Stafford Township School District
Superintendent's Educational Report
September 2026

| Staff Attendance Report: | August 2026 |
|---|---|
| Certificated Staff | 98% |
| Support Staff | 98% |

**DRILL REPORT**:

| *SCHOOL NAME* | *DRILL TYPE* | *OCCUPANTS INVOLVED* | | *DATE* | *TIME* |
|---|---|---|---|---|---|
| | | *Students* | *Staff* | | |
| **Oxycocus Elementary** | | | | | |
| **Oxycocus Elementary** | | | | | |
| **Primary Learning Center** | | | | | |
| **Primary Learning Center** | | | | | |
| **Ocean Acres Elementary** | | | | | |
| **Ocean Acres Elementary** | | | | | |
| **McKinley Avenue Elementary** | **Fire Drill** | **278** | **43** | **8/6/26** | **12:35PM** |
| **McKinley Avenue Elementary** | **Shelter in Place Drill** | **278** | **43** | **8/6/26** | **9AM** |
| **Intermediate School** | **Fire Drill** | **0** | **6** | **8/6/26** | **12:35pm** |
| **Intermediate School** | **Shelter in Place** | **0** | **6** | **8/6/26** | **9:00am** |

Attachments are subject to change without notice

**BOARD RETREAT** August 12, 2026

The Board Retreat Meeting of the Stafford Township Board of Education was held on August 12, 2026 at 5:36pm at the Oxycocus Elementary School.

## CALL TO ORDER

The Stafford Township Board of Education is called to order in compliance with the Open Public Meeting Act Law - 1975 Chapter 231 (P.L. 1975-231C). This meeting was advertised on TAPinto. Notice has been posted in the office of the Stafford Township Clerk, all school buildings and the district website.

## ROLL CALL

| | |
|---|---|
| Brian Fenlon | Member (Absent) |
| Gregory Gioe | Member |
| Keith Mollema | Member |
| Matthew Regulski | Member |
| Christopher Smith | Member (Absent) |
| Bonnie Strouse | Member |
| Joseph Washco | Member (Absent) |
| Kevin Cooney | Vice President (Absent) |
| Tammy Wagner | President |

## ALSO PRESENT

| | |
|---|---|
| George J. Chidiac | Superintendent |
| Lourdes LaGuardia | Business Administrator/Board of Education Secretary |
| Isabel Machado | Special Education Attorney |

## FLAG SALUTE

## A. RECOGNITION/PRESENTATIONS

None

## B. CLOSED SESSION – Student Matters, Specifically HIB Related, Personnel Matters and Board Matters

Whereas Section 8 of the Open Public Meetings Act, Chapter 231, P.L. 1975, permits the exclusion of the public from a meeting under certain circumstances; and

Whereas, this public body is of the opinion that such circumstances presently exist;

Now, therefore, be it resolved by the Stafford Township Board of Education, County of Ocean, State of New Jersey, as follows:

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The public shall be excluded from discussion of and action of the hereinafter specified subject matters.

The general nature of the subject matter to be discussed is as follows:

Student Matters, Specifically HIB Related, Personnel Matters and Board Matters

It is anticipated at this time that the above-stated subject matters shall be made public at such time as the reasons for non-disclosure no longer exists.

A motion was made by Mr. Mollema and seconded by Mrs. Strouse to move on the above Resolution. Voice vote: All members present voted yes (5-0); motion passed.

A motion was made by Mr. Gioe and seconded by Dr. Regulski to exit closed session and resume the regular meeting. Voice vote: All members present voted yes (5-0); motion passed.

TIME IN: 5:38pm
TIME AT CONCLUSION OF CLOSED SESSION: 6:42pm

## C. COMMUNICATION FROM THE PUBLIC (AGENDA ITEMS ONLY)

None

Mr. Chidiac provided a brief overview regarding -

1. No Cell Phone Policy
2. Preschool Correspondence – Delay to September 14th
3. Finance $1.1M Roof Conditions
4. Negotiations Scattergram Early
5. Special Education Parent Advisory Group Meeting
6. Safe Routes to School
7. Side Bar PT Secretary CST

## D. PERSONNEL/POLICY – No Update

Chairperson Tammy Wagner – Update (Policy Only)

1. To discuss the **second reading** of following **new** policies and regulations:
   - 0162.01 Legal Notices (M)
   - 5111.13 Eligibility of Resident/Nonresident Students – Choice School District (M)
   - R5111.13 Eligibility of Resident/Nonresident Students – Choice School District (M)

2. To discuss the **second reading** of following **revised** policies:
   - 0162 Notice of Board Meetings
   - 1643 Family Leave (M)
   - 1230 Superintendent's Duties (M)
   - 2200 Curriculum (M)

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- 2260 Equity in School and Classroom Practices (M)
- 2411 Career Education and Academic Counseling (M)
- 5561 Use of Physical Restraint and Seclusion Techniques for Students with Disabilities (M)
- 6112 Reimbursement of Federal and Other Grant Expenditures (M)
- 6115.02 Federal Awards/Funds Internal Controls –Mandatory Disclosures (M)
- 6311 Contracts for Goods or Services Funded by Federal Grants (M)
- 8561 Procurement Procedures for School Nutrition Programs (M)
- 6115.01 Federal Awards/Funds Internal Controls – Allowability of Costs (M)

3. To discuss the **first reading** of the following **revised** policy and regulation:
   - 5516 Student Use of Internet-Enabled Devices (M)
   - R5516 Student Use of Internet-Enabled Devices (M)

4. To discuss to **rescind** the following policy:
   - 4123 Probationary Period

## E. SPECIAL EDUCATION/CURRICULUM – No Update

Chairperson Matthew Regulski – Update

## F. FINANCE/BUILDINGS&GROUNDS

Chairperson Joseph Washco – Update

Mr. Clayton provided an update on the Ocean Acres HVAC Unit Vents, Balancing Casework all done; PLC HVAC all air up and running; McKinley Connector; Intermediate Roof Leak.

## G. CLOSED SESSION

None

## ADJOURNMENT

A motion was made by Dr. Regulski and seconded by Mr. Gioe to adjourn the meeting at 7:02pm. Voice vote: All members present voted yes (5-0); motion passed.

_____

Lourdes LaGuardia
School Business Administrator/Board Secretary

LL/km/8-27-2026

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**BUSINESS MEETING** August 12, 2026

The Business Meeting of the Stafford Township Board of Education was held on August 12, 2026 at 7:04pm at the Oxycocus Elementary School and was live streamed over the web.

## CALL TO ORDER

The Stafford Township Board of Education is called to order in compliance with the Open Public Meeting Act Law - 1975 Chapter 231 (P.L. 1975-231C). This meeting was advertised on TAPinto. Notice has been posted in the office of the Stafford Township Clerk, all school buildings and on the district website. A mechanical device is being used to video record this meeting.

## ROLL CALL

| | |
|---|---|
| Brian Fenlon | Member (Absent) |
| Gregory Gioe | Member |
| Keith Mollema | Member |
| Matthew Regulski | Member |
| Christopher Smith | Member (Absent) |
| Bonnie Strouse | Member |
| Joseph Washco | Member (Absent) |
| Kevin Cooney | Vice President (Absent) |
| Tammy Wagner | President |

## ALSO PRESENT

| | |
|---|---|
| George J. Chidiac | Superintendent |
| Lourdes LaGuardia | Business Administrator/Board of Education Secretary |
| Martin J. Buckley, Esq. | Board of Education Attorney |

## FLAG SALUTE

## A. RECOGNITION/PRESENTATIONS

No Presentations

## B. SUPERINTENDENT'S EDUCATIONAL REPORT - Attachment

## C. APPROVAL OF MINUTES OF PREVIOUS MEETING(S)

NOTE: If a board member was absent (listed below), they are to abstain from the vote on that item/meeting.

To approve the minutes of the following meeting(s):

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1. June 11, 2026 Committee of the Whole – 3 Absences (B.Fenlon, M. Regulski, J. Washco)
2. June 11, 2026 Business Meeting – 3 Absences (B.Fenlon, M. Regulski, J. Washco)
3. June 11, 2026 Closed Session - 3 Absences (B.Fenlon, M. Regulski, J. Washco)

A motion was made by Mr. Mollema and seconded by Mr. Gioe to approve Approval of Minutes of Previous Meeting(s) #1-3. Roll call vote: four (4) members present voted yes; motion passed. Dr. Regulski abstained on items #1-3.

## D. COMMUNICATION FROM THE PUBLIC (AGENDA ITEMS ONLY)

None

## E. CORRESPONDENCE TO AND FROM THE BOARD

None

## F. BOARD BUSINESS

1. There were two incidents of harassment, intimidation, and bullying.

2. To affirm the determination of the Superintendent regarding harassment, intimidation, and bullying incident investigation – McKinley #6.

3. To approve the attached Parent/Student Handbook for the 2026-2027 school year.

4. To approve the attached Preschool Parent/Student Handbook for the 2026-2027 school year.

5. To approve the attached Extended Day Program Handbook for the 2026-2027 school year.

6. To approve the attached District Mentoring Plan for the 2026-202 school year.

7. To approve the attached Sidebar Agreement between Stafford Township Education Association (STEA) and Stafford Township Board of Education dated August 12, 2026 with regard to Part Time CST Secretary.

8. Whereas the Stafford Township School District wishes to utilize the Ocean Acres Community Center located at 489 Nautilus Drive, Manahawkin, NJ, for the purpose of extra space in connection with its educational needs for students on Monday, Thursday and Friday, 8:00am to 3:30pm for the 2026-2027 school year until June 30, 2027. Further to approve the attached Assumption of Risk, Release and Waiver of Liability, and Indemnity Agreement with the Township of Stafford.

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9. To acknowledge the continuation of the Shared Service and Indemnification and Hold Harmless Agreement with the Township of Stafford for ownership and control of the Bravo antenna cable, on the water tower located in the Stafford Park located at Block 25 Lot 34.07 and otherwise known as 130 Campbell Boulevard, Manahawkin, NJ. for operational use by the District.

10. To approve for submission The Request to Establish a Special Education Program for district special education programs with NJ Department of Education, commencing July 1, 2026.

11. To readopt the attached Stafford Township School District Mission Statement for the 2026-2027 school year.

12. To readopt the existing Stafford Township School District bylaws, policies, and regulations for the Board's operation and for the operation of the school district, as listed on the Stafford Township School District Intranet for the 2026-2027 school year.

13. To readopt the existing Stafford Township School District procedures, plans, forms, handbooks, standing orders, health regulation, and health supplies as listed on the Stafford Township School District Intranet for the 2026-2027 school year.

14. To readopt the Board of Education's Internal Standard Operating (SOP) Procedures as on file in the Board Secretary/Business Administrator's Office for the 2026-2027 school year.

15. To approve Meridian Health Center as medical waste disposal site, this is free resource made possible by the Township for the 2026-2027 school year.

16. To approve petty cash funds, as per Policy 6620 – Petty Cash for the 2026-2027 school year.

17. To readopt the Integrated Pest Management Plan for the 2026-2027 school year.

18. To approve the attached revised Transportation Manual for the 2026-2027 school year.

A motion was made by Mr. Gioe and seconded by Mr. Mollema to approve Board Business item(s) #1-18. Roll call vote: five (5) members present voted yes; motion passed.

**NEW BUSINESS**

Unofficial
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## G. FINANCE/INSURANCE/TRANSPORTATION

The Committee of the Whole has reviewed the following action items, has consulted with the superintendent, school business administrator/board secretary and other appropriate district officials, and hereby certifies that the actions being approved are consistent with the 2026-2027 board/district goals. In addition, we further certify that we have reviewed the attached bill list and are satisfied that curriculum related expenditures are directly related to the results of assessment data and that professional development expenditures are directly related to professional development plans.

Board Secretary's Certification:

I, Lourdes LaGuardia, School Business Administrator/Board Secretary certifies that no line item has been over expended in violation of N.J.A.C. 6A:23-A-16.10 (c) 3 and that sufficient funds are available to meet the district's financial obligations for the remainder of the fiscal year.

_____ _____

School Business Administrator/Board Secretary Date

1. To approve for payment of August 2026 bills list totaling $6,913,078.24 as attached. (G-1)

   Fund 10 - $1,355,045.78
   Fund 20 - $197,577.12
   Fund 30 - $5,358,099.89
   Fund 40 - $0
   Fund 60 - $0
   Fund 61 - $0
   Fund 62 - $2,355.45

   *Note: $4,676,691.29 of the amounts listed were made as EFT payments. (G-1a)

2. To approve for payment of July 2026 additional bills list totaling $6,892,719.51 as attached. (G-1b)

   Fund 10 - $1,592,106.50
   Fund 20 - $355.00
   Fund 30 - $2,032,114.18
   Fund 40 - $3,266,622.44
   Fund 60 - $0
   Fund 61 - $12.74
   Fund 62 - $1,508.65

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*Note - $6,072,149.43 of the amounts listed were made as EFT payments. (G-1c)

*To approve for payment of June 2026 additional bills list totaling $3,293,183.18 as attached. (G-1d)

Fund 10 - $729,498.22
Fund 20 - $1,352,415.11
Fund 30 - $860,645.50
Fund 40 - $0
Fund 60 - $162,079.21
Fund 61 - $79,301.13
Fund 62 - $109,244.01

*Note - $1,626,366.69 of the amounts listed were made as EFT payments. (G-1e)

2. To approve for payment of payroll

   a. dated June 15, 2026 totaling $2,171,273.20
   b. dated June 18, 2026 totaling $1,290,168.42
   c. dated June 30, 2026 totaling $498,476.45
   d. dated July 15, 2026 totaling $299,489.65
   e. dated July 30, 2026 totaling $531,012.69

3. To accept the Treasurer's Report for the month of:
   a. May 2026.
   b. June 2026

4. To accept the Secretary's Report for the month of:
   a. May 2026
   b. June 2026

5. To approve the attached line item transfers for:

   a. May 2026
   b. June 2026

6. To approve the attached list of donations.

7. To authorize the Business Administrator to make payment of post-Board meeting bills for the month of August 2026 and to execute mid-cycle contracts such as utilities and out-of-district contracts. Specifics of these transactions, if any, will be provided for ratification at the next regular scheduled board meeting.

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8. To approve the attached tentative 2027-2028 Budget Calendar.

9. To approve the anticipated bus routes for the 2026-2027 school year.

10. To approve to submit and accept the FY'27 ESEA Federal Grant Application for available funding in the amount of:

    Title I $112,700
    Stafford $109,815
    St. Mary's $2,885

    Title IIA $37,889
    Stafford $35,024
    St, Mary's $2,357
    LCA $508

    Title III $17,821
    Stafford $17,643
    LCA $178

    Title IV $10,000
    Stafford $9,244
    St. Mary $622
    LCA $134

    Total Federal Funds $178,410

11. To approve to submit and accept the FY'27 IDEA Federal Grant Application for available funding in the amounts of $711,629 for Basic and $44,857 for Preschool.

12. To approve the SAIF premiums for Workers' Compensation; Supplemental Workers' Compensation; Property (including Property, BM, Crime, Cyber and EIL); Liability (including General and Auto); School Leaders' Professional Liability; Excess Liability (SLPL) and Security Guard Liability at a cost of $763,222 for the 2026-2027 school year as submitted by VanDyk Insurance Agency.

13. To approve the Student Accident Insurance Renewal Application with Bob McCloskey Insurance for the 2026-2027 school year in the base premium amount of $7,950 and Catastrophic $3,785 as submitted by VanDyk Insurance Agency.

14. To approve AmeriFlex of Cherry Hill, NJ as the management company for COBRA insurance for the 2026-2027 school year.

Attachments are subject to change without notice

15. To acknowledge the attached Open Systems Integrators' project proposal for the low voltage technical scope as awarded through ESCNJ Co-Op in the amount of $398,966.61 with an additional $20,000 contingency. Funding for this initiative is associated with the 2024 Referendum Oxycocus Construction Renovation Project #24K066.

16. To approve the attached Change Order GC-03 from Benjamin R. Harvey Company in the total amount of $22,237 to be deducted from the $780,113 Allowance Balance, leaving an Allowance Balance of $757,876. This Change Order is with regard to the new Oxycocus Addition/Alterations Project. (Referendum Project 24K066)

    a. PCO#4 Casework and Interior Lighting $6,622
    b. PCO#5 Doors and Hardware Revised $17,320
    c. PCO#6 Credit for Masonry Control Joint Reduction -$1,705

17. To approve a tuition contract with Barnegat Township Board of Education for McKinney Vento student #5144804408 in the amount of $9,182.66, commencing April 2, 2026 and ending June 1, 2026.

18. To approve an in-district tuition contract with Eagleswood Township Board of Education for student #26243 in the amount of $4,455 for tuition and $200 for related services for the 2026 ESY Program, commencing July 7, 2026 and ending August 13, 2026.

19. To approve an in-district tuition contract with Eagleswood Township Board of Education for student #26243 to attend the Autism Program at an annual tuition rate of $42,646 and $2,400 for related services for the 2026-2027 school year, commencing September 3, 2026.

20. To approve an out of district tuition contract with The Shore Center for student #22509 in the amount of $60,000 for tuition and $54,500 for extraordinary services-personal aide for the 2026-2027 school year, commencing September 1, 2026. Stafford Township is responsible for the education of this student.

21. To approve school contracts with the Commission for the Blind and Visually Impaired for student #24532 in the amount of $2,668 and for student #22597 in the amount of $2,668 for the 2026-2027 school year, commencing September 1, 2026.

22. To approve the contract for student nursing services with Bayada Nursing Services for student #25707 at the rate of $65/hr for RN and $65/hr for LPN for the 2026-2027 school year, commencing July 1, 2027. This student requires one to one nursing services.

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23. To approve Neuropsychology & Counseling Associates, LLC as a consultant to the Child Study Team for neurological evaluations as per the attached fee sheet for the 2026-2027 school year, commencing July 1, 2026.

24. To approve Foundations Behavioral Health to provide 3.75 hours of academic tutoring per week at a rate of $56/hr for student #22509 while in the hospital, commencing June 25, 2026 and ending August 7, 2026.

25. To approve Choice Student Shared Services Transportation Contracts with Barnegat Township Board of Education for students ID #25057 and #24823 for the 2026-2027 school year. These contracts are for $500/each for transporting these students to and from school.

26. To approve Choice Student Shared Services Transportation Contracts with Lacey Township Board of Education for student #25607 for the 2026-2027 school year. This contract is for $500 for transporting this student to and from school.

27. To approve a Choice Student Shared Services Transportation Contract with Little Egg Harbor Township Board of Education for student ID #25960 for the 2026-2027 school year. This contract is for $500 for transporting this student to and from school.

28. To approve Dynamic Earth, LLC of Newtown, PA as the Environmental Specialist beginning July 1, 2026 until June 30, 2027 as per the attached fee sheet. This RFP was one of one received and was reviewed/selected based on the factors set forth in the RFP. (Year 1 of 3)

29. To approve the attached revised list of software for the 2026-2027 school year for District and Management Systems.

30. To approve the out of district tuition contract with Bayshore Jointure Commission Board of Directors for student #22851 in the amount of $6,000 per month for tuition and $5,450 per month for extraordinary services for the 2026-2027 school year, commencing September 1, 2026. Stafford Township is responsible for the education of this student.

31. To approve the out of district tuition contract with New Age Behavioral Consultants for student #22851 for the 2026 Extended School Year Program, commencing July 7, 2026 and ending August 14, 2026 at an estimated cost of $7,717.50, consisting of 92 hours of RBT services ($7,360), six 20-minute speech therapy sessions ($260) and three 15-minute occupational therapy sessions ($97.50). Stafford Township is responsible for the education of this student.

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32. To approve the out of district contract with Ocean Academy for student #26224 in the amount of $92,437.80 for tuition and $31,061.10 for extraordinary services for the 2026-2027 school year, commencing July 1, 2026.

33. To approve JDC Energy Services of Lawrenceville, NJ for Energy Consultant Services and as an approved ESCO Energy Services Company to analyze the potential for community solar, district energy usage and renewable energy (solar panels) and provide guidance on eligibility and implementation for district energy projects and renewable energy (solar panels) utilizing ESIP savings programs and/or grants for July 1, 2026 through June 30, 2027, with two one-year renewal options. The proposal was one of one received and was selected based on the factors set forth in the RFP. (Year 1 of 3). Costs are bundled into "break fee" for project start up; otherwise, the district incurred costs not to exceed $46,173.77 in year one for benchmarking and forecasting.

34. To approve the surplus reallocation of Capital Reserve Withdrawal funds originally designated for the Intermediate HVAC ROD Project to be used for the Intermediate Roof Repair/Replacement project in the amount of $1,173,890.77, retroactive to June 30, 2026. Purpose is necessary due to extensive roof damage from winter storms 2026.

A motion was made by Dr. Regulski and seconded by Mr. Mollema to approve Finance/Insurance/Transportation item(s) #1-34. Roll call vote item #1: five (5) members present voted yes; motion passed. Roll call vote item #2: four (4) members present voted yes; motion passed. Mr. Gioe abstained on item #2. Roll call vote items #3-34: five (5) members present voted yes; motion passed.

## H. BUILDINGS/GROUNDS/CAFETERIA

The Buildings/Grounds/Cafeteria Committee has reviewed the following action items, has consulted with the school business administrator/board secretary and other appropriate district officials, and hereby certifies that the actions being approved are consistent with the 2026-2027 board/district goals.

1. To approve the attached New Jersey Department of Education Equivalency Application for the use of the classrooms listed on the application that do not have a classroom bathroom, but has one that is “in line of sight”. This will allow the district to utilize the pre-existing classrooms that have been used for preschool over the last five years and continue to serve the 300+ PEA-funded students for the 2026-2027 school year.

2. To approve To approve the attached New Jersey Department of Education Applications for Temporary Instructional Space for the 2026-2027 school year:
    a. Intermediate School - Stage
    b. Primary Learning Center – Trailers

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3. To approve the attached New Jersey Department of Education Applications for Change of Use of Educational Space for the 2026-2027 school year:
    a. Intermediate School – Room 112
    b. McKinley School – Room 126A
    c. Ocean Acres School – Room 4, G-21, G-22, G-25
    d. Primary Learning Center – Room 7
    e. Primary Learning Center – Room 11

A motion was made by Mr. Mollema and seconded by Dr. Regulski to approve Buildings/Grounds/Cafeteria item(s) #1-3. Roll call vote: five (5) members present voted yes; motion passed.

## I. CURRICULUM/INSTRUCTION/TECHNOLOGY

The Committee of the Whole has reviewed the following action items, has consulted with the superintendent and other appropriate district officials, and hereby certifies that the actions being approved are consistent with the 2026-2027 board/district goals. In addition, we further certify that we have reviewed the attached professional development request list and are satisfied that each professional development event is directly related to the employee's duties, each event is fiscally prudent (consistent with N.J.S.A. 18A:11-12), that teaching staff requests are aligned to the New Jersey Student Learning Standards, and that administrator requests are aligned to the Professional Standards for School Leaders.

1. To approve the professional development requests shown on the attached listing.

2. To approve the attached list of requested Police Presence for the 2026-2027 school year.

3. To approve the attached Stafford Township School District District-Wide Professional Development Plan for the 2026-2027 school year.

4. To approve the attached list of activity trips and class field trips for the 2026-2027 school year.

A motion was made by Dr. Regulski and seconded by Mr. Mollema to approve Curriculum/Instruction/Technology item(s) #1-4. Roll call vote: five (5) members present voted yes; motion passed.

## J. PERSONNEL

The following Personnel items were discussed:

Chairperson of the Personnel Committee – Tammy Wagner

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Report: The superintendent recommends the board approve/ratify the appointment of the following named individuals who constitute a careful selection and screening of applicants, in accordance with the board/district hiring policies/procedures, and are hereby recommended for an employment contract contingent upon the successful completion of their accredited degree program, New Jersey Department of Education certification requirements, Federal NCLB Highly qualified Teacher requirements, a criminal history clearance and the successful completion of a medical examination as required by the board of education. These initial assignments/appointments may be changed as district needs develop, unless otherwise stipulated. The Personnel/Policy Committee has reviewed the following action items, has consulted with the superintendent and other appropriate district officials, and hereby certifies that the actions being approved are consistent with the 2026-2027 board/district goals.

1. To approve the attached list of substitutes for the 2026-2027 school year.

2. To approve the change of assignment for the attached list of personnel for the 2026-2027 school year.

3. To approve the transfers for the attached list of personnel for the 2026-2027 school year.

4. To approve the following retirement:
    a. Amy D'Agostino, teacher, effective July 1, 2027

5. To approve the following resignations:
    a. Katherine Reilly, Teacher, effective September 1, 2026
    b. Erin Scott, Teacher Aide, effective September 1, 2026
    c. Kathy Cruz, Teacher, effective September 1, 2026
    d. Pamela Nicholas, Teacher Aide, effective September 1, 2026
    e. Lauren Russell, Teacher Aide, effective July 20, 2026
    f. Mary Fernandiolo, Teacher, effective July 23, 2026
    g. Richard Bowser, Bus Driver, effective July 31, 2026
    h. Kathleen Kube, Teacher Aide, effective July 30, 2026
    i. Marielis Gutierrez, Teacher Aide, effective June 20, 2026

6. To approve the following leaves:
    a. Employee ID #4519, unpaid leave of absence, beginning June 5, 2026 and returning June 8, 2026 AND beginning June 9, 2026 and returning June 11, 2026
    b. Employee ID #6993, unpaid leave of absence, beginning June 5, 2026 and returning June 6, 2026
    c. Employee ID #6873, unpaid leave of absence, beginning June 3, 2026 and returning June 6, 2026
    d. Employee ID #6282, unpaid leave of absence, beginning June 4, 2026 and returning June 8, 2026

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e. Employee ID #6862, unpaid leave of absence, beginning May 27, 2026 and returning May 28, 2026 AND beginning June 1, 2026 and returning June 4, 2026
f. Employee ID #7024, unpaid leave of absence, beginning June 1, 2026 and returning June 2, 2026 AND beginning June 5, 2026 and returning June 8, 2026 AND beginning June 18, 2026 and returning June 23, 2026
g. Employee ID #6873, unpaid leave of absence, beginning June 16, 2026 and returning June 17, 2026
h. Employee ID #7043, unpaid leave of absence, beginning June 12, 2026 and returning June 15, 2026
i. Employee ID #6294, unpaid leave of absence, beginning June 3, 2026 and returning June 24, 2026 AND beginning June 16, 2026 and returning June 17, 2026
j. Employee ID #6873, unpaid leave of absence, beginning March 24, 2026 and returning March 25, 2026 AND beginning March 30, 2026 and returning March 31, 2026
k. Employee ID #6906, unpaid leave of absence, beginning June 10, 2026 and returning June 11, 2026
l. Employee ID #6862, unpaid leave of absence, beginning June 10, 2026 and returning June 11, 2026
m. Employee ID #6862, unpaid leave of absence, beginning June 16, 2026 and returning June 17, 2026
n. Employee ID #6718, unpaid leave of absence, beginning June 16, 2026 and returning June 17, 2026
o. Employee ID #4086, unpaid leave of absence, beginning June 9, 2026 and returning June 10, 2026
p. Employee ID #7080, unpaid leave of absence, beginning June 1, 2026 and returning June 2, 2026
q. Employee ID #6665, unpaid leave of absence, beginning June 5, 2026 and returning June 9, 2026
r. Employee ID #6730, unpaid leave of absence, beginning June 2, 2026 and returning June 3, 2026
s. Employee ID #6492, unpaid family leave FMLA, beginning October 26, 2026 and returning February 1, 2027
t. Employee ID #6985, unpaid family leave FMLA, beginning September 1, 2026 and returning November 30, 2026
u. Employee ID #6985, unpaid contractual child rearing leave, beginning November 30, 2026 and returning March 1, 2027
v. Employee ID #6712, unpaid contractual child rearing leave, beginning September 1, 2026 and returning July 1, 2027
w. Employee ID #6988, unpaid family leave FMLA, beginning October 2, 2026 and returning January 11, 2027

7. To approve the Strong Leadership Evaluation Rubric for all administrators beginning July 1, 2026 and ending June 30, 2027.

Attachments are subject to change without notice
Unofficial

8. To approve the Danielson Evaluation Rubric for all certified staff beginning July 1, 2026 and ending June 30, 2027.

9. To approved the attached list of teachers working with student fieldwork placements for the 2026-2027 school year.

10. To approve Matthew Aires to receive BA+15 stipend as per the STEA contract, beginning September 1, 2027.

11. To approve the attached list of employees for the Extended Day Program for the 2026-2027 school year.

12. To approve the attached salary increases for:
    a. Employee ID #5767, effective July 1, 2026
    b. Employee ID #5034, effective September 1, 2026

13. To approve the additional staff below for Summer Camp/Extended Day Program 2026:
    a. Erica Perez

14. To approve the attached list of student fieldwork placements for the 2026-2027 school year.

15. To approve the attached affiliation between Stockton University Social and Behavioral Sciences Program for the 2026-2027 school year.

16. To approve the attached list of additional staff for Extended School Year 2026.

17. To approve the attached additional personnel for Extra-Curricular and Enrichment Programs for the 2026-2027 school year.

18. To approve Rocklyn Petrizzi as School Secretary, Ronald L. Meinders Primary Learning Center, beginning September 1, 2026 and ending June 30, 2027, Step B, +BA, pro-rated, of the Stafford Township Board of Education/STEA Agreement. This is a replacement position.

19. To approve Eniko Pascone as Part Time School Secretary, CST, McKinley Avenue Elementary School, beginning September 1, 2026 and ending June 30, 2027, Step B, +AA, pro-rated, of the Stafford Township Board of Education/STEA Agreement.

20. To approve Jennifer Fabrizzio as Cafeteria Playground Aide, McKinley Avenue Elementary School, beginning September 1, 2026 and ending June 30, 2027, Step 10, of the Stafford Township Board of Education/STEA Agreement. This is a replacement position.

Attachments are subject to change without notice
Unofficial

21. To approve Jeri Jorge as Cafeteria Playground Aide, McKinley Avenue Elementary School, beginning September 1, 2026 and ending June 30, 2027, Step 4, of the Stafford Township Board of Education/STEA Agreement. This is a replacement position.

22. To approve Samantha Harms as Cafeteria Playground Aide, Intermediate School, beginning September 1, 2026 and ending June 30, 2027, Step 1, of the Stafford Township Board of Education/STEA Agreement. This is a replacement position.

23. To approve Jessica Ramos as Cafeteria Playground Aide, McKinley Avenue Elementary School, beginning September 1, 2026 and ending June 30, 2027, Step 1, of the Stafford Township Board of Education/STEA Agreement. This is a replacement position.

24. To approve Sharon Zaintz as Cafeteria Playground Aide, Ocean Acres Elementary School, beginning September 1, 2026 and ending June 30, 2027, Step 1, of the Stafford Township Board of Education/STEA Agreement. This is a replacement position.

25. To approve Lori Silberberg as Bus Attendant, beginning September 1, 2026 and ending June 30, 2027, Step 7, of the Stafford Township Board of Education/STEA Agreement. This is a replacement position.

26. To approve Laurie Campbell as Bus Attendant, beginning September 1, 2026 and ending June 30, 2027, Step 7, of the Stafford Township Board of Education/STEA Agreement. This is a replacement position.

27. To approve Glorie Rasmussen as Bus Attendant, beginning September 1, 2026 and ending June 30, 2027, Step 6, of the Stafford Township Board of Education/STEA Agreement.

28. To approve Thomas Buonavolonta as Bus Driver, beginning September 1, 2026 and ending June 30, 2027, Step 3, of the Stafford Township Board of Education/STEA Agreement. This is a replacement position.

29. To approve John DeStefanis as Bus Driver, beginning September 1, 2026 and ending June 30, 2027, Step 3, of the Stafford Township Board of Education/STEA Agreement.

30. To approve Olivia Melanson as Teacher Aide, MD Class, Ronald L. Meinders Primary Learning Center, beginning September 1, 2026 and ending June 30, 2027, Step 1, +BA, of the Stafford Township Board of Education/STEA Agreement. This is a replacement position.

Attachments are subject to change without notice
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31. To approve Amanda Schnepp as Part Time Hourly Teacher Aide, Extraordinary, Ronald L. Meinders Primary Learning Center, beginning September 1, 2026 and ending June 30, 2027, Step 2, +BA, of the Stafford Township Board of Education/STEA Agreement. This is a replacement position.

32. To approve Kelsey Clarke as Part Time Hourly Teacher Aide, PSD Class, Oxycocus Elementary School, beginning September 1, 2026 and ending June 30, 2027, Step 1, of the Stafford Township Board of Education/STEA Agreement. This is a replacement position.

33. To approve Teresa Cioffi as Part Time Hourly Teacher Aide, Extraordinary, Oxycocus Elementary School, beginning September 1, 2026 and ending June 30, 2027, Step 1, of the Stafford Township Board of Education/STEA Agreement. This is a replacement position.

34. To approve Maria Lino as Part Time Hourly Teacher Aide, Resource Class, Ocean Acres Elementary School, beginning September 1, 2026 and ending June 30, 2027, Step 5, +BA, of the Stafford Township Board of Education/STEA Agreement. This is a replacement position.

35. To approve Sandra DeVico as Part Time Hourly Teacher Aide, Autistic Class, Ocean Acres Elementary School, beginning September 1, 2026 and ending June 30, 2027, Step 11, of the Stafford Township Board of Education/STEA Agreement. This is a replacement position.

36. To approve Beverly Flax as Part Time Hourly Teacher Aide, Resource Class, Ocean Acres Elementary School, beginning September 1, 2026 and ending June 30, 2027, Step 12, +BA, of the Stafford Township Board of Education/STEA Agreement. This is a replacement position.

37. To approve Katherine Smith as Part Time Hourly Teacher Aide, Extraordinary, Intermediate School, beginning September 1, 2026 and ending June 30, 2027, Step 8, +BA, of the Stafford Township Board of Education/STEA Agreement. This is a replacement position.

38. To approve Danielle Padovani as Part Time Hourly Teacher Aide, Autistic Class, Ocean Acres Elementary School, beginning September 1, 2026 and ending June 30, 2027, Step 5, +BA, of the Stafford Township Board of Education/STEA Agreement. This is a replacement position.

39. To approve Samuel Morabito-Pipher as Part Time Hourly Teacher Aide, Autistic Class, McKinley Avenue Elementary School, beginning September 1, 2026 and ending June 30, 2027, Step 2, +BA, of the Stafford Township Board of Education/STEA Agreement. This is a replacement position.

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40. To approve Michelle Geddes as Part Time Hourly Teacher Aide, PSD Class, Oxycocus Elementary School, beginning September 1, 2026 and ending June 30, 2027, Step 4, +BA, of the Stafford Township Board of Education/STEA Agreement. This is a replacement position.

41. To approve Heather Keller as Registered Behavior Technician, McKinley Avenue Elementary School, beginning September 1, 2026 and ending June 30, 2027, Step 17(TA Guide), +BT Stipend, of the Stafford Township Board of Education/STEA Agreement. This is a replacement position.

42. To approve Rebecca Stuppiello as Registered Behavior Technician, Intermediate School, beginning September 1, 2026 and ending June 30, 2027, Step 6(TA Guide), +BT Stipend, +BA, of the Stafford Township Board of Education/STEA Agreement. This is a replacement position.

43. To approve Rebecca Brummer as Elementary School Teacher, Resource Class, Intermediate School, beginning September 1, 2026 and ending January 31, 2027, Step A, pro-rated, of the Stafford Township Board of Education/STEA Agreement. This is a non-tenured track leave replacement position.

44. To approve John Michael O'Dell as Elementary School Teacher, Grade 6, Intermediate School, beginning September 1, 2026 and ending June 30, 2027, Step J, +MA, of the Stafford Township Board of Education/STEA Agreement. This is a non-tenured track leave replacement position.

45. To approve Samantha Kohlhepp as Elementary School Teacher, LLD Class, McKinley Avenue Elementary School, beginning September 1, 2026 and ending June 30, 2027, Step A, +MA, of the Stafford Township Board of Education/STEA Agreement. This is a replacement position.

46. To approve Samantha Palmer as Elementary School Teacher, World Language, Ocean Acres Elementary School, beginning September 1, 2026 and ending June 30, 2027, Step N, +MA, of the Stafford Township Board of Education/STEA Agreement. This is a replacement position.

47. To approve Gianna Del Viscovo as Elementary School Teacher, MD Class, Intermediate School, beginning September 1, 2026 and ending June 30, 2027, Step E, +MA, of the Stafford Township Board of Education/STEA Agreement. This is a non-tenured track leave replacement position.

48. To approve Alyssa Bubenas as Preschool Teacher, PSD Class, Oxycocus Elementary School, beginning September 1, 2026 and ending June 30, 2027, Step D, of the Stafford Township Board of Education/STEA Agreement. This is a non-tenured track leave replacement position.

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49. To approve Gabriella Deo as Preschool Teacher, Ronald L. Meinders Primary Learning Center, beginning September 1, 2026 and ending June 30, 2027, Step A, of the Stafford Township Board of Education/STEA Agreement. This is a replacement position.

50. To approve Caleigh Iovine as Preschool Teacher, Oxycocus Elementary School, beginning September 1, 2026 and ending January 31, 2027, Step A, pro-rated, of the Stafford Township Board of Education/STEA Agreement. This is a non-tenured track leave replacement position.

51. To approve Nicole Carrier as Teacher of the Deaf, Ronald L. Meinders Primary Learning Center, beginning September 1, 2026 and ending June 30, 2027, Step S, of the Stafford Township Board of Education/STEA Agreement.

52. To approve to withhold step increment for employee ID #5173 for the 2026-2027 school year.

***Employee appointments are provisional pending satisfactory completion of the Criminal History Background Check, Pre-employment P.L. 2018,C.5 Disclosure and Physical Exam Requirements required by the State of New Jersey.***

A motion was made by Dr. Regulski and seconded by Mr. Gioe to approve Personnel item(s) #1-52. Roll call vote items #1-5: five (5) members present voted yes; motion passed. Roll call vote item #6: four (4) members present voted yes; motion passed. Mr. Gioe abstained on item #6. Roll call vote items #7-52: five (5) members present voted yes; motion passed.

## K. POLICY/LEGISLATIVE

The Committee of the Whole has reviewed the following policies and regulations, has consulted with the board attorney and other appropriate district officials, and hereby certify, pursuant to N.J.S.A. 18A:11-1, that the attached policies and regulations are in compliance with all applicable statutes and administrative code provisions and are consistent with the 2026-2027 board/district goals.

1. To approve the **second reading** of following **new** policies and regulations:
   - 0162.01 Legal Notices (M)
   - 5111.13 Eligibility of Resident/Nonresident Students – Choice School District (M)
   - R5111.13 Eligibility of Resident/Nonresident Students – Choice School District (M)

2. To approve the **second reading** of following **revised** policies:
   - 0162 Notice of Board Meetings
   - 1643 Family Leave (M)
   - 1230 Superintendent's Duties (M)
   - 2200 Curriculum (M)
   - 2260 Equity in School and Classroom Practices (M)
   - 2411 Career Education and Academic Counseling (M)

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- 5561 Use of Physical Restraint and Seclusion Techniques for Students with Disabilities (M)
- 6112 Reimbursement of Federal and Other Grant Expenditures (M)
- 6115.02 Federal Awards/Funds Internal Controls –Mandatory Disclosures (M)
- 6311 Contracts for Goods or Services Funded by Federal Grants (M)
- 8561 Procurement Procedures for School Nutrition Programs (M)
- 6115.01 Federal Awards/Funds Internal Controls – Allowability of Costs (M)

3. To approve the **first reading** of the following **revised** policy and regulation:
   - 5516 Student Use of Internet-Enabled Devices (M)
   - R5516 Student Use of Internet-Enabled Devices (M)

4. To approve to **rescind** the following policy:
   - 4123 Probationary Period

A motion was made by Dr. Regulski and seconded by Mr. Mollema to approve Policy/Legislative item(s) #1-4. Roll call vote: five (5) members present voted yes; motion passed.

## L. ADVANCED PLANNING

- September 17, 2026 – Committee of the Whole at 6:00pm at STAC
- September 17, 2026 – Business Meeting at 7:00pm at STAC

## M. PUBLIC COMMENT

None

## N. BOARD INFORMATIONAL ITEMS

## O. CLOSED SESSION

None

## ADJOURNMENT

A motion was made by Dr. Regulski and seconded by Mr. Gioe to adjourn the meeting at 7:09pm. Voice vote: All members present voted yes (5-0); motion passed.

_____

Lourdes LaGuardia
School Business Administrator/Board Secretary

LL/km/8-18-2026

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# STAFFORD TOWNSHIP SCHOOL DISTRICT

Stafford Intennediate School
1000 McKinley Avenue
Manahawkin, NJ 08050
609-978-5700

www.staffordschools.org

George J. Chidiac
Superintendent of Schools

Hope Zaun
Director of Special Services
Ext. 1030

*"SET SAIL FOR SUCCESS"*

## 2026-2027 Nursing Service Plan

Basic Nursing Services provided to all pupils includes care for an injury or illness that occurs during the school day. Screenings that occur during the student's school year can include height, weight, blood pressure, vision, hearing screenings along with color perception, and scoliosis. Individual Health and Emergency Care plans are prepared with the intention of ensuring optimal wellness during the academic day and plans for a medical emergency for those students with severe medical conditions.

In anticipation of a survey-audit done by the Ocean County Health Department, records are reviewed to determine immunization compliance. Input is provided at Child Study Team meetings along with input for the development of any medically related Individual Health and/or 504 plans.

Specific Medical Needs for Individual Pupils – Individual students may require individualized care provided by the school nurse. This individual care is inclusive of daily medications and treatments, and as needed medication distribution. The following pages are a summary of the daily medications/treatments that individual students require for their chronic conditions by school building. Included in this plan are the numbers of students, as well as, the numbers of students effected by specific medical conditions.

Attachments are subject to change without notice

# Oxycocus Elementary School

## Nursing Service Plan 2026-2027

| | |
|---|---|
| Total Registered Students-All Leaming Modules | 72 |
| Number of Students with Medications | 12 |
| Number of Medications in Building | 11 |
| Number of Daily Medications Dispensed by Nurse | 0 |
| Number of PRN Medications in Building | 11 |
| Number of Students with Chronic Medical Conditions | 16 |
| Number of Students with Severe and/or Medically Complex Conditions | 7 |
| Students with Life Threatening Allergies | 8 |
| Number of Classified Students in Building | 38 |

Oxycocus Elementary Detailed Report:

- One student with a rare metabolic disorder, MCAD. Requires constant blood sugar level monitoring, with strict feeding schedules during the day, to avoid Metabolic Crises. Must be transported to Jersey Shore Hospital if needed. Close Parent-Teacher communication is critical.
- 16 students with Chronic medical conditions, requiring frequent pm meds , treatments and multiple food restrictions
- One student with Down Syndrome with comorbid conditions (Aortic Stenosis, Malformation of lung; ) 5 students with Severe Asthma requiring Emergency meds at school pm
- One student with Diabetes Mellitus Type one, ASD; has 1-1 Private RN while in school. Insulin dependent, using Insulin Pump. Requires intensive monitoring of blood sugar levels in school.

Prepared by E.Mancini, RN-BS, CSN, CPEN on *91912026*

Attachments are subject to change without notice

# Primary Learning Center
## Nursing Service Plan 2026-2027

| | |
|---|---|
| Total Registered Students -All Learning Modules | 444 |
| Number of Students with Medications | 23 |
| Number of Medications in Building | 30 |
| Number of Daily Medications Dispensed by Nurse | 0 |
| Number of PRN Medications in Building | 30 |
| Number of Students with Chronic Medical Conditions | 71 |
| Number of Students with Severe and/or Medically Complex Conditions | 7 |
| Students with Life Threatening Allergies | 18 |
| Number of Classified Students in Building | 53 |

PLC Detailed Report:

- Four students currently under the care of pediatric cardiologists for: congenital heart defect, heart surgery, and/or heart transplant. Activity restrictions/clearances, medications and assessments managed by the school nurse.
- Fifteen students with asthma, ten who have Asthma Action Plans and a rescue inhaler and/or nebulizer in the Health Office.
- Eighteen students with life threatening allergies that require EpiPens in case of anaphylaxis. Food Allergy & Anaphylaxis Emergency Care Plans on file.
- Seven students with complex life-threatening conditions that require occasional nurse assessment/monitoring with emergency action plans in place.
- One student with PKU requires monitoring and adherence to prescribed dietary restrictions to prevent complications.
- One student with beta thalassemia that requires monitoring for fatigue, weakness, pallor, and other symptoms related to their condition.
- One student with Hemophilia A is at increased risk for prolonged bleeding following injury. School nurse will monitor for signs of bleeding or injury and follow the student's individualized emergency plan and prescribed treatment orders.
- One student with Prader-Willi syndrome requires monitoring and support related to dietary needs, food access, and safety.
- One student requires ongoing monitoring due to a history of heart transplant, adrenal insufficiency, and imrnunosuppression.

Prepared by J. Mlotkiewicz, RN-BSN on 9/8/2026

Attachments are subject to change without notice

# Ocean Acres Elementary School
## Nursing Service Plan 2026-27

| | |
|---|---|
| Total Registered Students-All Leaming Modules | 731 |
| Number of Students with Medications | 34 |
| Number of Medications in Building | 52 |
| Number of Daily Medications Dispensed by Nurse | 4 |
| Number of PRN Medications in Building | 49 |
| Number of Students with Chronic Medical Conditions | 52 |
| Number of Students with Severe and/or Medically Complex Conditions | 13 |
| Students with Life Threatening Allergies | 29 |
| Number of Classified Students in Building | 109 |

Ocean Acres Elementary Detailed Report:

- Two students with a seizure disorder, four who require rescue medication in the event of seizure with a Seizure Emergency Action Plans in place.
- Two students with insulin dependent Type 1 Diabetes Mellitus. Students see the school nurse for blood glucose management and insulin dosage multiple times throughout the day. Rescue medication and emergency action plans on file. Continuous blood glucose monitoring from the health office.
- One student is currently under the care of pediatric cardiologists for:congenital heart defect, heart surgery, and/or cardiac arrhytlunia. Activity restrictions/clearances, medications and assessments managed by the school nurse.
- Thirty-eight students with asthma, twenty-nine who have Asthma Action Plans and a rescue inhaler and/or nebulizer in the Health Office.
- Twenty Nine students with life threatening allergies that require EpiPens in case of anaphylaxis. Food Allergy & Anaphylaxis Emergency Care Plans on file.
- One student who receives daily medication in the Health Office to help them focus and achieve academic success while living with ADHD.
- Four students with complex life-threatening conditions that require occasional nurse assessment/monitoring with emergency action plans in place.Activity restrictions/clearances, medications, frequent Health Office visits, care plans and assessments managed by school nurse.

Attachments are subject to change without notice

Prepared by Carol Doran, RN-BS, CSN + Carmella DeFilippo RN-BS, CSN on 9/8l2026

# McKinley Avenue Elementary School
## Nursing Service Plan 2026-27

| | |
|---|---|
| Total Registered Students-All Leaming Modules | 646 |
| Number of Students with Medications | 28 |
| Number of Medications in Building | 49 |
| Number of Daily Medications Dispensed by Nurse | 2 |
| Number of PRN Medications in Building | 47 |
| Number of Students with Chronic Medical Conditions | 7 |
| Number of Students with Severe and/or Medically Complex Conditions | 11 |
| Students with Life Threatening Allergies | 33 |
| Number of Classified Students in Building | 161 |

McKinley Avenue Elementary Detailed Report:

- Three students with a seizure disorder, two who require rescue medication in the event of seizure with a Seizure Emergency Action Plans in place.
- Four students currently under the care of pediatric cardiologists for:congenital heart defect, heart surgery, and/or cardiac arrhythmia.Activity restrictions/clearances, medications and assessments managed by the school nurse.
- Thirty-four students with asthma, twenty-two who have Asthma Action Plans and a rescue inhaler and/or nebulizer in the Health Office with frequent visits during PE and recess periods.
- Thirty-three students with life threatening allergies that require EpiPens in case of anaphylaxis. Food Allergy & Anaphylaxis Emergency Care Plans on file.Nurse is frequently asked to check classroom-based treats/snacks/birthday items for allergens.
- Two students who receive daily medication in the Health Office to help them focus and achieve academic success.
- Eleven students with complex life-threatening conditions that require frequent nurse assessment/monitoring and action plans in place. Activity restrictions/clearances, medications, frequent Health Office visits, care plans and assessments managed by school nurse.

Attachments are subject to change without notice

Prepared by J. Molettiere, RN-BS, CSN, CPEN on 9/14/26

# Stafford Intermediate School
## Nursing Service Plan 2026/2027

| | |
|---|---|
| Total Registered Students All Learning Modules | 669 |
| Number of Students with Medications | 21 |
| Number of Medications in Building | 35 |
| Number of Daily Medications Dispensed by Nurse | 2 |
| Number of PRN Medications in Building | 33 |
| Number of Students with Chronic Medical Conditions | 85 |
| Number of Students with Severe and/or Medically Complex Conditions | 11 |
| Students with Life Threatening Allergies | 28 |
| Number of Classified Students in Building | 158 |

Attachments are subject to change without notice

Stafford Intermediate Detailed Report:

- Seven students with convulsive disorders. Emergency action plan and Individualized Health Plan on file. Emergency seizure medication in the health office. Students require frequent assessment and monitoring by school nurses.

- Eighteen diagnosed with Autism Spectrum Disorder (ASD), including students with significant communication and behavioral support needs. Several students are nonverbal and often require comprehensive nursing assessment with their individual baseline in mind. Students may require frequent visits to the health office or nurse to classroom evaluations, monitoring, injury evaluation, illness assessment, and support with individualized health and safety needs.

- Seventy-five with asthma, sixteen who have Asthma action plan rescue inhalers and/or nebulizers in the Health Office. Medications, frequent assessment, and education all provided by school nurses.

- Seven students currently under the care of pediatric cardiologists for: congenital heart defect, heart surgery, and/or cardiac arrhythmia. Activity restrictions/clearances, medications and assessments managed by school nurses.

- Sixty-three students with food allergies and food restrictions. Twenty- eight students with life threatening allergies that require EpiPens in case of anaphylaxis. Food allergy action plans/IHP's on file. Rescue Medications, frequent assessment and classroom food safety managed by school nurses.

  Seven students with complex life-threatening conditions that require frequent nurse assessment and monitoring with emergency action plans in place. Activity restrictions/clearances, medications, frequent assessments, managed by school nurses.

- Two students who receive daily medications in the Health Office to help focus and achieve academic success while living with ADHD.

Prepared by: Alyssa Costner, RN-BSN and Paula LaRocca, RN-BSN
Stafford Intermediate School Nurse

# All Buildings

PRN Medication (As Needed Medication) requires nursing physical assessment and intervention at the time of an occurrence. The following are medications that the district nurse's office has for students this school year:

- Asthmatics who need inhalers or nebulizer treatments when they are in respiratory distress
- Epi-pens and Benadryl for anaphylaxis or a lesser allergic reaction
- Eye drops to prevent eye swelling from severe seasonal allergies
- Help for migraines to reduce the potential of vomiting if administered early enough
- Keeping febrile seizures from starting
- Skin ointments for care of Eczema
- Students who have seizures that last longer than 3-5 minutes

Attachments are subject to change without notice

Recommendations to Provide Nursing Service to Address Students' Needs

The district has in place a Certified School Nurse and/or an RN in each building full time. The certified school nurse must maintain oversight ofrequired practices and procedures of the district. The district maintains contracts with nursing service providers in order to maintain nursing full time. As well, the district utilizes a floater and substitute nurses to help ensure building coverage.

Nursing Services in Emergency Situations

The district will need to utilize out of district contracted nursing agency services or in district substitute nurses to cover buildings. While we prefer our substitutes to be school nurse certified however, we will accept Registered Nurses holding their proper county substitute certificate. Recommendations include encouraging continued recruitment at school functions and in local advertising media, making the substitute nursing pay more competitive, and utilizing the nursing agencies for nursing coverage if unable to secure a substitute for the day. The district nurses continually strive to provide excellent services to the students of this district. They have done so by traveling to the other schools and ensuring the essential medication administration and medical treatments are provided for the students who require the services to remain in school.

Full day coverage will provide nursing medical services for the "PRN-as needed at the time of occurrence"medication-treatment coverage. Ifno nurses are available to fully cover the students' medical needs and/or if a medical emergency occurs, the building principal/building administrators or teacher in charge will call 911. Ifthere is a non-emergency medical need, the students' parent/guardian will be called.The district continues to have principals/building administrators and teachers-in-charge Epi-pen trained and CPR certified.

**Non-Public**

Monmouth Ocean Educational Services Commission (MOESC) shall provide Nonpublic Nursing Services to all of the eligible nonpublic schools within the borders of the district pursuant to the requirements of the New Jersey Nonpublic Nursing Law, PL 1991 Chapter 226, on behalf of Stafford Township BOE.The services shall be limited to those permitted under the law and pertinent regulations.

Attachments are subject to change without notice

**STAFFORD TOWNSHIP SCHOOL DISTRICT**

**HEALTH OFFICE REGULATIONS**

DOCTOR'S NOTES / GYM EXCUSES: Nurse or parent/guardian may excuse student from gym for two days; doctor's note is required after day two. If a child is excused from gym he/she may also be excluded from recess, certain class trips or other activities depending on the child's condition and an assessment of risk factors. Gym/recess activity for students will be permitted if a doctor's/medical provider's note is received which specifies the type(s) of gym/recess activity for participation will be allowed. As appropriate, the school principal will confer with the school nurse and the parent/guardian to determine if these additional limitations are necessary to provide a safe environment for the student.

*Students with sutures/stitches in place will be excused from gym/recess. Gym/recess activity for students with sutures/stitches in place will be permitted if a doctor's/medical provider's note is received which specifies the type(s) of gym/recess activity for which participation will be allowed.

**LIST OF APPROVED SUPPLIES:**

Acetaminophen
Alcohol (Isopropyl)
Aloe Vera
Anbesol
Auto injector Epinephrine 0.3 mg dose / 0.15 mg dose
Bacitracin
Bactine
Benadryl
Caladryl
Calamine Lotion
Eye Wash Solution
First Aid Cream
Hot Water Bottle (rubber)
Hydrogen Peroxide
Nonstick DSD
Pediatric Flow Meter and disposable mouthpieces
Salt (warm salt water gargle)
Slings
Splinter Removers (individually wrapped sterile, disposable, stainless steel lancets)
Splints
Sterile bandages – various sizes
Sting Kill
Triple Antibiotic Ointment
Vaseline

Todd Schmoll, M.D.

8/31/26
Date

2026-2027
School Year

Attachments are subject to change without notice

**STAFFORD TOWNSHIP SCHOOL DISTRICT**
**STANDING ORDERS for 2026-2027 School Year**

The following are standing orders for students Pre-K – 6 in Stafford School District:

**ANAPHYLAXIS:** See standing order for Administration of Epinephrine.

**ABRASIONS:** Cleanse area with soap and water or Bactine; apply Antibiotic ointment PRN and Band Aid/DSD PRN.

**BITES:** Clean with soap and water. Apply antiseptic or antibiotic ointment and cover with bandage or non-stick DSD for a longer area.

**ANIMAL BITES:** Report to Ocean County Health Dept, if not previously notified and notify parent.

**HUMAN BITE:** Cleanse area. If skin is broken, apply antibiotic ointment, cover with band aid or DSD and encourage parent/guardian to contact MD for evaluation.

**INSECT BITE:** Cleanse area and remove stinger if visible; scrape across area with tongue depressor and remove it. Apply a cold pack, Calafryl, Calamine Lotion or "Sting Kill" PRN.

**BURNS:** Rinse area with cold water. Apply a cold pack, if 1st or 2nd degree burn, then First Aid Cream and nonstick DSD.

**CANKER SORE:** Apply Anbesol to area.

**CHAFED SKIN/CHAPPED LIPS:** Apply vaseline.

**CHOKING:** Ask "Can you speak? Are you choking?" If the individual is coughing, continue to encourage this and provide reassurance. If the individual cannot speak, cough or breath, perform Heimlich maneuver until obstruction is cleared. Activate emergency response as needed. If the individual becomes unresponsive, follow BLS guidelines. Call 911 and/or parents as indicated

**COMMUNICABLE SKIN CONDITIONS:** Exclude all suspicious skin conditions until diagnosed and/or treated by M.D.

**CONTUSIONS:** Apply cold compress; observe and assess student, notify parent PRN.

**DENTAL:** If an emergency, notify parent. If a permanent tooth is dislodged, place the tooth in saline solution or milk and send with student/parent to the dentist. If the tooth is loose, encourage the student to manipulate the tooth, pull out if ready. Provide assistance to remove the tooth if requested. Control any bleeding, rinse mouth, hand hygiene

**DIARRHEA:** Exclude from school until 24 hours after last episode of diarrhea.

Attachments are subject to change without notice

Todd Schmoll, M.D. — 8/31/26 Date — 2026-2027 School Year

**DIZZINESS:** Have the individual sit and/or lie down. Assess LOC and additional complaints. Check vital signs as indicated. Offer fluids. Review medical conditions, medications, and recent injuries. Notify parents if medical follow up is advised

**DRY SKIN:** Apply aloe vera to area.

**EPISTAXIS:** Pinch nostrils until bleeding stops. If bleeding persists, apply ice to the nose and notify the parent.

**EYE IRRITATION OR INFLAMMATION:** Rinse eye with tap water or sterile eye wash solution. If discharge is present, exclude from school until diagnosed and/or treated by M.D.

**EYE EMERGENCIES:**

**CHEMICAL CONTACT:** Flush with water for at least 15 minutes, contact parent and refer for medical assessment.
**FOREIGN BODY:** Flush eye with water or sterile eye wash solution. If foreign body does not flush out, cover the eye lightly with a patch and refer for medical assessment.
**BLOWS TO THE EYE:** Apply cold compress. If discoloration, eye pain or vision change occurs, contact the parent and refer for medical assessment.
**CUTS/PUNCTURES OF EYE OR LID:** Bandage lightly and refer to M.D.

**FEVER:** Exclude from school if oral temperature is >100. The School nurse may administer Tylenol PRN per attached guidelines if the parent is delayed in picking the child up from school. Child may return to school after temperature is normal (below 100 degrees) for 24 hours without the use of fever-reducing medications, i.e. Acetaminophen or Ibuprofen.

**FAINTING:** Have student rest, check BP and pulse. Notify parents and recommend medical assessment.

**FALLS:** Assess for injury, contact the parent and refer for medical assessment as needed. Notify parent/guardian and teacher of falls from an elevated surface, i.e. playground equipment, steps.

**HEADACHE:** Allow student to rest, assess temperature.

**HEAD INJURY:** Apply cold pack, assess neurological status. Contact parent, refer for medical assessment as needed.

**HEAT STROKE:** Have student rest in cool, well-ventilated room. Give oral fluids. Notify parents.

**LACERATION:** Apply pressure to stop bleeding. Cleanse with soap and water, apply antiseptic and cover with DSD. Notify the parent and refer to M.D. if the cut is deep or bleeding does not stop.

Attachments are subject to change without notice

Todd Schnoll, M.D. — 8/31/26 Date — 2026-2027 School Year

**MENSTRUAL CRAMPS:** Allow to rest, apply hot water bottle to abdomen.

**ORTHOPEDIC EMERGENCIES:** Apply ice and splint PRN. Cover any exposed bone with sterile dressing. Calm child and keep warm; observe for shock. Contact parents and call the ambulance PRN.

**PEDICULOSIS:** Exclude from school until treated with appropriate pediculicide & ALL nits have been removed.

**POISONING:** Contact Poison Control Center (1-800-222-1222) and follow their directions. Call 911 and send the student to the Emergency Room.

**POISON IVY/OAK/SUMAC:** Apply Calamine Lotion for itching. If the area is weeping, keep covered.

**PUNCTURE WOUNDS (NAILS, THUMBTACKS, STAPLES, PENCIL POINTS):** Cleanse with soap and water, apply DSD. Do NOT remove deep foreign bodies; refer to M.D.

**SCABIES:** Exclude from school until evaluated by M.D. and treated. Students must have M.D. note to return to school.

**SCROTAL INJURIES:** Have student recline, apply cold pack. Notify parents and refer for medical evaluation.

**SORE THROAT:** Contact parent if severe or accompanied by fever. If Strep is suspected, the child may return to school after negative throat culture or after 24 hours of treatment with appropriate antibiotics.

**SUNBURN:** Apply First Aid Cream or Bactine to area. May use aloe vera if 1st degree and no blistering is noted.

**SPLINTERS:** Cleanse area with soap and water. If the child is cooperative, remove the splinter with tweezers or Splinter Remover, apply antiseptic or antibiotic ointment and cover with DSD/Band Aid.

**SUTURES/STITCHES:** Gym/recess activity for students with sutures/stitches in place, will be permitted if a doctor's/medical provider's note is received with specifics of the type(s) of gym/recess activity participation will be allowed.

**TICK BITE:** Remove tick with tick remover or tweezers. Cleanse area with antiseptic. If unable to remove the tick, contact the parent and refer to M.D.

**VOMITING:** Exclude from school until 24 hours after the last episode of vomiting.

Todd Schmoll, M.D.

8/31/26
Date

2026-2027
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Attachments are subject to change without notice

## STANDING ORDER: ADMINISTRATION OF EPINEPHRINE IN SCHOOL

**Definition:** Anaphylaxis is the medical term for a rare but life-threatening systemic allergic reaction that may occur when allergic individuals are exposed to specific allergens. The most common sensitizing agents encountered in schools include food (nuts, legumes, shellfish, eggs), stinging insects (wasps, bees), and medications (antibiotics). Anaphylaxis will usually occur within 30 minutes after the sensitized individual is exposed to the antigen. The more rapid the onset of symptoms, the more severe the reaction is likely to be. Early recognition and management is critical to preventing full-blown anaphylaxis and possible death.

**IF**, in the school nurse's professional opinion, a child in a school setting is experiencing an anaphylactic reaction, the nurse is directed to immediately activate the emergency system by **CALLING 911** or to direct someone else to do so.
**THEN**, the nurse should:

- Place the child in the supine position with legs elevated unless doing so interferes with breathing **AND**
- Inject epinephrine by auto-injector intramuscularly into the anterolateral aspect of the thigh (through clothing if necessary) according to the manufacturer's recommendations.

**Note:**
*Epinephrine auto-injectors are available in 0.3 mg dose (EpiPen 1:1000 and 0.15 mg dose (EpiPen Jr 1:2000). Using two 0.15 mg doses to obtain a 0.3 mg dose is permissible.*

**Dosage:** 0.3 mg EpiPen, if 30 kilograms (66 pounds) or more
0.15 mg EpiPen Jr. if 15-30 kilograms (33-66 pounds)

**Frequency:** If symptoms are not noticeably improved after 10 minutes, a second dose may be administered.

**BEFORE** epinephrine is administered for anaphylaxis, one or more of the following symptoms should be present on nursing assessment.

- *urticaria* (hives, generalized itching)
- *angioedema* (lip, facial, tongue, uvula swelling)
- *upper airway obstruction* (laryngeal swelling, hoarseness, lump in throat, change in voice, difficulty swallowing, difficulty breathing)
- *bronchospasm* (wheezing, cough)
- *hypotension* (faintness, weakness, paleness, dizziness, feeling of impending doom, change in mental status)

**Note:** Product insert and prescribing information for EpiPen and EpiPen Jr are available at: http://www.epipen.com

Todd Schmoll, M.D. — 8/31/26 (Date) — 2026-2027 (School Year)

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## STANDING ORDER: ADMINISTRATION OF ACETAMINOPHEN IN SCHOOL

Orders for Administration of Acetaminophen:

If a student has a fever greater than 101 orally and the parents or emergency contacts are unavailable or delayed, the school nurse may administer one dose of Acetaminophen, calculated by weight in pounds, as follows:

| Child's Weight | Acetaminophen |
|---|---|
| Below 24 lbs | Not Recommended |
| 24-35 lbs | administer 160 mg. P.O. |
| 36-47 lbs | administer 240 mg. P.O. |
| 48-59 lbs | administer 320 mg. P.O. |
| 60-71 lbs | administer 400 mg. P.O. |
| 72-95 lbs | administer 480 mg. P.O. |
| 96-120 lbs | administer 560 mg. P.O. |
| >120 lbs | administer 650 mg. P.O. |

Todd Schmoll, M.D.

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## STANDING ORDER: ADMINISTRATION OF BENADRYL IN SCHOOL

Orders for the Administration of Benadryl (diphenhydramine):

If a student has mild symptoms of an allergic reaction such as rash, itching, or localized swelling without any breathing problems or other symptoms, the school nurse may administer one dose of Benadryl (diphenhydramine), calculated by weight in pounds, as follows:

| Child's Weight | Liquid Benadryl (12.5mg/5ml) | Benadryl Chewable tablet (12.5mg) | Benadryl Tablet (12mg) |
|---|---|---|---|
| Under 22 lbs | Not recommended | Not recommended | Not recommended |
| 22-28 lbs | ¾ tsp (3.75 ml) | Not recommended | Not recommended |
| 29-41 lbs | 1 tsp (5 ml) | 1 chewable | Not recommended |
| 42-55 lbs | 1.5 tsp (7.5 ml) | Not recommended | Not recommended |
| 56-83 lbs | 2 tsp (10 ml) | 2 chewables | 1 tablet |
| 84-110 lbs | 3 tsp (15 ml) | 3 chewables | Not recommended |
| >110 lbs | 4 tsp (20 ml) | 4 chewables | 2 tablets |

Todd Schmoll, M.D.

8/31/26
Date

2026-2027
School Year

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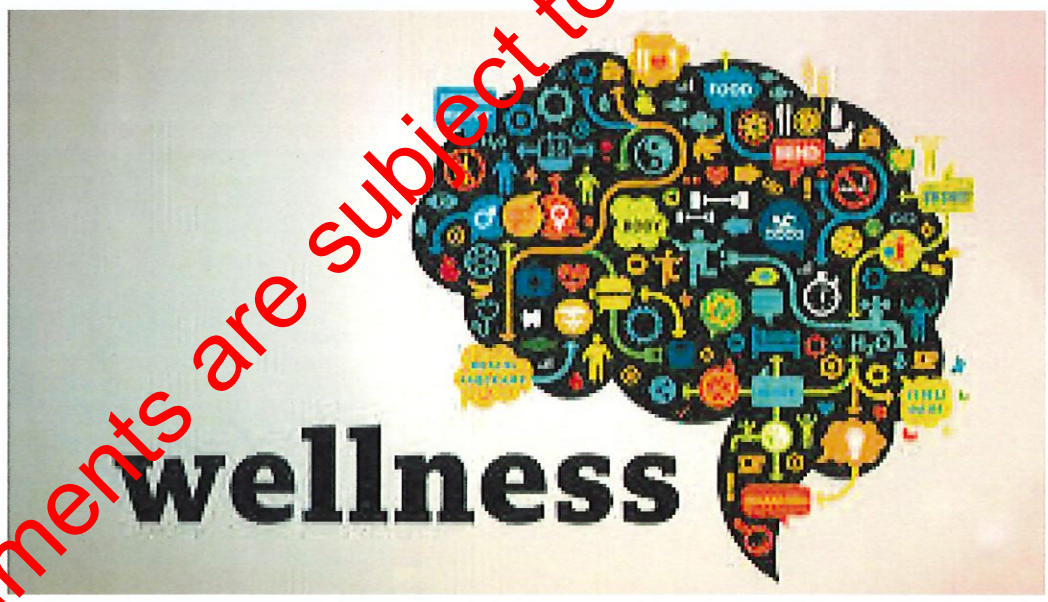
Stafford Township School District
Manahawkin, NJ

# 2026-2027

# WELLNESS PLAN

## VISION

The Stafford Township School District will provide programs that support student adoption of healthy habits. Students will be provided daily opportunities for physical activity to ensure healthy minds and healthy bodies. Students will learn to develop life-long wellness.




Attachments are subject to change without notice

# GOALS

Given the current health issues faced by school age children in this state, regardless of age/grade level, the school environment should support the district's mission to promote wellness. Growing evidence shows that healthy eating is critical to child development and school performance. School breakfast programs, healthy school lunches, and after school snacks are critical to ensuring that children are well-fed and ready to learn. Physical activity is noted to lead to increased health in students. To reduce the spread of germs, especially given the current pandemic, is essential in increasing wellness.

1. Students will have access to healthful food choices in school, lunch, parties and related activities.

2. Students should have daily opportunities for physical activity.

3. Students will develop healthy habits to reduce the spread of germs.

4. Students will have access to mindfulness and mental health activities and understand how they apply to overall wellness.



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## Health and Nutrition Goals

The primary goal of nutrition education is to influence students' eating behaviors.

- Students in grades Pre-K to 6 should receive nutrition education that is interactive and teaches the skills they need to adopt healthy eating behaviors. This should include information on allergens and alternative food groups.

- Nutrition education should be offered in the school cafeteria as well as in the classroom, with coordination between food service staff and teachers.

## Suggested Activities/Ideas for Implementation:

- Utilize monthly lunch menus provided by the food service provider to review awareness of healthy eating habits.
- Utilize video information to encourage proper nutrition.
- Allow students sufficient time to eat lunch.
- Parties or school events should promote healthy snacks.
- Ensure that parties or school events offer food choices that are safe for students with dietary restrictions and food allergies.
- Ensure 'safe snacks' are on hand in classroom or Health Office to offer students with dietary restrictions and food allergies during parties and school events
- Utilize information on the New Jersey Department of Education School Nutrition Programs website
- Incorporate healthy eating into the curriculum.
- Discuss how nutrition and food choices impact student's health and play a role in specific disease prevention/processes during related school nurse visits.
- Collaborate with the food service provider on balanced eating instruction.
- Promote use of So Happy app for nutrition education.
- Continue to promote awareness of specific food allergies and restrictions both in the classroom and cafeteria.

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## Physical Activity Goals

The primary goal for a school's physical activity component is to provide opportunities for every student to develop the knowledge and skills, maintain physical fitness, regularly participate in physical activity, and understand the short- and long-term benefits of a physically active and healthy lifestyle.

- At the minimum, students by state law should have 150 minutes of physical education and health instruction each week.
- Review curriculum to ensure that daily instruction reflects the need for physical activity.
- Daily opportunities for physical activity.

**Suggested Activities/Ideas for Implementation**:

- Design a plan to include physical activities during indoor recess.
- Life-time sports are offered for students before or after school.
- Encourage all students to participate in physical activity during outdoor recess.
- Have weekly game play outside during appropriate weather months.
- Have an annual field day with events sponsored by community people.
- Have an exercise club.
- Incorporate opportunities for physical activity in the curriculum.
- Explain the role that physical activity plays in health promotion and disease prevention during related school nurse visits.
- Ensure proper footwear for physical activity.
- Teach rules for safe physical activity.
- Encourage physical activity as part of school-wide special events.
- Staff is trained to recognize signs of head injury and limit risk factors during physical activity.



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## Reducing the Spread of Germs Goal

The primary goal for a school's overall health is to reduce the spread of germs leading to less illness. Instruction on proper procedures to reduce the spread of germs is crucial.

- Students in grades pre-K -6 should receive education that is interactive and teaches the skills they need to adopt behaviors to reduce the spread of germs. This should include information on proper handwashing, mask wearing and covering sneezes.
- District will monitor absences for illness related concerns.
- Curriculum will include lessons on reducing the spread of germs.
- District will ensure immunization compliance

## Suggested Activities/Ideas for Implementation:

- Incorporate lessons on proper handwashing, covering a cough, and ways of reducing the spread of germs.
- Refer to local, state and federal guidance on transmission rates of prevalent diseases and guidance.
- Display visual age-appropriate signage throughout the building that promotes hygiene (e.g., "Cover Your Cough", step-by-step hand washing instructions).
- Educate parents regarding return-to-school policy after illness.
- Place hand sanitizer dispensers at strategic and high-contact locations throughout the building.
- Utilize specific disinfectants to reduce the spread of germs.



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## Mindfulness Goals

The primary goal for a school's mindfulness component is to provide social and emotional learning opportunities for every student through a range of activities.

- Stress reduction activities should be incorporated into the instructional program.
- Students will participate in social emotional special area instruction throughout the school year.

## Suggested Activities/Ideas for Implementation:

- Incorporate yoga-type study activities into daily instruction.
- Social and emotional learning activities
- Guidance lessons on acceptance and mindfulness
- Physical Education teachers can promote physical activity as a means of relieving stress and emotional wellness.
- Instruction in the Second Step Program and Project Team
- Students will be able to recognize peers' emotions and show empathy towards others.
- Utilize the trained network of staff (nurse, guidance, counseling, administration, etc) available to students in regards to emotional wellness and related concerns.



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**The following pages provide ideas for the implementation of the wellness plan. You will find suggestions for healthy habits as well as a website for additional recommendations.**

**Remember all ideas are <u>suggestions.</u>**



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## Healthy Food and Beverages for Student Activities

As an administrator, teacher, coach or parent, you can help teach children lifelong healthy eating habits by promoting healthy eating behaviors. Opportunities to be a good role model for healthy eating habits abound and include special school activities such as sports events (concessions and banquets), intramural activities, dances, programs, concerts, plays and musicals.

There are many healthy and tasty food and beverage options for special activities. Portion control is also important. Try to offer smaller portions of foods, such as mini muffins or mini bagels.

## Healthy Suggestions for Concessions

Grilled chicken sandwich
Fresh fruit and vegetables – buy locally when possible
Fresh bagels with low fat cream cheese
Baby carrots and other vegetables with low fat dip
Fig cookies
Baked chips
Granola bars*
Pizza (no extra cheese and no more than one meat)
String cheese
Single-serve low fat or fat free mild (regular or flavored)
Bottled water (including flavored water)
Sub sandwich
Yogurt
Trail mix*
Nuts and seeds*
Animal crackers
Low fat popcorn
Soft pretzels and mustard
Pudding
Cereal bar
100% fruit juice (small single-serve)

*May be allergens and/or choking risk for some people, please check with a health care provider

**Sample Meals:**

- Chili, cornbread, and salad
- Soup, whole grain crackers, cheese and fruit
- Spaghetti, salad, and bread
- Pizza (no extra cheese or more than one meat)
- Sub sandwich and fruit
- Baked potato bar (suggested toppings: shredded cheese, Low fat sour cream, salsa, broccoli)
- Fat free or low fat milk

Note: Visit www.mealsthatmatter.com for meal planning tools and recipes.

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## Healthy Food and Beverages for Parent, Teacher and Staff Meetings

Children can learn healthy (or unhealthy!) eating habits by watching the food patterns of parents, teachers and other adults who serve as role models in their lives. A mixed message can be sent if healthy food and beverages are taught in the classroom and served to students at school but less healthy choices are provided at meetings of school personnel or parent teacher groups. Having healthy food and beverages available at school meetings will also make it easier for adults to make choices for good health. It might not be necessary to serve food at all, especially at meetings held outside of mealtimes.

If food will be offered at school meetings here are ideas to build on. Be sure to keep cold foods cold and hot foods hot throughout serving time.

**Food Safety**

Preparing and serving food that will not cause food bourn illness is as important as preparing and serving healthy choices for school activities!
Remember the four steps to safe food:

Clean. Wash hands and surfaces often.

Chill. Refrigerate promptly.

Cook to proper temperatures.

Separate. Don't cross contaminate.

Note: Fact sheets on each of these steps can be found at www.fightbac.org

- Fresh fruits and vegetables
  -Buy locally when possible
- Yogurt
- Bagels with low fat cream cheese
- Baby carrots and other vegetables with low fat dip
- Trail Mix*
- Nuts and seeds*
- Fig Cookies
- Animal crackers
- Baked chips
- Low fat popcorn
- Granola Bars*
- Soft pretzels and mustard
- Pizza (no extra cheese and no more than one meat)
- Pudding
- String Cheese
- Cereal bar
- Single-serve low fat or fat free milk (regular or flavored)
- 100% fruit juice(small single serves)
- Bottled water (including flavored water)

Recommended Criteria:
These single-serving size snacks (except for nuts, seeds, and cheese) should have no more than 6 grams of fat and meet at least two of the following three criteria:

Contain 300 of fewer calories,

One of more grams of fiber, or

At least 10% of Calcium, Iron, Vitamin A or Vitamin C

Attachments are subject to change without notice

*May be allergens and/or a choking risk for some people, please check with a health care provider

Serve water, coffee, tea, 100% fruit juice and/or milk (fat free or low fat) as beverages. Fat free and low fat or evaporated milk can be provided for use in hot beverages. Other foods and beverages may also be healthy choices. Refer to the Nutrition Facts label when selecting.
If meetings get lengthy, provide a quick physical activity stretch break.

## Healthy School Parties

Schools can play a major role in helping students become fit, healthy and ready to learn. One way to accomplish this is for foods offered in schools to support lessons learned in the classroom regarding nutrition and physical activity. What better venue than school – which has a great impact on children—to support the message that proper nutrition and physical activity are a key part of a healthy lifestyle? Positive examples of making healthy eating choices and encouraging physical activity should be visible throughout the school. Parties as well as cafeterias, school stores, vending machines, and after-school events offer opportunities for schools to reinforce the message that making healthy food choices and being physically active means a healthier body and sharper mind.

## Snack Ideas for School and Classroom Parties

Of course, the foods offered at school parties should add to the fun, but try to avoid making them the main focus. Remember, schools are responsible for helping students learn lessons about good nutrition and healthy lifestyles and students should practice these lessons during school parties. For Example, consider combining student birthday parties into one monthly event that incorporates physical activities as well as healthy snacks. Also, be sure to consider ethnic and medical food restrictions and allergies when providing classroom snacks.

Here is a list of healthy snack choices to consider for classroom events. Serving all healthy foods and incorporating physical activities make a powerful statement. Actions speak louder than words: Lead by example.

- Fresh fruit and vegetables –
- Yogurt
- Bagels with low fat cream cheese
- Baby carrots and other vegetables with low fat dip
- Trail Mix*
- Nuts and seeds*
- Fig cookies
- Animal crackers
- Baked chips

Low fat popcorn
Granola bars*
Soft pretzels and mustard
Pizza (no extra cheese and no more than one meat)
Pudding
String cheese
Cereal bar
Single-serve low fat or fat free milk (reg. or flavored)
100% fruit juice (small single serve)
Bottled water (including flavored water)

* May be allergens and/or a choking risk for some people, please check with a health care provider.

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## Food Safety

Preparing and serving food that will not cause food borne illness is as important as preparing and serving healthy choices for school parties! Remember the four steps to safe food:

1. Clean. Wash hands and surfaces often.
2. Chill. Refrigerate promptly.
3. Cook to proper temperatures.
4. Separate. Don't cross contaminate.

*Fact sheets on each of these steps can be found at www.fightbac.org

## Things to Remember When Having a School Party

### Common Food Allergies

Eight foods account for 90% of all food-allergic reactions: peanuts, tree nuts (walnuts, cashews, etc), milk, eggs, fish, shellfish, soy and wheat. The most common food allergens that cause problems in children are eggs, milk, and peanuts. It is important to prevent allergic reactions to food because they can cause devastating illness and, in some cases, be fatal. Avoidance is the only way to prevent an allergic reaction. When planning school parties be sure you are aware of any food allergies of students and staff.

### Incorporate Physical Activity

Today's children are at an increased risk of developing diabetes, high blood pressure, obesity, depression, and anxiety as a result of the lack of physical activity and poor nutrition habits. Teachers are encouraged to incorporate physical activities into class parties as well as classroom learning. Celebrate special events without food or limit the quantity of food and encourage physical activity (active games, dancing, walking, etc.)

### Healthy Food Preparation Techniques:

- Bake, roast or broil un-breaded or breaded meats, poultry and fish instead of frying
- Bake frozen potatoes and other vegetables (i.e. French fries)
- Prepare vegetables without added fat
- Cook with non-stick spray or pan liners
- Thoroughly drain fat from ground meats

Note: Definitions for food label terms and more information about Nutrition Facts Label can be found at: https://www.fda.gov/food/labelingnutrition

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## Healthy Habits for Reducing the Spread of Germs

The single best way to prevent the spread of germs is to avoid people who are sick. Good health habits like practicing social distancing. wearing a mask, washing your hands and covering your cough or sneeze can often help stop the spread of germs and prevent respiratory illness.

The tips and resources below will help you learn about actions you can take to protect yourself and others from illness and help stop the spread of germs.

1. Avoid close contact. Avoid close contact with people who are sick. When you are sick, keep your distance from others to protect them from getting sick too.

2. Stay home when you are sick. If possible, stay home from work, school, and errands when you are sick. This will help prevent spreading your illness to others.

3. Cover your mouth and nose. Cover your mouth and nose with a tissue when coughing or sneezing. It may prevent those around you from getting sick. Flu and other serious respiratory illnesses, like respiratory syncytial virus (RSV), whooping cough, and COVID-19, are spread by cough, sneezing, or unclean hands.

4. Clean your hands. Washing your hands often will help protect you from germs. If soap and water are not available, use an alcohol-based hand rub.

    - Handwashing: Clean Hands Save Lives
      Tips on hand washing and using alcohol-based hand sanitizers
    - It's a SNAP Toolkit: Handwashing
    - Hand washing resources from the It's A SNAP program, aimed at preventing school absenteeism by promoting clean hands. From the School Network for Absenteeism Prevention, a collaborative project of the CDC, the U.S. Department of Health and Human Services and the American Cleaning Institute.

5. Avoid touching your eyes, nose or mouth. Germs are often spread when a person touches something that is contaminated with germs and then touches his or her eyes, nose, or mouth.

6. Practice other good health habits.
   Clean and disinfect frequently touched surfaces at home, work or school, especially when someone is ill. Get plenty of sleep, be physically active, manage your stress, drink plenty of fluids, and eat nutritious food.

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## Helpful Resources:

Click on the hyperlink to view the resource.

CDC Guidance for Schools

FDA- Nutrition Labels

Wellness Toolkit

Eat Right Nutrition Information

Food Allergy Awareness

Emotional Wellness Toolkit

**Nondiscrimination:**

In accordance with federal civil rights law and U.S. Department of Agriculture (USDA) civil rights regulations and policies, this institution is prohibited from discriminating on the basis of race, color, national origin, sex (including gender identity and sexual orientation), disability, age, or reprisal or retaliation for prior civil rights activity.

Revised 9/1/26

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# Stafford Township Board of Education
## Bills and Claims
## September 2026 Bills List

| Vendor Name | Account Number | Id | PO Number | Description | Batch | Check # | Amount |
|---|---|---|---|---|---|---|---|
| 330 ROCK OAK INC.<br>DBA: AR Communication | 11-000-270-615-00-121 | 5253 | PO-27-00189 | Mag-Mount Antenna Kit and installation for Bus 171<br>Inv: 53824 | 09/26 | | 150.00 |
| 330 ROCK OAK INC.<br>DBA: AR Communication | 11-000-270-615-00-121 | 5253 | PO-27-00385 | Radio Installation Bus #271 (Partial)<br>Inv: 53823 STAFFORD PORTION | 09/26 | | 499.52 |
| | | | | | | | **649.52** |
| ALL RISK RESTORATION | 11-000-261-420-60-400-001 | 2897 | PO-27-00269 | McKinley Water Damage<br>Inv: SI-20006 | 09/26 | | 20,584.05 |
| ALL RISK RESTORATION | 30-000-411-450-70-400 | 2897 | PO-27-00334 | Intermediate Roof Leak<br>Inv: SI-20007 | 09/26 | | 136,254.20 |
| | | | | | | | **156,838.25** |
| Alphas Landscaping | 20-421 | 5926 | PO-26-01885-PYPBL | Playground Mulch for Preschool Students<br>Inv: 4937 | 09/26 | | 1,184.94 |
| | | | | | | | **1,184.94** |
| AMAZON.COM SERVICES INC | 11-190-100-610-65-100 | 5325 | PO-27-00190 | Teaching Supply Oa<br>Inv: 1TQF-2K4Y-MDWC | 09/26 | | 1,175.35 |
| AMAZON.COM SERVICES INC | 11-190-100-610-65-100 | 5325 | PO-27-00190 | Teaching Supply Oa<br>Inv: 1F7G-9WLG-3L4G | 09/26 | | 435.79 |
| AMAZON.COM SERVICES INC | 11-000-221-610-00-100 | 5325 | PO-27-00192 | materials for new hires 26-27<br>Inv: 1JN9-CLHY-D74D | 09/26 | | 367.84 |
| AMAZON.COM SERVICES INC | 11-000-270-610-00-100 | 5325 | PO-27-00214 | Supplies for Office and Buses<br>Inv: 1CLT-9Y94-RTC6 | 09/26 | | -105.14 |
| AMAZON.COM SERVICES INC | 11-000-270-610-00-600 | 5325 | PO-27-00214 | Supplies for Office and Buses<br>Inv: 1TPQ-9KND-W1XY | 09/26 | | 738.92 |
| AMAZON.COM SERVICES INC | 11-000-270-610-00-100 | 5325 | PO-27-00214 | Supplies for Office and Buses<br>Inv: 1TPQ-9KND-W1XY | 09/26 | | 189.25 |
| AMAZON.COM SERVICES INC | 11-000-219-600-70-100 | 5325 | PO-27-00229 | Ot/pt/speech Supplies Mck<br>Inv: 1L76-HJG9-CYM4 | 09/26 | | 55.99 |
| AMAZON.COM SERVICES INC | 11-000-216-610-60-100 | 5325 | PO-27-00229 | Ot/pt/speech Supplies Mck<br>Inv: 1QGM-G1L6-6HYF | 09/26 | | 1,126.05 |
| AMAZON.COM SERVICES INC | 11-000-270-610-00-600 | 5325 | PO-27-00230 | Supplies for Shop, Buses and Office<br>Inv: 1N3Q-4WR4-FKV3 | 09/26 | | 217.71 |
| AMAZON.COM SERVICES INC | 11-000-270-610-00-600 | 5325 | PO-27-00230 | Supplies for Shop, Buses and Office<br>Inv: 1FNN-MVQY-1Q97 | 09/26 | | 258.83 |
| AMAZON.COM SERVICES INC | 11-000-270-610-00-100 | 5325 | PO-27-00230 | Supplies for Shop, Buses and Office<br>Inv: 1N3Q-4WR4-FKV3 | 09/26 | | 67.03 |
| AMAZON.COM SERVICES INC | 11-000-261-610-65-105 | 5325 | PO-27-00231 | Parts needed for lawnmower/door switch<br>Inv: 1MP7-C7RK-HCDK | 09/26 | | 7.99 |
| AMAZON.COM SERVICES INC | 11-000-263-610-00-100 | 5325 | PO-27-00231 | Parts needed for lawnmower/door switch<br>Inv: 1MP7-C7RK-HCDK | 09/26 | | 26.69 |
| AMAZON.COM SERVICES INC | 11-000-240-600-70-103 | 5325 | PO-27-00246 | Amazon Order<br>Inv: 19Y9-KHC4-TGLJ | 09/26 | | 265.77 |
| AMAZON.COM SERVICES INC | 11-000-263-610-00-100 | 5325 | PO-27-00249 | Grounds supplies needed for district<br>Inv: 1PYP-6MY1-GXM3 | 09/26 | | 33.88 |
| AMAZON.COM SERVICES INC | 11-190-100-610-65-100 | 5325 | PO-27-00250 | Teaching Supply Oa<br>Inv: 17VX-6JFQ-CGRQ | 09/26 | | 354.15 |
| AMAZON.COM SERVICES INC | 11-190-100-610-65-100 | 5325 | PO-27-00250 | Teaching Supply Oa<br>Inv: 14NP-CNHJ-FQQQ | 09/26 | | -59.84 |

Attachments are subject to change without notice

**Stafford Township Board of Education**
**Bills and Claims**
**September 2026 Bills List**

| Vendor Name | Account Number | Id | PO Number | Description | Batch | Check # | Amount |
|---|---|---|---|---|---|---|---|
| AMAZON.COM SERVICES INC | 11-000-270-610-00-100 | 5325 | PO-27-00271 | Binder Clips, Paper Clips and Laminating Rolls for the Office<br>Inv: 1M69-DQJV-R3JH | 09/26 | | -49.89 |
| AMAZON.COM SERVICES INC | 11-000-270-610-00-100 | 5325 | PO-27-00271 | Binder Clips, Paper Clips and Laminating Rolls for the Office<br>Inv: 116K-MTNL-FGYH | 09/26 | | 147.05 |
| AMAZON.COM SERVICES INC | 11-000-270-610-00-100 | 5325 | PO-27-00271 | Binder Clips, Paper Clips and Laminating Rolls for the Office<br>Inv: 1L7R-HQM7-16GM | 09/26 | | -9.49 |
| AMAZON.COM SERVICES INC | 11-000-270-610-00-600 | 5325 | PO-27-00286 | Grease and Reflective Tape for Shop<br>Inv: 19DX-HRCV-KM3P | 09/26 | | 131.76 |
| AMAZON.COM SERVICES INC | 11-190-100-610-60-100 | 5325 | PO-27-00289 | Desk Chairs for Teachers<br>Inv: 1XH1-QFMR-DJN7 | 09/26 | | 239.94 |
| AMAZON.COM SERVICES INC | 11-000-263-610-00-100 | 5325 | PO-27-00303 | Grounds supplies needed for district<br>Inv: 161Q-39PM-FV9V | 09/26 | | 355.00 |
| AMAZON.COM SERVICES INC | 11-000-216-610-60-100 | 5325 | PO-27-00313 | Student Markers<br>Inv: 1TG3-[illegible]C7-VQ4F | 09/26 | | 27.99 |
| AMAZON.COM SERVICES INC | 11-000-216-610-60-100 | 5325 | PO-27-00313 | Student Markers<br>Inv: UNAPPLIED FUNDS | 09/26 | | -9.00 |
| AMAZON.COM SERVICES INC | 11-212-100-610-00-110 | 5325 | PO-27-00323 | iPad Screen Protectors<br>Inv: 1RL9-GFQG-64HV | 09/26 | | 33.20 |
| AMAZON.COM SERVICES INC | 11-000-261-610-00-105 | 5325 | PO-27-00336 | Bottle Filling Stations<br>Inv: 1YMH-TFRM-MWTN | 09/26 | | 3,773.96 |
| AMAZON.COM SERVICES INC | 11-190-100-610-70-100 | 5325 | PO-27-00343 | Classroom Supplies<br>Inv: 1VWM-Y1KQ-NTCK | 09/26 | | 189.40 |
| AMAZON.COM SERVICES INC | 11-000-261-610-60-105 | 5325 | PO-27-00358 | Clocks needed for district<br>Inv: 14XX-HN9W-NDKR | 09/26 | | 139.90 |
| AMAZON.COM SERVICES INC | 11-000-261-610-65-105 | 5325 | PO-27-00358 | Clocks needed for district<br>Inv: 14XX-HN9W-NDKR | 09/26 | | 139.90 |
| AMAZON.COM SERVICES INC | 11-000-261-610-70-105 | 5325 | PO-27-00358 | Clocks needed for district<br>Inv: 14XX-HN9W-NDKR | 09/26 | | 139.90 |
| AMAZON.COM SERVICES INC | 11-000-261-610-75-105 | 5325 | PO-27-00358 | Clocks needed for district<br>Inv: 14XX-HN9W-NDKR | 09/26 | | 139.90 |
| AMAZON.COM SERVICES INC | 11-000-262-610-00-104 | 5325 | PO-27-00358 | Clocks needed for district<br>Inv: 14XX-HN9W-NDKR | 09/26 | | 14.37 |
| AMAZON.COM SERVICES INC | 11-000-270-615-00-121-001 | 5325 | PO-27-00358 | Clocks needed for district<br>Inv: 14XX-HN9W-NDKR | 09/26 | | 22.31 |
| AMAZON.COM SERVICES INC | 11-000-261-610-00-105 | 5325 | PO-27-00358 | Clocks needed for district<br>Inv: 14XX-HN9W-NDKR | 09/26 | | 139.90 |
| | | | | | | | **10,722.36** |
| ANTHONY CLAYTON | 11-000-262-890-00-800 | 4710 | PO-27-00223 | Boiler license reimbursement<br>Inv: REIMBURSE 26 | 09/26 | | 160.00 |
| | | | | | | | **160.00** |
| ASCENDANCE TRUCKS, LLC | 11-000-270-615-00-121 | 5569 | PO-27-00166 | V Band Clamp for Bus 155<br>Inv: XA122033998:01 | 09/26 | | 180.26 |
| ASCENDANCE TRUCKS, LLC | 11-000-270-615-00-121 | 5569 | PO-27-00168 | Fleetrite Air Suspension Spring for Bus 151<br>Inv: XA122033997:01 | 09/26 | | 241.52 |
| ASCENDANCE TRUCKS, LLC | 11-000-270-615-00-121 | 5569 | PO-27-00225 | Thermostat with Gasket for Bus 142<br>Inv: XA122034441:01 | 09/26 | | 98.21 |

Attachments are subject to change without notice

**Stafford Township Board of Education**
**Bills and Claims**
**September 2026 Bills List**

| Vendor Name | Account Number | Id | PO Number | Description | Batch | Check # | Amount |
|---|---|---|---|---|---|---|---|
| ASCENDANCE TRUCKS, LLC | 11-000-270-615-00-121 | 5569 | PO-27-00258 | Door Control Switches and Exhaust Pipe Flange Gasket for Bus 154 and Bus 182 Inv: XA122034571:01 | 09/26 | | 417.24 |
| ASCENDANCE TRUCKS, LLC | 11-000-270-615-00-121 | 5569 | PO-27-00266 | Tee Fitting and Elbow Fitting for Bus 154 Inv: XA122034615:01 | 09/26 | | 165.96 |
| ASCENDANCE TRUCKS, LLC | 11-000-270-615-00-121 | 5569 | PO-27-00267 | Absorber, Shock Absorber for Bus 181 Inv: XA122034616:01 | 09/26 | | 306.44 |
| | | | | | | | **1,409.63** |
| Banach, Megan | 11-000-291-290-00-000 | 5810 | PO-27-00342 | NJL2L Enrollment Inv: REIMBURSE | 09/26 | | 1,100.00 |
| | | | | | | | **1,100.00** |
| BAYADA HOME HEALTH CARE INC | 11-000-217-320-50-300 | 4402 | PO-27-00350 | One to One Nursing Services-OXY Inv: 743287GG1810 07/07/26 - 07/09/26 KM | 09/26 | | 780.00 |
| BAYADA HOME HEALTH CARE INC | 11-000-217-320-50-300 | 4402 | PO-27-00350 | One to One Nursing Services-OXY Inv: 752828GG1779 07/13/26 - 07/16/26 KM | 09/26 | | 1,023.75 |
| BAYADA HOME HEALTH CARE INC | 11-000-217-320-50-300 | 4402 | PO-27-00350 | One to One Nursing Services-OXY Inv: 762519GG1811 07/20/26 - 07/23/26 KM | 09/26 | | 1,040.00 |
| BAYADA HOME HEALTH CARE INC | 11-000-217-320-50-300 | 4402 | PO-27-00350 | One to One Nursing Services-OXY Inv: 772672GH1765 07/27/26 - 07/30/26 KM | 09/26 | | 1,040.00 |
| BAYADA HOME HEALTH CARE INC | 11-000-213-300-60-300 | 4402 | PO-27-00360 | Building Coverage Inv: 752833GG1787 7/15/26 | 09/26 | | 382.50 |
| BAYADA HOME HEALTH CARE INC | 11-000-213-300-60-300 | 4402 | PO-27-00360 | Building Coverage Inv: 782930GH1810 8/3/26 - 8/6/26 | 09/26 | | 1,508.75 |
| BAYADA HOME HEALTH CARE INC | 11-000-213-300-60-300 | 4402 | PO-27-00360 | Building Coverage Inv: 793504GH1756 8/10/26 - 8/13/26 | 09/26 | | 1,530.00 |
| | | | | | | | **7,305.00** |
| BENECARD SERVICES, LLC | 11-000-291-270-00-200-001 | 3324 | PO-27-00016 | Employee Prescription Benefit 2026/2027 Inv: 0071611 9/26 COBRA | 09/26 | | 355.03 |
| BENECARD SERVICES, LLC | 11-000-291-270-00-200 | 3324 | PO-27-00016 | Employee Prescription Benefit 2026/2027 Inv: 0071611 9/26 ACTIVE | 09/26 | | 192,147.34 |
| | | | | | | | **192,502.37** |
| BENJAMIN R HARVEY CO INC | 30-000-410-450-50-002 | 5861 | PO-26-01269-PYPO | 24K066 Construction Mgmt - Referendum HVAC Oxy Addition/Alterations Inv: PAY APP 4 8/26 | 09/26 F30 EFT | | 3,351,543.70 |
| | | | | | | | **3,351,543.70** |
| BIT DIRECT, INC. | 11-190-100-610-00-106 | 4495 | PO-27-00279 | Technololgy Supplies and Equipment Inv: 5036351 | 09/26 | | 2,510.90 |
| BIT DIRECT, INC. | 20-218-100-600-00-100 | 4495 | PO-27-00281 | Laptops for Preschool Staff Inv: 5036352 | 09/26 | | 2,019.90 |
| | | | | | | | **4,530.80** |
| BROWN & BROWN BENEFIT ADVISORS, INC. | 11-000-291-270-00-200 | 4437 | PO-27-00059 | Benefits Brokerage Services 2026-2027 Inv: 25941012 9/26 | 09/26 | | 2,000.00 |
| | | | | | | | **2,000.00** |
| CANON USA, INC | 62-992-330-420-00-420 | 5417 | PO-27-00261 | Maint/Usage Copier STAC Inv: 6016817203 4/28/26 - 7/27/26 | 09/26 | | 338.16 |

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**Stafford Township Board of Education**
**Bills and Claims**
**September 2026 Bills List**

| Vendor Name | Account Number | Id | PO Number | Description | Batch | Check # | Amount |
|---|---|---|---|---|---|---|---|
| CANON USA, INC | 11-000-251-340-00-300 | 5417 | PO-27-00364 | Maint/Usage - ADM & Oxy Copiers - 05/15/2026 - 08/14/2026 Inv: 6017089926 | 09/26 | | 10.57 |
| CANON USA, INC | 11-190-100-500-50-500 | 5417 | PO-27-00364 | Maint/Usage - ADM & Oxy Copiers - 05/15/2026 - 08/14/2026 Inv: 6017089926 | 09/26 | | 16.72 |
| | | | | | | | **365.45** |
| CDW-G, LLC. | 10-421 | 1843 | PO-26-01808-PYPBL | Replacement Security Cameras - OA Inv: AJ9J36V | 09/26 | | 1,024.01 |
| CDW-G, LLC. | 11-190-100-340-00-300 | 1843 | PO-27-00110 | Yearly Renewal - Microsoft Inv: AK6Q99A | 09/26 | | 28,752.24 |
| | | | | | | | **29,776.25** |
| COMEGNO LAW GROUP PC | 11-000-230-331-00-323 | 5235 | PO-27-00311 | Legal Fees July 2026 Inv: 9804 7/26 | 09/26 | | 494.00 |
| | | | | | | | **494.00** |
| COOPER ELECTRIC SUPPLY, LLC | 11-000-262-610-00-105 | 2015 | PO-27-00175 | Batteries for exit lights needed for district Inv: S062778276.001 | 09/26 | | 115.38 |
| | | | | | | | **115.38** |
| CRISIS PREVENTION INST., INC. | 11-000-219-390-00-306 | 3184 | PO-27-00325 | CPI TRAINING Inv: NAIN-252155 | 09/26 | | 1,903.65 |
| | | | | | | | **1,903.65** |
| D & W DIESEL, INC. | 11-000-270-615-00-121 | 4459 | PO-27-00169 | Turbo Charger Kit for Bus 151 Inv: EA8061 | 09/26 | | 5,608.12 |
| D & W DIESEL, INC. | 11-000-270-615-00-121 | 4459 | PO-27-00169 | Turbo Charger Kit for Bus 151 Inv: ED5780 | 09/26 | | -1,200.00 |
| | | | | | | | **4,408.12** |
| DASTI MURPHY & MCGUCKIN PC | 11-000-230-331-00-323 | 5235 | PO-27-00318 | Legal Fees July 2026 Inv: 148331 7/26 | 09/26 | | 315.00 |
| | | | | | | | **315.00** |
| DELTA DENTAL, INC. | 11-000-291-270-00-200 | 2583 | PO-27-00015 | Employee Dental Coverage 2026/2027 Inv: PM00000001316354 9/26 ACTIVE | 09/26 | | 31,555.87 |
| DELTA DENTAL, INC. | 11-000-291-270-00-200-007 | 2583 | PO-27-00015 | Employee Dental Coverage 2026/2027 Inv: PM00000001316355 9/26 RETIREE | 09/26 | | 5,007.84 |
| DELTA DENTAL, INC. | 11-000-291-270-00-200-001 | 2583 | PO-27-00015 | Employee Dental Coverage 2026/2027 Inv: PM00000001316356 9/26 COBRA | 09/26 | | 346.57 |
| | | | | | | | **36,910.28** |
| Direct Energy Business LLC - Electric DBA: Direct Energy Business, LLC | 11-000-262-622-00-100 | 5791 | PO-27-00022 | Electric Delivery and Supply charge for 2026-2027 School Year Inv: 26430060131864 07/18/26 - 08/17/26 TRANS | 09/26 | | 337.66 |
| Direct Energy Business LLC - Electric DBA: Direct Energy Business, LLC | 11-000-262-622-00-100 | 5791 | PO-27-00022 | Electric Delivery and Supply charge for 2026-2027 School Year Inv: 262430060130609 07/21/26 - 08/18/26 OA SIGN | 09/26 | | 7.82 |
| | | | | | | | **345.48** |
| Eagleswood Township Board of Education | 10-143 | 5589 | PO-27-00263 | 25/26 Tuition Overpayment Inv: OVERPAYMENT 25/26SY | 09/26 | | 3,377.60 |
| | | | | | | | **3,377.60** |

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**Stafford Township Board of Education**
**Bills and Claims**
**September 2026 Bills List**

| Vendor Name | Account Number | Id | PO Number | Description | Batch | Check # | Amount |
|---|---|---|---|---|---|---|---|
| EAI EDUCATION | 11-190-100-610-75-100 | 3201 | 27-05318 | Science Supplies<br>Inv: INV1487605 | 09/26 | | 29.00 |
| | | | | | | | **29.00** |
| ENERGYCAP LLC. | 11-000-262-300-00-300 | 4041 | PO-27-00153 | Yearly Renewal - EnergyCap<br>Inv: INV7923 | 09/26 | | 5,190.90 |
| | | | | | | | **5,190.90** |
| FERGUSON ENTERPRISES, LLC | 11-000-261-610-00-105 | 5242 | PO-27-00091 | Anticipated emergency HVAC supplies<br>Inv: 4962114 8/27/26 | 09/26 | | 49.50 |
| | | | | | | | **49.50** |
| FORD SCOTT & ASSOCIATES LLC | 11-000-230-332-00-329 | 2162 | PO-27-00047 | AUDIT 2026-2027 SY<br>Inv: 40067 | 09/26 | | 15,500.00 |
| | | | | | | | **15,500.00** |
| FYR-FYTER SALES SERVICE, INC | 11-000-262-420-70-400 | 1068 | PO-27-00072 | Yearly Sprinkler Inspections<br>Inv: 146402 | 09/26 | | 765.00 |
| FYR-FYTER SALES SERVICE, INC | 11-000-262-420-60-400 | 1068 | PO-27-00072 | Yearly Sprinkler Inspections<br>Inv: 146402 | 09/26 | | 275.00 |
| FYR-FYTER SALES SERVICE, INC | 11-000-262-420-65-400 | 1068 | PO-27-00072 | Yearly Sprinkler Inspections<br>Inv: 146402 | 09/26 | | 630.00 |
| FYR-FYTER SALES SERVICE, INC | 11-000-262-420-50-400 | 1068 | PO-27-00075 | Annual Hood Cleanings<br>Inv: 146480 | 09/26 | | 490.00 |
| FYR-FYTER SALES SERVICE, INC | 11-000-262-420-60-400 | 1068 | PO-27-00075 | Annual Hood Cleanings<br>Inv: 146479 | 09/26 | | 980.00 |
| FYR-FYTER SALES SERVICE, INC | 11-000-262-420-65-400 | 1068 | PO-27-00075 | Annual Hood Cleanings<br>Inv: 146482 | 09/26 | | 490.00 |
| FYR-FYTER SALES SERVICE, INC | 11-000-262-420-70-400 | 1068 | PO-27-00075 | Annual Hood Cleanings<br>Inv: 146481 | 09/26 | | 490.00 |
| FYR-FYTER SALES SERVICE, INC | 11-000-261-420-65-400 | 1068 | PO-27-00338 | Repairs needed at Ocean Acres<br>Inv: 145104 | 09/26 | | 772.50 |
| | | | | | | | **4,892.50** |
| G.B.I. INC T/A THERMAL PIPING | 30-000-410-450-00-001 | 5746 | PO-26-00889-PYPO | 24K068 Construction Mgmt - Referendum HVAC Multiple Schools<br>Inv: PAY APP 8 7/26 | 09/26 F30 | | 574,754.07 |
| | | | | | | | **574,754.07** |
| GANN LAWBOOKS, INC | 11-000-230-610-00-100 | 1284 | PO-27-00004 | Gann Law Books BA/Superintendent<br>Inv: S720916 | 09/26 | | 383.00 |
| GANN LAWBOOKS, INC | 11-000-251-600-00-100 | 1284 | PO-27-00004 | Gann Law Books BA/Superintendent<br>Inv: S721652 | 09/26 | | 383.00 |
| | | | | | | | **766.00** |
| GENSERVE, INC. | 11-000-261-420-75-400 | 4630 | PO-26-01626-PYPO | Repairs needed for PLC generator<br>Inv: 0632324-IN | 09/26 | | 1,458.83 |
| | | | | | | | **1,458.83** |
| George Kesheneff<br>DBA: Bay Transmission Service, Inc | 11-000-270-420-00-400 | 5931 | PO-27-00257 | ABS Module for White Van 122<br>Inv: 27078 | 09/26 | | 1,707.40 |
| | | | | | | | **1,707.40** |
| GLOBAL SIGN | 11-000-262-590-00-500 | 3806 | PO-27-00207 | Yearly Renewal - GlobalSign<br>Inv: 34485 | 09/26 | | 696.00 |
| | | | | | | | **696.00** |

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**Stafford Township Board of Education**
**Bills and Claims**
**September 2026 Bills List**

| Vendor Name | Account Number | Id | PO Number | Description | Batch | Check # | Amount |
|---|---|---|---|---|---|---|---|
| GREENWOOD TREE SERVICE, INC | 11-000-263-420-00-420 | 5782 | PO-27-00245 | Tree removal behind bus garage<br>Inv: 42242 | 09/26 | | 3,000.00 |
| | | | | | | | **3,000.00** |
| GSAC CORPORATION | 11-000-270-615-00-121 | 4890 | PO-27-00211 | Emergency Purchases not to exceed $600 for July 24th through August 31st, 2026<br>Inv: 084140 7/30/26 | 09/26 | | -70.53 |
| GSAC CORPORATION | 11-000-270-615-00-121 | 4890 | PO-27-00211 | Emergency Purchases not to exceed $600 for July 24th through August 31st, 2026<br>Inv: 083742 7/27/26 | 09/26 | | 71.80 |
| GSAC CORPORATION | 11-000-270-615-00-121 | 4890 | PO-27-00211 | Emergency Purchases not to exceed $600 for July 24th through August 31st, 2026<br>Inv: 084442 8/3/26 | 09/26 | | 49.76 |
| GSAC CORPORATION | 11-000-270-615-00-121 | 4890 | PO-27-00211 | Emergency Purchases not to exceed $600 for July 24th through August 31st, 2026<br>Inv: 083744 7/27/26 | 09/26 | | 17.90 |
| GSAC CORPORATION | 11-000-270-615-00-121 | 4890 | PO-27-00211 | Emergency Purchases not to exceed $600 for July 24th through August 31st, 2026<br>Inv: 084103 7/30/26 | 09/26 | | 70.53 |
| GSAC CORPORATION | 11-000-270-615-00-121 | 4890 | PO-27-00211 | Emergency Purchases not to exceed $600 for July 24th through August 31st, 2026<br>Inv: 084738 8/6/26 | 09/26 | | 324.28 |
| GSAC CORPORATION | 11-000-270-615-00-121 | 4890 | PO-27-00211 | Emergency Purchases not to exceed $600 for July 24th through August 31st, 2026<br>Inv: 084521 8/4/26 | 09/26 | | 30.84 |
| GSAC CORPORATION | 11-000-270-615-00-121 | 4890 | PO-27-00211 | Emergency Purchases not to exceed $600 for July 24th through August 31st, 2026<br>Inv: 084837 8/7/26 | 09/26 | | 14.32 |
| GSAC CORPORATION | 11-000-270-615-00-121 | 4890 | PO-27-00211 | Emergency Purchases not to exceed $600 for July 24th through August 31st, 2026<br>Inv: 084838 8/7/26 | 09/26 | | 17.90 |
| GSAC CORPORATION | 11-000-270-615-00-121 | 4890 | PO-27-00211 | Emergency Purchases not to exceed $600 for July 24th through August 31st, 2026<br>Inv: 085146 8/10/26 | 09/26 | | 41.76 |
| GSAC CORPORATION | 11-000-270-615-00-121 | 4890 | PO-27-00211 | Emergency Purchases not to exceed $600 for July 24th through August 31st, 2026<br>Inv: 085246 8/11/26 | 09/26 | | 200.59 |
| GSAC CORPORATION | 11-000-270-615-00-121 | 4890 | PO-27-00211 | Emergency Purchases not to exceed $600 for July 24th through August 31st, 2026<br>Inv: 084744 8/6/26 | 09/26 | | -324.28 |
| GSAC CORPORATION | 11-000-270-615-00-121 | 4890 | PO-27-00305 | Emergency Purchases not to exceed $600 for August 12th through August 31st, 2026<br>Inv: 086504 8/24/26 | 09/26 | | 47.16 |
| GSAC CORPORATION | 11-000-270-615-00-121 | 4890 | PO-27-00305 | Emergency Purchases not to exceed $600 for August 12th through August 31st, 2026<br>Inv: 087155 8/31/26 | 09/26 | | 32.60 |
| GSAC CORPORATION | 11-000-270-615-00-121 | 4890 | PO-27-00305 | Emergency Purchases not to exceed $600 for August 12th through August 31st, 2026<br>Inv: 086620 08/25/26 | 09/26 | | 91.26 |
| GSAC CORPORATION | 11-000-270-615-00-121 | 4890 | PO-27-00305 | Emergency Purchases not to exceed $600 for August 12th through August 31st, 2026<br>Inv: 085391 8/12/26 | 09/26 | | 66.45 |

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| Vendor Name | Account Number | Id | PO Number | Description | Batch | Check # | Amount |
|---|---|---|---|---|---|---|---|
| GSAC CORPORATION | 11-000-270-615-00-121 | 4890 | PO-27-00305 | Emergency Purchases not to exceed $600 for August 12th through August 31st, 2026 Inv: 087151 8/31/26 | 09/26 | | 16.10 |
| GSAC CORPORATION | 11-000-270-615-00-121 | 4890 | PO-27-00305 | Emergency Purchases not to exceed $600 for August 12th through August 31st, 2026 Inv: 087154 8/31/26 | 09/26 | | -16.10 |
| GSAC CORPORATION | 11-000-270-615-00-121-001 | 4890 | PO-27-00305 | Emergency Purchases not to exceed $600 for August 12th through August 31st, 2026 Inv: 085356 8/12/26 | 09/26 | | 12.65 |
| GSAC CORPORATION | 11-000-270-615-00-121 | 4890 | PO-27-00305 | Emergency Purchases not to exceed $600 for August 12th through August 31st, 2026 Inv: 085962 8/18/26 | 09/26 | | 163.92 |
| GSAC CORPORATION | 11-000-270-615-00-121 | 4890 | PO-27-00305 | Emergency Purchases not to exceed $600 for August 12th through August 31st, 2026 Inv: 086505 8/24/26 | 09/26 | | 17.31 |
| GSAC CORPORATION | 11-000-270-615-00-121 | 4890 | PO-27-00305 | Emergency Purchases not to exceed $600 for August 12th through August 31st, 2026 Inv: 087375 9/1/26 | 09/26 | | -1.75 |
| GSAC CORPORATION | 11-000-270-615-00-121 | 4890 | PO-27-00324 | Serpentine Belts for Bus 173, 174 and 175 Inv: 086215 8/20/26 | 09/26 | | 72.87 |
| GSAC CORPORATION | 11-000-270-615-00-121-001 | 4890 | PO-27-00327 | Battery for Red Mail Van Inv: 086216 8/20/26 | 09/26 | | 146.90 |
| GSAC CORPORATION | 11-000-270-615-00-121-001 | 4890 | PO-27-00327 | Battery for Red Mail Van Inv: 086269 8/20/26 | 09/26 | | -18.00 |
| | | | | | | | **1,076.24** |
| GSRP G-I SOLAR 1 LLC DBA: STAFFORD SOLAR 1 LLC | 11-000-262-622-00-100 | 5108 | PO-26-00022-PYPO | Solar Supply 2025-2026 Inv: NJ-05-003A-202607-01 INT | 09/26 EFT | | 3,552.27 |
| GSRP G-I SOLAR 1 LLC DBA: STAFFORD SOLAR 1 LLC | 11-000-262-622-00-100 | 5108 | PO-26-00022-PYPO | Solar Supply 2025-2026 Inv: NJ-05-001A-202607-01 MCK | 09/26 EFT | | 4,770.85 |
| GSRP G-I SOLAR 1 LLC DBA: STAFFORD SOLAR 1 LLC | 11-000-262-622-00-100 | 5108 | PO-26-00022-PYPO | Solar Supply 2025-2026 Inv: NJ-05-005A-202607-01 | 09/26 EFT | | 875.56 |
| GSRP G-I SOLAR 1 LLC DBA: STAFFORD SOLAR 1 LLC | 11-000-262-622-00-100 | 5108 | PO-26-00022-PYPO | Solar Supply 2025-2026 Inv: NJ-05-006A-202607-01 OXY | 09/26 EFT | | 3,032.12 |
| GSRP G-I SOLAR 1 LLC DBA: STAFFORD SOLAR 1 LLC | 11-000-262-622-00-100 | 5108 | PO-26-00022-PYPO | Solar Supply 2025-2026 Inv: NJ-05-002A-202607-01 | 09/26 EFT | | 3,554.67 |
| | | | | | | | **15,785.47** |
| HARRING FIRE PROTECTION, LLC | 11-000-262-420-60-400 | 5442 | PO-27-00074 | Semi Annual & Annual Kitchen Suppression Inspections Inv: 48800588SP | 09/26 | | 340.00 |
| HARRING FIRE PROTECTION, LLC | 11-000-262-420-65-400 | 5442 | PO-27-00074 | Semi Annual & Annual Kitchen Suppression Inspections Inv: 48800588SP | 09/26 | | 158.00 |
| HARRING FIRE PROTECTION, LLC | 11-000-262-420-70-400 | 5442 | PO-27-00074 | Semi Annual & Annual Kitchen Suppression Inspections Inv: 48800588SP | 09/26 | | 166.00 |
| HARRING FIRE PROTECTION, LLC | 11-000-262-420-50-400 | 5442 | PO-27-00074 | Semi Annual & Annual Kitchen Suppression Inspections Inv: 48800588SP | 09/26 | | 174.00 |
| | | | | | | | **838.00** |

Attachments are subject to change without notice

| Vendor Name | Account Number | Id | PO Number | Description | Batch | Check # | Amount |
|---|---|---|---|---|---|---|---|
| Heinrichs, Gretchen | 11-000-270-800-00-800 | 5934 | PO-27-00285 | Reimbursement For Fingerprints for Gretchen Heinrichs on 7/5/2026<br>Inv: REIMBURSE FINGERPRINTS | 09/26 | | 30.55 |
| | | | | | | | **30.55** |
| HOME DEPOT | 11-000-261-610-65-105 | 2374 | PO-27-00093 | Emergency maintenance supplies/grounds supplies<br>Inv: 0951 00002 52213 8/12/26 | 09/26 | | 59.92 |
| HOME DEPOT | 11-000-261-610-60-105 | 2374 | PO-27-00093 | Emergency maintenance supplies/grounds supplies<br>Inv: 0951 00002 52213 8/12/26 | 09/26 | | 56.92 |
| HOME DEPOT | 11-000-261-610-65-105 | 2374 | PO-27-00093 | Emergency maintenance supplies/grounds supplies<br>Inv: 0951 62 44198 8/11/26 | 09/26 | | 59.93 |
| HOME DEPOT | 11-000-261-610-65-105 | 2374 | PO-27-00093 | Emergency maintenance supplies/grounds supplies<br>Inv: 1973192 8/03/26 | 09/26 | | -40.32 |
| HOME DEPOT | 11-000-261-610-75-105 | 2374 | PO-27-00093 | Emergency maintenance supplies/grounds supplies<br>Inv: 0951 00002 55182 8/13/26 | 09/26 | | 31.20 |
| HOME DEPOT | 11-000-261-610-50-105 | 2374 | PO-27-00093 | Emergency maintenance supplies/grounds supplies<br>Inv: 0951 00062 58651 8/20/26 | 09/26 | | 78.73 |
| HOME DEPOT | 11-000-261-610-50-105 | 2374 | PO-27-00093 | Emergency maintenance supplies/grounds supplies<br>Inv: 0951 0005 71331 8/24/26 | 09/26 | | .77 |
| HOME DEPOT | 11-000-263-610-00-100 | 2374 | PO-27-00093 | Emergency maintenance supplies/grounds supplies<br>Inv: 0951 0005 71331 8/24/26 | 09/26 | | 17.14 |
| HOME DEPOT | 11-000-261-610-60-105 | 2374 | PO-27-00294 | Hardware for wall installation-OT Room<br>Inv: 7900797 | 09/26 | | 80.08 |
| | | | | | | | **344.37** |
| Inspired Education (Happy Days II) | 20-218-200-321-00-300 | 5681 | PO-27-00051 | Pre-School Tuition 26/27<br>Inv: PYMT 2 9/26 | 09/26 | | 69,751.81 |
| | | | | | | | **69,751.81** |
| INSPIRED EDUCATION, LLC (HAPPY DAYS I) | 20-218-200-321-00-300 | 5348 | PO-27-00050 | Tuition Pre-School 26/27<br>Inv: PYMT 2 9/26 | 09/26 | | 46,501.27 |
| | | | | | | | **46,501.27** |
| INTERFLEX PAYMENT LLC<br>DBA: AMERIFLEX | 11-000-291-290-00-000 | 3214 | PO-27-00029 | Flexible Spending 2026-2027<br>Inv: INV1011180 8/26 | 09/26 | | 453.60 |
| INTERFLEX PAYMENT LLC<br>DBA: AMERIFLEX | 11-000-291-270-00-200-001 | 3214 | PO-27-00030 | COBRA 2026 - 2027<br>Inv: INV1017301 8/26 | 09/26 | | 333.00 |
| | | | | | | | **786.60** |
| International Driver Training, Inc<br>DBA: Comedy Defensive Driving | 11-000-270-420-00-400 | 5930 | PO-27-00264 | New Jersey Defensive Driving Course for Drivers 2026-2027 School Year<br>Inv: LJWINBAJ-0002 | 09/26 | | 846.79 |
| | | | | | | | **846.79** |
| JAMES PARSELLS<br>DBA: PARSELLS PRINTING | 11-000-221-610-00-106 | 5414 | PO-27-00150 | District-Wide Letterhead/Envelope Order<br>Inv: 31983 | 09/26 | | 46.00 |
| JAMES PARSELLS<br>DBA: PARSELLS PRINTING | 11-000-230-610-00-114 | 5414 | PO-27-00150 | District-Wide Letterhead/Envelope Order<br>Inv: 31983 | 09/26 | | 116.00 |

Attachments are subject to change without notice

**Stafford Township Board of Education**
**Bills and Claims**
**September 2026 Bills List**

| Vendor Name | Account Number | Id | PO Number | Description | Batch | Check # | Amount |
|---|---|---|---|---|---|---|---|
| JAMES PARSELLS DBA: PARSELLS PRINTING | 11-000-240-600-00-117 | 5414 | PO-27-00150 | District-Wide Letterhead/Envelope Order Inv: 31983 | 09/26 | | 120.00 |
| JAMES PARSELLS DBA: PARSELLS PRINTING | 11-000-240-600-60-103 | 5414 | PO-27-00150 | District-Wide Letterhead/Envelope Order Inv: 31983 | 09/26 | | 92.00 |
| JAMES PARSELLS DBA: PARSELLS PRINTING | 11-000-240-600-75-103 | 5414 | PO-27-00150 | District-Wide Letterhead/Envelope Order Inv: 31983 | 09/26 | | 212.00 |
| JAMES PARSELLS DBA: PARSELLS PRINTING | 11-000-251-600-00-100 | 5414 | PO-27-00150 | District-Wide Letterhead/Envelope Order Inv: 31983 | 09/26 | | 212.00 |
| JAMES PARSELLS DBA: PARSELLS PRINTING | 20-218-200-600-00-100 | 5414 | PO-27-00150 | District-Wide Letterhead/Envelope Order Inv: 31983 | 09/26 | | 212.00 |
| JAMES PARSELLS DBA: PARSELLS PRINTING | 62-992-330-600-00-105 | 5414 | PO-27-00150 | District-Wide Letterhead/Envelope Order Inv: 31983 | 09/26 | | 46.00 |
| JAMES PARSELLS DBA: PARSELLS PRINTING | 11-000-219-600-00-100 | 5414 | PO-27-00150 | District-Wide Letterhead/Envelope Order Inv: 31983 | 09/26 | | 198.00 |
| JAMES PARSELLS DBA: PARSELLS PRINTING | 11-000-219-600-00-100 | 5414 | PO-27-00197 | District-Wide Print Order Inv: 32002 | 09/26 | | 84.00 |
| JAMES PARSELLS DBA: PARSELLS PRINTING | 11-000-240-600-60-103 | 5414 | PO-27-00197 | District-Wide Print Order Inv: 32002 | 09/26 | | 929.00 |
| JAMES PARSELLS DBA: PARSELLS PRINTING | 11-000-240-600-70-103 | 5414 | PO-27-00197 | District-Wide Print Order Inv: 32002 | 09/26 | | 333.00 |
| JAMES PARSELLS DBA: PARSELLS PRINTING | 11-000-270-610-00-600 | 5414 | PO-27-00197 | District-Wide Print Order Inv: 32002 | 09/26 | | 1,316.00 |
| JAMES PARSELLS DBA: PARSELLS PRINTING | 11-000-230-610-00-116 | 5414 | PO-27-00197 | District-Wide Print Order Inv: 32002 | 09/26 | | 364.00 |
| JAMES PARSELLS DBA: PARSELLS PRINTING | 11-000-240-600-65-103 | 5414 | PO-27-00197 | District-Wide Print Order Inv: 32002 | 09/26 | | 317.00 |
| JAMES PARSELLS DBA: PARSELLS PRINTING | 11-000-251-600-00-100 | 5414 | PO-27-00197 | District-Wide Print Order Inv: 32002 | 09/26 | | 109.00 |
| JAMES PARSELLS DBA: PARSELLS PRINTING | 11-000-251-600-00-117 | 5414 | PO-27-00197 | District-Wide Print Order Inv: 32002 | 09/26 | | 127.00 |
| JAMES PARSELLS DBA: PARSELLS PRINTING | 11-190-100-610-60-100 | 5414 | PO-27-00197 | District-Wide Print Order Inv: 32002 | 09/26 | | 6,224.00 |
| JAMES PARSELLS DBA: PARSELLS PRINTING | 11-190-100-610-70-100 | 5414 | PO-27-00197 | District-Wide Print Order Inv: 32002 | 09/26 | | 1,510.00 |
| JAMES PARSELLS DBA: PARSELLS PRINTING | 11-190-100-610-65-100 | 5414 | PO-27-00197 | District-Wide Print Order Inv: 32002 | 09/26 | | 3,328.00 |
| JAMES PARSELLS DBA: PARSELLS PRINTING | 11-190-100-610-75-100 | 5414 | PO-27-00197 | District-Wide Print Order Inv: 32002 | 09/26 | | 7,897.00 |
| JAMES PARSELLS DBA: PARSELLS PRINTING | 20-218-100-600-00-100 | 5414 | PO-27-00197 | District-Wide Print Order Inv: 32002 | 09/26 | | 222.00 |
| | | | | | | | **24,014.00** |
| JOSEPH GARTLAND, INC. | 11-000-270-615-00-121 | 2118 | PO-27-00115 | Bonded Spill Pads and Spill Blanket for Garage Inv: 191659 | 09/26 | | 264.00 |
| | | | | | | | **264.00** |
| LABORATORY CORP OF AMERICA HOLDINGS | 11-000-230-590-00-500 | 5335 | PO-27-00238 | Employee Drug Testing Inv: 87815436 | 09/26 | | 643.20 |
| | | | | | | | **643.20** |

Attachments are subject to change without notice

**Stafford Township Board of Education**
**Bills and Claims**
**September 2026 Bills List**

| Vendor Name | Account Number | Id | PO Number | Description | Batch | Check # | Amount |
|---|---|---|---|---|---|---|---|
| LEARNING A - Z, INC. | 11-190-100-340-60-300 | 3244 | PO-27-00312 | Annual renewal of 26-27 District licenses<br>Inv: CI-00941776 | 09/26 | | 12,116.00 |
| LEARNING A - Z, INC. | 11-190-100-340-65-300 | 3244 | PO-27-00312 | Annual renewal of 26-27 District licenses<br>Inv: CI-00941776 | 09/26 | | 12,116.00 |
| LEARNING A - Z, INC. | 11-190-100-340-75-300 | 3244 | PO-27-00312 | Annual renewal of 26-27 District licenses<br>Inv: CI-00941776 | 09/26 | | 6,058.00 |
| | | | | | | | **30,290.00** |
| LITTLE GRADUATES PRESCHOOL | 20-218-200-321-00-300 | 5345 | PO-27-00052 | Pre-School Tuition 26/27<br>Inv: PYMT 2 9/26 | 09/26 EFT | | 23,250.09 |
| | | | | | | | **23,250.09** |
| MACHADO LAW GROUP | 11-000-230-331-00-323 | 5217 | PO-27-00310 | Legal Fees July 16th-31st<br>Inv: 6334 7/16/26 - 7/31/26 | 09/26 | | 2,173.48 |
| MACHADO LAW GROUP | 11-000-230-331-00-323 | 5217 | PO-27-00359 | Legal Fees August 1st - 15th 2026<br>Inv: 6410 8/1/26 - 8/15/26 | 09/26 | | 2,228.72 |
| | | | | | | | **4,402.20** |
| MCCARTHY TIRE SERVICE CO. OF PHILA | 11-000-270-615-00-120 | 5273 | PO-27-00333 | Front Tires for buses<br>Inv: 79124833 | 09/26 | | 1,883.80 |
| | | | | | | | **1,883.80** |
| MCGRAW HILL SCHOOL PUBLISHING | 11-190-100-640-65-107 | 1706 | PO-27-00215 | additonal materials needed fro OA and INT<br>Inv: 141159486001 | 09/26 | | 1,406.64 |
| MCGRAW HILL SCHOOL PUBLISHING | 11-190-100-610-00-100 | 1706 | PO-27-00215 | additonal materials needed fro OA and INT<br>Inv: 141159486001 | 09/26 | | 745.87 |
| MCGRAW HILL SCHOOL PUBLISHING | 11-190-100-610-70-100 | 1706 | PO-27-00215 | additonal materials needed fro OA and INT<br>Inv: 141159486001 | 09/26 | | 769.08 |
| | | | | | | | **2,921.59** |
| MEADOWBROOK INDUSTRIES LLC | 11-000-262-420-00-405 | 4075 | PO-27-00306 | Trash Removal District Wide 2026-2027 School year<br>Inv: 07/26 | 09/26 | | 6,916.00 |
| | | | | | | | **6,916.00** |
| MOBILEASE MODULAR SPACE, INC. | 30-000-410-450-50-001 | 3728 | PO-25-01213-PYPO-PYPO | Modular Classroom Building - Referendum Projects<br>Inv: RI21526 9/26 | 09/26 F30 | | 22,050.00 |
| | | | | | | | **22,050.00** |
| MONMOUTH-OCEAN EDUCATIONAL SERV COMM | 11-000-270-518-00-500 | 1407 | PO-27-00379 | Transportation Service for July 2026<br>Inv: 27-00154 7/26 | 09/26 | | 1,899.00 |
| | | | | | | | **1,899.00** |
| MR. ERIC MCILHENNY | 11-000-270-800-00-800 | 3690 | PO-27-00337 | Reimbursement For Fingerprints for Eric McIlhenny on 8/19/2026<br>Inv: REIMBURSE | 09/26 | | 30.55 |
| | | | | | | | **30.55** |
| Nasco / School Specialty DBA: Nasco Education | 11-190-100-610-75-100 | 5896 | 27-05317A | Science Supplies<br>Inv: 948078 | 09/26 | | 80.52 |
| | | | | | | | **80.52** |
| NATIONAL VISION ADMINISTRATORS LLC | 11-000-291-270-00-200 | 3500 | PO-27-00017 | Employee Vision Benefit 2026/2027<br>Inv: 4485880 09/26 ACTIVE | 09/26 | | 6,260.26 |
| NATIONAL VISION ADMINISTRATORS LLC | 11-000-291-270-00-200-001 | 3500 | PO-27-00017 | Employee Vision Benefit 2026/2027<br>Inv: 4485881 09/26 COBRA | 09/26 | | 43.04 |

Attachments are subject to change without notice

**Stafford Township Board of Education**
**Bills and Claims**
**September 2026 Bills List**

| Vendor Name | Account Number | Id | PO Number | Description | Batch | Check # | Amount |
|---|---|---|---|---|---|---|---|
| NATIONAL VISION ADMINISTRATORS LLC | 11-000-291-270-00-200-001 | 3500 | PO-27-00017 | Employee Vision Benefit 2026/2027<br>Inv: 4485882 09/26 RETIREE | 09/26 | | 1,115.62 |
| | | | | | | | **7,418.92** |
| NEUROPSYCHOLOGY & COUNSELING ASSOC LLC | 11-000-219-390-75-306 | 5884 | PO-27-00256 | Student Evaluation<br>Inv: NC39900 7/30/26 | 09/26 | | 1,200.00 |
| | | | | | | | **1,200.00** |
| NEW ROAD CONSTRUCTION MNGT CO., INC. | 30-000-410-390-99-001 | 5714 | PO-25-01367-PYPO-PYPO | Construction Management Contract - Referendum Projects<br>Inv: 4889 4/26 | 09/26 F30 | | 5,725.00 |
| NEW ROAD CONSTRUCTION MNGT CO., INC. | 30-000-410-390-65-001 | 5714 | PO-25-01367-PYPO-PYPO | Construction Management Contract - Referendum Projects<br>Inv: 4889 4/26 | 09/26 F30 | | 500.00 |
| NEW ROAD CONSTRUCTION MNGT CO., INC. | 30-000-410-390-99-001 | 5714 | PO-25-01367-PYPO-PYPO | Construction Management Contract - Referendum Projects<br>Inv: 4915 5/26 | 09/26 F30 | | 6,225.00 |
| NEW ROAD CONSTRUCTION MNGT CO., INC. | 30-000-410-390-99-001 | 5714 | PO-25-01367-PYPO-PYPO | Construction Management Contract - Referendum Projects<br>Inv: 4964 6/26 | 09/26 F30 | | 1,050.00 |
| NEW ROAD CONSTRUCTION MNGT CO., INC. | 30-000-410-390-70-001 | 5714 | PO-25-01367-PYPO-PYPO | Construction Management Contract - Referendum Projects<br>Inv: 4964 6/26 | 09/26 F30 | | 5,175.00 |
| NEW ROAD CONSTRUCTION MNGT CO., INC. | 30-000-410-390-70-001 | 5714 | PO-25-01367-PYPO-PYPO | Construction Management Contract - Referendum Projects<br>Inv: 5018 7/26 | 09/26 F30 | | 7,825.00 |
| NEW ROAD CONSTRUCTION MNGT CO., INC. | 30-000-410-390-50-001 | 5714 | PO-25-01367-PYPO-PYPO | Construction Management Contract - Referendum Projects<br>Inv: 5018 7/26 | 09/26 F30 | | 2,175.00 |
| NEW ROAD CONSTRUCTION MNGT CO., INC. | 30-000-410-390-50-001 | 5714 | PO-25-01367-PYPO-PYPO | Construction Management Contract - Referendum Projects<br>Inv: 5018 7/26 | 09/26 F30 | | 2,175.00 |
| NEW ROAD CONSTRUCTION MNGT CO., INC. | 30-000-410-390-75-001 | 5714 | PO-25-01367-PYPO-PYPO | Construction Management Contract - Referendum Projects<br>Inv: 5018 7/26 | 09/26 F30 | | 3,912.50 |
| NEW ROAD CONSTRUCTION MNGT CO., INC. | 30-000-410-390-60-001 | 5714 | PO-25-01367-PYPO-PYPO | Construction Management Contract - Referendum Projects<br>Inv: 5018 7/26 | 09/26 F30 | | 3,912.50 |
| NEW ROAD CONSTRUCTION MNGT CO., INC. | 30-000-410-390-50-001 | 5714 | PO-25-01367-PYPO-PYPO | Construction Management Contract - Referendum Projects<br>Inv: 5018 7/26 | 09/26 F30 | | 24,900.00 |
| | | | | | | | **63,575.00** |
| NEW YORK LIFE INSURANCE COMPANY | 11-000-291-290-00-000 | 5204 | PO-27-00031 | Long-Term Disability - non affl emp/admin 26/27<br>Inv: 64449 8/26 | 09/26 | | 639.19 |
| | | | | | | | **639.19** |
| NJ ASSOC. OF SCHOOL BUSINESS OFFICIALS | 11-000-251-592-00-500 | 1283 | PO-27-00423 | NJASBO Dinner at ASBO International - Pittsburgh<br>Inv: 200036509 | 09/26 | | 33.00 |
| | | | | | | | **33.00** |
| NJ DIVISION OF MOTOR VEHICLES | 11-000-270-593-00-525 | 4866 | PO-27-00239 | Registration Renewal Bus #236<br>Inv: 4DRBUPWP5RB249921 BUS 236 | 09/26 | | 50.00 |

Attachments are subject to change without notice

# Stafford Township Board of Education
## Bills and Claims
## September 2026 Bills List

| Vendor Name | Account Number | Id | PO Number | Description | Batch | Check # | Amount |
|---|---|---|---|---|---|---|---|
| NJ DIVISION OF MOTOR VEHICLES | 11-000-270-593-00-525 | 4866 | PO-27-00240 | Registration Renewal for Bus #145<br>Inv: 4DRBUAAN9EB022082 BUS 145 | 09/26 | | 50.00 |
| NJ DIVISION OF MOTOR VEHICLES | 11-000-270-593-00-525 | 4866 | PO-27-00241 | Registration Renewal Bus #205<br>Inv: 1BAKFCEHXMF368822 BUS 205 | 09/26 | | 50.00 |
| NJ DIVISION OF MOTOR VEHICLES | 11-000-270-593-00-525 | 4866 | PO-27-00242 | Registration Renewal Bus #235<br>Inv: 4DRBUPWP3RB249920 BUS 235 | 09/26 | | 50.00 |
| NJ DIVISION OF MOTOR VEHICLES | 11-000-270-593-00-525 | 4866 | PO-27-00243 | Registration Renewal for Bus #144<br>Inv: 4DRBUAAN7EB022081 BUS 144 | 09/26 | | 50.00 |
| NJ DIVISION OF MOTOR VEHICLES | 11-000-270-593-00-525 | 4866 | PO-27-00244 | Registration Renewal for Bus #143<br>Inv: 4DRBUAAN5EB022080 BUS 143 | 09/26 | | 50.00 |
| NJ DIVISION OF MOTOR VEHICLES | 11-000-270-593-00-525 | 4866 | PO-27-00275 | Registration Renewal Bus #234<br>Inv: 4DRBUPWP7PB502180 BUS 234 | 09/26 | | 50.00 |
| | | | | | | | **350.00** |
| NJ LOGO WEAR LLC | 11-000-266-610-00-100 | 4693 | PO-27-00201 | Security Officer Apparel<br>Inv: 22520 | 09/26 | | 388.85 |
| | | | | | | | **388.85** |
| NJ SCHOOL JOBS.COM | 11-000-230-590-00-526 | 4055 | PO-27-00290 | Job Postings - Advertising<br>Inv: 21149 | 09/26 | | 150.00 |
| | | | | | | | **150.00** |
| NJADP | 11-000-262-890-00-800 | 5666 | PO-27-00326 | Annual Membership for NJ Association of Designated Persons<br>Inv: A CLAYTON | 09/26 | | 150.00 |
| | | | | | | | **150.00** |
| PC PARTS PLUS, LLC<br>DBA: CHROMEBOOKPARTS.COM | 11-190-100-610-00-106 | 5671 | PO-27-00282 | Replacement Screens - Chromebooks<br>Inv: #296123 | 09/26 | | 234.90 |
| | | | | | | | **234.90** |
| Planbook Inc.<br>DBA: Teacher Innovations, Inc | 11-190-100-500-70-500 | 4435 | PO-27-00329 | 12-month subscription to Planbook (2026-2027)<br>Inv: #1061099 | 09/26 | | 450.00 |
| | | | | | | | **450.00** |
| PLANET YOUNG, LLC<br>DBA: SCHOOL BASICS,LLC | 11-000-230-610-00-116 | 5653 | PO-27-00158 | UpStander T-shirts<br>Inv: 2052913000084092040 | 09/26 | | 746.35 |
| | | | | | | | **746.35** |
| PREVENTION SPECIALISTS INC | 11-000-270-390-00-306 | 1178 | PO-27-00340 | DOT Post Accident Drug Test for R. Bowser on 7/15/2026<br>Inv: 38182 | 09/26 | | 70.00 |
| | | | | | | | **70.00** |
| PRIMO, INC. | 62-992-330-590-00-500 | 4757 | PO-27-00292 | STAC Advertising<br>Inv: #182824 | 09/26 | | 301.20 |
| PRIMO, INC. | 62-992-330-590-00-500 | 4757 | PO-27-00308 | STAC Advertising<br>Inv: 182823 | 09/26 | | 251.02 |
| | | | | | | | **552.22** |
| PRO ED, INC. | 11-000-219-390-60-306 | 1126 | PO-27-00237 | Student Reading Program<br>Inv: 3136697 | 09/26 | | 252.50 |
| PRO ED, INC. | 11-000-219-390-70-306 | 1126 | PO-27-00237 | Student Reading Program<br>Inv: 3136697 | 09/26 | | 252.50 |
| | | | | | | | **505.00** |

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**Stafford Township Board of Education**
**Bills and Claims**
**September 2026 Bills List**

| Vendor Name | Account Number | Id | PO Number | Description | Batch | Check # | Amount |
|---|---|---|---|---|---|---|---|
| Rebecca Gee | 62-992-330-590-00-500 | 5599 | PO-27-00198 | STAC Advertising<br>Inv: 8/6-2026 | 09/26 | | 390.00 |
| Rebecca Gee | 62-992-330-600-00-105 | 5599 | PO-27-00209 | T-shirts for STAC Summer Camp<br>Inv: FROZEN TEE SHIRTS | 09/26 | | 290.45 |
| Rebecca Gee | 62-992-330-590-00-500 | 5599 | PO-27-00218 | STAC Advertising<br>Inv: RICH VOS FALL 2026 | 09/26 | | 90.00 |
| Rebecca Gee | 62-992-330-590-00-500 | 5599 | PO-27-00235 | STAC Advertising<br>Inv: RACK CARDS FALL 2026 | 09/26 | | 60.00 |
| Rebecca Gee | 62-992-330-590-00-500 | 5599 | PO-27-00335 | STAC Advertising<br>Inv: PB TRIBUNE FALL '26 | 09/26 | | 30.00 |
| | | | | | | | **860.45** |
| Roselli, Carolyn | 11-000-291-290-00-000 | 5795 | PO-27-00331 | NJL2L Principal Mentor Fee Reimbursement for Year 1<br>Inv: REIMBURSE | 09/26 | | 1,600.00 |
| | | | | | | | **1,600.00** |
| SANDPAPER, The | 62-992-330-590-00-500 | 3579 | PO-26-01461-PYPO | Advertising for STAC<br>Inv: 168961 8/12/26 | 09/26 | | 546.00 |
| SANDPAPER, The | 62-992-330-590-00-500 | 3579 | PO-26-01461-PYPO | Advertising for STAC<br>Inv: 168294 7/29/26 | 09/26 | | 546.00 |
| SANDPAPER, The | 62-992-330-590-00-500 | 3579 | PO-26-01461-PYPO | Advertising for STAC<br>Inv: 168558 8/5/26 | 09/26 | | 546.00 |
| | | | | | | | **1,638.00** |
| SCHOLASTIC CLASSROOM MAGAZINES | 11-190-100-610-65-100 | 2738 | PO-27-00060 | Teaching Supply Oa<br>Inv: M7728994 | 09/26 | | 4,843.44 |
| SCHOLASTIC CLASSROOM MAGAZINES | 11-190-100-610-60-100 | 2738 | PO-27-00162 | Scholastic News Subscription<br>Inv: M7733044 7 | 09/26 | | 4,981.83 |
| SCHOLASTIC CLASSROOM MAGAZINES | 11-190-100-610-70-100 | 2738 | PO-27-00173 | Scholastic Magazine<br>Inv: M77342335 | 09/26 | | 10,673.21 |
| SCHOLASTIC CLASSROOM MAGAZINES | 11-190-100-610-75-100 | 2738 | PO-27-00182 | Proprietary to Scholastic<br>Inv: M7714473 1 | 09/26 | | 2,629.30 |
| | | | | | | | **23,127.78** |
| SCHOOL SPECIALTY, LLC | 11-190-100-610-60-100 | 5278 | 27-05004 | General Classroom Supplies<br>Inv: 308104936588 | 09/26 | | 1,800.48 |
| SCHOOL SPECIALTY, LLC | 11-000-216-610-60-100 | 5278 | 27-05008 | General Classroom Supplies<br>Inv: 308104893287 | 09/26 | | 74.97 |
| SCHOOL SPECIALTY, LLC | 11-213-100-610-60-112 | 5278 | 27-05024 | General Classroom Supplies<br>Inv: 208137315925 | 09/26 | | 50.29 |
| SCHOOL SPECIALTY, LLC | 11-000-219-600-60-100 | 5278 | 27-05032 | General Classroom Supplies<br>Inv: 308104908084 | 09/26 | | 69.49 |
| SCHOOL SPECIALTY, LLC | 11-190-100-610-70-100 | 5278 | 27-05145 | General Classroom Supplies<br>Inv: 308104899221 | 09/26 | | 966.60 |
| SCHOOL SPECIALTY, LLC | 11-213-100-610-70-112 | 5278 | 27-05148 | General Classroom Supplies<br>Inv: 308104901885 | 09/26 | | 74.91 |
| SCHOOL SPECIALTY, LLC | 11-204-100-610-70-110 | 5278 | 27-05185 | General Classroom Supplies<br>Inv: 308104899219 | 09/26 | | 74.92 |
| SCHOOL SPECIALTY, LLC | 11-190-100-610-75-100 | 5278 | 27-05213 | General Classroom Supplies<br>Inv: 308104906875 | 09/26 | | 74.96 |
| SCHOOL SPECIALTY, LLC | 11-190-100-610-75-100 | 5278 | 27-05227 | General Classroom Supplies<br>Inv: 308104891894 | 09/26 | | 74.85 |

Attachments are subject to change without notice

| Vendor Name | Account Number | Id | PO Number | Description | Batch | Check # | Amount |
|---|---|---|---|---|---|---|---|
| SCHOOL SPECIALTY, LLC | 11-190-100-610-75-100 | 5278 | 27-05231 | General Classroom Supplies<br>Inv: 308104891905 | 09/26 | | 272.60 |
| SCHOOL SPECIALTY, LLC | 11-190-100-610-75-100 | 5278 | 27-05233 | General Classroom Supplies<br>Inv: 308104894864 | 09/26 | | 2,741.98 |
| SCHOOL SPECIALTY, LLC | 11-190-100-610-75-100 | 5278 | 27-05238 | General Classroom Supplies<br>Inv: 208137220181 | 09/26 | | 74.21 |
| SCHOOL SPECIALTY, LLC | 11-190-100-610-60-109 | 5278 | 27-05273 | Fine Art Supplies<br>Inv: 208137251598 | 09/26 | | 614.65 |
| SCHOOL SPECIALTY, LLC | 11-190-100-610-75-100 | 5278 | 27-05296 | Fine Art Supplies<br>Inv: 208137220568 | 09/26 | | 233.70 |
| SCHOOL SPECIALTY, LLC | 11-190-100-610-75-100 | 5278 | 27-05316 | Science Supplies<br>Inv: 208137221197 | 09/26 | | 158.23 |
| SCHOOL SPECIALTY, LLC | 11-190-100-610-75-100 | 5278 | 27-05340 | Elementary Science Supplies<br>Inv: 208137209072 | 09/26 | | 54.32 |
| SCHOOL SPECIALTY, LLC | 11-000-221-610-00-106 | 5278 | PO-27-00280 | Technology Supplies<br>Inv: 308104930872 | 09/26 | | 167.35 |
| | | | | | | | **7,578.51** |
| SCREENCASTIFY, LLC | 11-190-100-340-60-300 | 5252 | PO-27-00287 | District wide renewal of subscription for 2026-2027<br>Inv: SC-1014406 | 09/26 | | 2,688.50 |
| SCREENCASTIFY, LLC | 11-190-100-340-65-300 | 5252 | PO-27-00287 | District wide renewal of subscription for 2026-2027<br>Inv: SC-1014406 | 09/26 | | 2,688.00 |
| SCREENCASTIFY, LLC | 11-190-100-340-70-300 | 5252 | PO-27-00287 | District wide renewal of subscription for 2026-2027<br>Inv: SC-1014406 | 09/26 | | 2,688.00 |
| SCREENCASTIFY, LLC | 11-190-100-340-75-300 | 5252 | PO-27-00287 | District wide renewal of subscription for 2026-2027<br>Inv: SC-1014406 | 09/26 | | 2,688.00 |
| | | | | | | | **10,752.50** |
| SHERWIN - WILLIAMS | 11-000-263-610-00-100 | 1238 | PO-27-00344 | Traffic Paint for District<br>Inv: 61231138530826 | 09/26 | | 575.00 |
| | | | | | | | **575.00** |
| SONITROL SECURITY OF DELAWARE VALLEY, INC. | 11-000-261-420-50-400 | 4886 | PO-27-00069 | Annual Service Maintenance Agreement 2026-2027<br>Inv: 337438 9/26 - 12/26 | 09/26 | | 3,807.27 |
| SONITROL SECURITY OF DELAWARE VALLEY, INC. | 11-000-261-420-70-400 | 4886 | PO-27-00069 | Annual Service Maintenance Agreement 2026-2027<br>Inv: 337437 9/26 - 12/26 | 09/26 | | 5,311.74 |
| SONITROL SECURITY OF DELAWARE VALLEY, INC. | 11-000-261-420-75-400 | 4886 | PO-27-00069 | Annual Service Maintenance Agreement 2026-2027<br>Inv: 337436 9/26 - 12/26 | 09/26 | | 3,197.16 |
| SONITROL SECURITY OF DELAWARE VALLEY, INC. | 11-000-261-420-55-401 | 4886 | PO-27-00069 | Annual Service Maintenance Agreement 2026-2027<br>Inv: 337440 9/26 - 12/26 | 09/26 | | 1,069.62 |
| SONITROL SECURITY OF DELAWARE VALLEY, INC. | 11-000-261-420-65-400 | 4886 | PO-27-00069 | Annual Service Maintenance Agreement 2026-2027<br>Inv: 337439 9/26 - 12/26 | 09/26 | | 3,421.74 |
| SONITROL SECURITY OF DELAWARE VALLEY, INC. | 11-000-261-420-50-400 | 4886 | PO-27-00069 | Annual Service Maintenance Agreement 2026-2027<br>Inv: 337441 9/26 - 12/26 | 09/26 | | 163.50 |

Attachments are subject to change without notice

| Vendor Name | Account Number | Id | PO Number | Description | Batch | Check # | Amount |
|---|---|---|---|---|---|---|---|
| | | | | | | | **16,971.03** |
| SPIEZLE ARCHITECTURAL GROUP, INC. | 30-000-410-390-50-003 | 3801 | 24K066-PYPO-PYPO | Spiezle Oxy Additions/Alterations - Referendum 24K066<br>Inv: 24K066-19 7/26 | 09/26 F30 | | 28,250.00 |
| SPIEZLE ARCHITECTURAL GROUP, INC. | 30-000-410-390-50-003-003 | 3801 | 24K066-PYPO-PYPO | Spiezle Oxy Additions/Alterations - Referendum 24K066<br>Inv: 24K066-19 7/26 | 09/26 F30 | | 148.50 |
| SPIEZLE ARCHITECTURAL GROUP, INC. | 30-000-410-390-60-003 | 3801 | 24K068-PYPO-PYPO | Spiezle HVAC Upgrades/Multiple Schools-Referendum 24K068<br>Inv: 24K068-18 7/26 | 09/26 F30 | | 510.00 |
| SPIEZLE ARCHITECTURAL GROUP, INC. | 30-000-410-390-75-003 | 3801 | 24K068-PYPO-PYPO | Spiezle HVAC Upgrades/Multiple Schools-Referendum 24K068<br>Inv: 245068-18 7/26 | 09/26 F30 | | 4,590.00 |
| SPIEZLE ARCHITECTURAL GROUP, INC. | 30-000-410-390-65-003 | 3801 | 24K069-PYPO-PYPO | Spiezle HVAC Upgrades/Ocean Acres - Referendum 24K069<br>Inv: 24K069-18 7/26 | 09/26 F30 | | 4,450.00 |
| | | | | | | | **37,948.50** |
| SRJ MECHANICAL LLC | 30-000-410-450-65-001 | 5835 | PO-26-00884-PYPO | 24K069 Construction Mgmt - Referendum HVAC Ocean Acres<br>Inv: PAY APP 8 THRU 8/24/26 | 09/26 F30 | | 408,816.90 |
| | | | | | | | **408,816.90** |
| STATE OF NEW JERSEY | 11-000-291-270-00-200 | 4111 | PO-27-00014 | Employee Medical Health Benefits 2026/2027<br>Inv: 9/26 | 09/26 EFT | | 746,799.53 |
| | | | | | | | **746,799.53** |
| STS OF NEW JERSEY | 11-000-270-800-00-800 | 1376 | PO-27-00276 | 2026-2027 Membership Dues for LeNina McCord<br>Inv: 879-4598 | 09/26 | | 125.00 |
| STS OF NEW JERSEY | 11-000-270-800-00-800 | 137[illegible] | PO-27-00277 | 2026-2027 Membership Dues for Michael Press<br>Inv: 879-4599 | 09/26 | | 300.00 |
| | | | | | | | **425.00** |
| SUMMIT MEDICAL GROUP PA DBA: CITY MD | 11-000-270-390-00-301 | 5254 | PO-27-00278 | DOT Physical Exams for G. Bain, K. Palmer, D. Sullivan, M. DiCarlo-Cottone In July 2026<br>Inv: 52011K2983 KP | 09/26 | | 110.00 |
| SUMMIT MEDICAL GROUP PA DBA: CITY MD | 11-000-270-390-00-301 | 5254 | PO-27-00278 | DOT Physical Exams for G. Bain, K. Palmer, D. Sullivan, M. DiCarlo-Cottone In July 2026<br>Inv: 52011K2983 GB | 09/26 | | 110.00 |
| SUMMIT MEDICAL GROUP PA DBA: CITY MD | 11-000-270-390-00-301 | 5254 | PO-27-00278 | DOT Physical Exams for G. Bain, K. Palmer, D. Sullivan, M. DiCarlo-Cottone In July 2026<br>Inv: 52011K2983 DS | 09/26 | | 110.00 |
| | | | | | | | **330.00** |
| SUPERGLASS WINDSHIELD REPAIR | 11-000-270-420-00-400 | 1174 | PO-27-00135 | Windshield Replacement and Door Glass Installation for Bus 155<br>Inv: 1054316 | 09/26 | | 745.00 |
| | | | | | | | **745.00** |
| SUPERIOR WASH NJ SOUTH, LLC | 11-000-270-420-00-400 | 5128 | PO-27-00178 | Buses professionally cleaned<br>Inv: SW-558791 | 09/26 | | 142.50 |
| SUPERIOR WASH NJ SOUTH, LLC | 11-000-270-420-00-400 | 5128 | PO-27-00178 | Buses professionally cleaned<br>Inv: SW-7797858 | 09/26 | | 2,953.00 |

Attachments are subject to change without notice

| Vendor Name | Account Number | Id | PO Number | Description | Batch | Check # | Amount |
|---|---|---|---|---|---|---|---|
| | | | | | | | **3,095.50** |
| TAPinto Local LLC | 62-992-330-590-00-500 | 5863 | PO-26-01231-PYPO | Advertising for STAC Inv: 61307 8/26 | 09/26 | | 425.00 |
| TAPinto Local LLC | 62-992-330-590-00-500 | 5863 | PO-26-01231-PYPO | Advertising for STAC Inv: 61793 9/26 | 09/26 | | 425.00 |
| | | | | | | | **850.00** |
| The Learning Experience - Pisces Ent. LLC | 20-218-200-321-00-300 | 5764 | PO-27-00053 | Pre-School Tuition 26/27 SY Inv: PYMT 2 9/26 | 09/26 | | 46,501.27 |
| | | | | | | | **46,501.27** |
| TRANE, INC | 11-000-261-610-65-105 | 3086 | PO-27-00191 | OA Library unit replacement parts Inv: 22269617 | 09/26 | | 1,472.84 |
| | | | | | | | **1,472.84** |
| UHS OF DOYLESTOWN, LLC | 11-219-100-320-70-300 | 5195 | PO-27-00272 | Academic Tutoring while hospitalized Inv: 11881900271R | 09/26 | | 56.00 |
| | | | | | | | **56.00** |
| ULINE, INC | 11-000-270-615-00-121 | 5383 | PO-27-00296 | Class ABC Fire Extinguishers for Bus 141 and Bus 142 Inv: 212012614 | 09/26 | | 269.95 |
| ULINE, INC | 11-000-270-615-00-121 | 5383 | PO-27-00299 | "Danger: Do Not Operate" Lockout Tags for Shop Inv: 211992746 | 09/26 | | 39.00 |
| | | | | | | | **308.95** |
| UNITED REFRIGERATION, INC. | 10-421 | 4123 | PO-26-01650-PYPBL | Thermostat for McKinley School Room 106 Inv: 20582553-00 | 09/26 | | 14.05 |
| | | | | | | | **14.05** |
| UNITED SUPPLY CORP. | 11-000-216-610-60-100 | 5328 | 27-05239 | Physical Education Supplies Inv: INV-0130699 | 09/26 | | 2.64 |
| UNITED SUPPLY CORP. | 11-000-216-610-60-100 | 5328 | 27-05239 | Physical Education Supplies Inv: INV-0132751 | 09/26 | | 65.30 |
| UNITED SUPPLY CORP. | 11-000-216-610-60-100 | 5328 | 27-05239 | Physical Education Supplies Inv: INV-0132029 | 09/26 | | 6.07 |
| UNITED SUPPLY CORP. | 11-190-100-610-70-100 | 5328 | 27-05251 | Physical Education Supplies Inv: INV-0130700 | 09/26 | | 2.68 |
| UNITED SUPPLY CORP. | 11-190-100-610-70-100 | 5328 | 27-05251 | Physical Education Supplies Inv: INV-0128057 | 09/26 | | 73.80 |
| UNITED SUPPLY CORP. | 11-190-100-610-60-109 | 5328 | 27-05276 | Fine Art Supplies Inv: INV-0130701 | 09/26 | | 18.62 |
| UNITED SUPPLY CORP. | 11-190-100-610-75-100 | 5328 | 27-05319 | Science Supplies Inv: INV-0138108 | 09/26 | | 21.94 |
| UNITED SUPPLY CORP. | 11-190-100-610-75-100 | 5328 | 27-05319 | Science Supplies Inv: INV-0133596 | 09/26 | | 18.62 |
| UNITED SUPPLY CORP. | 11-190-100-610-75-100 | 5328 | 27-05319 | Science Supplies Inv: INV-0134242 | 09/26 | | 123.68 |
| UNITED SUPPLY CORP. | 11-190-100-610-75-100 | 5328 | 27-05341 | Elementary Science Supplies Inv: INV-0136169 | 09/26 | | 20.68 |
| | | | | | | | **354.03** |

Attachments are subject to change without notice

| Vendor Name | Account Number | Id | PO Number | Description | Batch | Check # | Amount |
|---|---|---|---|---|---|---|---|
| UNITY SCHOOL BUS PARTS | 11-000-270-615-00-121 | 5151 | PO-27-00328 | Protech Booster Seats Protech IV without Pouch for Buses<br>Inv: 0645721-IN | 09/26 | | 2,705.45 |
| | | | | | | | **2,705.45** |
| UNUM | 11-000-291-290-00-000 | 1809 | PO-27-00082 | STAA Employee Disability - 26/27<br>Inv: 0550271-001 3 9/26 | 09/26 | | 576.45 |
| | | | | | | | **576.45** |
| W.B. MASON CO., INC. | 11-190-100-610-60-100 | 4070 | 27-05269 | Fine Art Supplies<br>Inv: 263689911 | 09/26 | | 20.67 |
| W.B. MASON CO., INC. | 11-190-100-610-60-100 | 4070 | 27-05269 | Fine Art Supplies<br>Inv: 263344851 | 09/26 | | 6.22 |
| W.B. MASON CO., INC. | 11-190-100-610-60-100 | 4070 | 27-05269 | Fine Art Supplies<br>Inv: 263418463 | 09/26 | | 32.38 |
| W.B. MASON CO., INC. | 11-190-100-610-75-100 | 4070 | 27-05294 | Fine Art Supplies<br>Inv: 263689943 | 09/26 | | 32.28 |
| W.B. MASON CO., INC. | 11-190-100-610-75-100 | 4070 | 27-05294 | Fine Art Supplies<br>Inv: 263344505 | 09/26 | | 2.41 |
| W.B. MASON CO., INC. | 11-190-100-610-75-100 | 4070 | 27-05294 | Fine Art Supplies<br>Inv: 263314777 | 09/26 | | 15.04 |
| W.B. MASON CO., INC. | 11-190-100-610-75-100 | 4070 | 27-05294 | Fine Art Supplies<br>Inv: 263418910 | 09/26 | | 23.76 |
| W.B. MASON CO., INC. | 11-190-100-610-75-100 | 4070 | 27-05298 | Fine Art Supplies<br>Inv: 263418119 | 09/26 | | 52.63 |
| W.B. MASON CO., INC. | 11-190-100-610-75-100 | 4070 | 27-05298 | Fine Art Supplies<br>Inv: 263689921 | 09/26 | | 32.28 |
| W.B. MASON CO., INC. | 11-000-230-610-00-100 | 4070 | PO-27-00094 | Central Admin Paper Order<br>Inv: 263232228 | 09/26 | | 54.80 |
| W.B. MASON CO., INC. | 11-000-230-610-00-114 | 4070 | PO-27-00094 | Central Admin Paper Order<br>Inv: 26334491 | 09/26 | | 315.27 |
| W.B. MASON CO., INC. | 11-000-230-610-00-116 | 4070 | PO-27-00094 | Central Admin Paper Order<br>Inv: 26334491 | 09/26 | | 132.35 |
| W.B. MASON CO., INC. | 11-000-251-600-00-100 | 4070 | PO-27-00094 | Central Admin Paper Order<br>Inv: 26334491 | 09/26 | | 635.28 |
| W.B. MASON CO., INC. | 11-000-230-610-00-100 | 4070 | PO-27-00094 | Central Admin Paper Order<br>Inv: 26334491 | 09/26 | | 199.48 |
| W.B. MASON CO., INC. | 11-190-100-610-00-100 | 4070 | PO-27-00094 | Central Admin Paper Order<br>Inv: 26334491 | 09/26 | | 332.29 |
| W.B. MASON CO., INC. | 11-000-230-610-00-100 | 4070 | PO-27-00094 | Central Admin Paper Order<br>Inv: CM4917687 | 09/26 | | -54.80 |
| W.B. MASON CO., INC. | 11-000-230-610-00-100 | 4070 | PO-27-00094 | Central Admin Paper Order<br>Inv: 263588787 | 09/26 | | 54.80 |
| W.B. MASON CO., INC. | 11-000-230-610-00-100 | 4070 | PO-27-00094 | Central Admin Paper Order<br>Inv: 263689066 | 09/26 | | 63.36 |
| W.B. MASON CO., INC. | 11-190-100-610-70-100 | 4070 | PO-27-00177 | WB Mason Paper Order 2026-2027 School Year<br>Inv: 263463909 | 09/26 | | 5,230.70 |
| | | | | | | | **7,181.20** |
| WESTERN PEST CONTROL INC | 11-000-262-420-00-405 | 2664 | PO-27-00064 | Annual Service Pest Agreement<br>Inv: 07032026 | 09/26 | | 350.00 |

Attachments are subject to change without notice

**Stafford Township Board of Education**
**Bills and Claims**
**September 2026 Bills List**

| Vendor Name | Account Number | Id | PO Number | Description | Batch | Check # | Amount |
|---|---|---|---|---|---|---|---|
| WESTERN PEST CONTROL, INC | 11-000-262-420-00-405 | 2664 | PO-27-00064 | Annual Service Pest Agreement<br>Inv: 08032026 | 09/26 | | 350.00 |
| | | | | | | | **700.00** |
| WOLFINGTON BODY COMPANY, INC. | 11-000-270-615-00-121 | 2533 | PO-27-00187 | Exhaust for Bus 203<br>Inv: 169811M | 09/26 | | 459.10 |
| WOLFINGTON BODY COMPANY, INC. | 11-000-270-615-00-121 | 2533 | PO-27-00187 | Exhaust for Bus 203<br>Inv: 169811MX1 | 09/26 | | 294.48 |
| WOLFINGTON BODY COMPANY, INC. | 11-000-270-615-00-121 | 2533 | PO-27-00228 | Fenders for Buses 212, 213 and 231<br>Inv: 169951M | 09/26 | | 2,188.08 |
| WOLFINGTON BODY COMPANY, INC. | 11-000-270-615-00-121 | 2533 | PO-27-00297 | Horns for Bus 152 and Shop<br>Inv: 170359M | 09/26 | | 113.73 |
| | | | | | | | **3,055.39** |

Attachments are subject to change without notice

**Stafford Township Board of Education**
**Bills and Claims**
**September 2026 Bills List**

Resolved that the Bills & Claims against the Board of Education as herein enumerated for equipment, material, and supplies, furnished and delivered and for work done and performance, and certified as correct by the Secretary of the Board of Education be and the same are ordered paid when approved by the Finance Committee, and when funds are available.

| Fund | Program | Purchase Orders | Current | Prior Year | Total |
|---|---|---|---|---|---|
| 10 General Fund | | 3 | 4,415.66 | | 4,415.66 |
| | **Fund total:** | | **4,415.66** | | **4,415.66** |
| 11 General Current Expense | 000 Undistributed Expenditures | 210 | 1,144,948.13 | | 1,144,948.13 |
| 11 General Current Expense | 190 Regular Programs - Undistributed | 60 | 133,587.20 | | 133,587.20 |
| 11 General Current Expense | 204 Special Education - Learning and/or Language Disabilities | 1 | 74.92 | | 74.92 |
| 11 General Current Expense | 212 Special Education - Multiple Disabilities | 1 | 33.20 | | 33.20 |
| 11 General Current Expense | 213 Special Education - Resource Room/Resource Center | 2 | 125.20 | | 125.20 |
| 11 General Current Expense | 219 Special Education - Home Instruction | 1 | 56.00 | | 56.00 |
| | **Fund total:** | | **1,278,824.65** | | **1,278,824.65** |
| 20 Special Revenue Fund | | 1 | 1,184.94 | | 1,184.94 |
| 20 Special Revenue Fund | 218 Preschool Education | 7 | 188,458.34 | | 188,458.34 |
| | **Fund total:** | | **189,643.28** | | **189,643.28** |
| 30 Capital Projects Fund | 000 Undistributed Expenditures | 21 | 4,594,942.37 | | 4,594,942.37 |
| | **Fund total:** | | **4,594,942.37** | | **4,594,942.37** |
| 62 Imported | 992 Imported | 14 | 4,284.83 | | 4,284.83 |
| | **Fund total:** | | **4,284.83** | | **4,284.83** |
| | **Grand totals:** | 321 | **6,072,110.79** | | **6,072,110.79** |

Attachments are subject to change without notice

_____
President

_____
Vice President

_____
Business Administrator

Attachments are subject to change without notice

**Stafford Township Board of Education**
**Bills and Claims**
**September 2026 Bills List - EFT**

| Vendor Name | Account Number | Id | PO Number | Description | Batch | Check # | Amount |
|---|---|---|---|---|---|---|---|
| BENJAMIN R HARVEY CO INC | 30-000-410-450-50-002 | 5861 | PO-26-01269-PYPO | 24K066 Construction Mgmt - Referendum HVAC Oxy Addition/Alterations<br>Inv: PAY APP 4 8/26 | 09/26 EFT | | 3,351,543.70 |
| | | | | | | | **3,351,543.70** |
| GSRP G-I SOLAR 1 LLC<br>DBA: STAFFORD SOLAR 1 LLC | 11-000-262-622-00-100 | 5108 | PO-26-00022-PYPO | Solar Supply 2025-2026<br>Inv: NJ-05-003A-202607-01 INT | 09/26 EFT | | 3,552.27 |
| GSRP G-I SOLAR 1 LLC<br>DBA: STAFFORD SOLAR 1 LLC | 11-000-262-622-00-100 | 5108 | PO-26-00022-PYPO | Solar Supply 2025-2026<br>Inv: NJ-05-001A-202607-01 MCK | 09/26 EFT | | 4,770.85 |
| GSRP G-I SOLAR 1 LLC<br>DBA: STAFFORD SOLAR 1 LLC | 11-000-262-622-00-100 | 5108 | PO-26-00022-PYPO | Solar Supply 2025-2026<br>Inv: NJ-05-005A-202607-01 | 09/26 EFT | | 875.56 |
| GSRP G-I SOLAR 1 LLC<br>DBA: STAFFORD SOLAR 1 LLC | 11-000-262-622-00-100 | 5108 | PO-26-00022-PYPO | Solar Supply 2025-2026<br>Inv: NJ-05-006A-202607-01 OXY | 09/26 EFT | | 3,032.12 |
| GSRP G-I SOLAR 1 LLC<br>DBA: STAFFORD SOLAR 1 LLC | 11-000-262-622-00-100 | 5108 | PO-26-00022-PYPO | Solar Supply 2025-2026<br>Inv: NJ-05-002A-202607-01 | 09/26 EFT | | 3,554.67 |
| | | | | | | | **15,785.47** |
| LITTLE GRADUATES PRESCHOOL | 20-218-200-321-00-300 | 5345 | PO-27-00052 | Pre-School Tuition 26/27<br>Inv: PYMT 9/26 | 09/26 EFT | | 23,250.09 |
| | | | | | | | **23,250.09** |
| STATE OF NEW JERSEY | 11-000-291-270-00-200 | 4111 | PO-27-00014 | Employee Medical Health Benefits 2026/2027<br>Inv: 9/26 | 09/26 EFT | | 746,799.53 |
| | | | | | | | **746,799.53** |

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**Stafford Township Board of Education**
**Bills and Claims**
**September 2026 Bills List - EFT**

Resolved that the Bills & Claims against the Board of Education as herein enumerated for equipment, material, and supplies, furnished and delivered and for work done and performance, and certified as correct by the Secretary of the Board of Education be and the same are ordered paid when approved by the Finance Committee, and when funds are available.

| Fund | Program | Purchase Orders | Current | Prior Year | Total |
|---|---|---|---|---|---|
| 11 General Current Expense | 000 Undistributed Expenditures | 6 | 762,585.00 | | 762,585.00 |
| | **Fund total:** | | **762,585.00** | | **762,585.00** |
| 20 Special Revenue Fund | 218 Preschool Education | 1 | 23,250.09 | | 23,250.09 |
| | **Fund total:** | | **23,250.09** | | **23,250.09** |
| 30 Capital Projects Fund | 000 Undistributed Expenditures | 1 | 3,351,543.70 | | 3,351,543.70 |
| | **Fund total:** | | **3,351,543.70** | | **3,351,543.70** |
| | **Grand totals:** | 8 | **4,137,378.79** | | **4,137,378.79** |

Attachments are subject to change without notice

_____
President

_____
Vice President

_____
Business Administrator

Attachments are subject to change without notice

**Stafford Township Board of Education**
**Bills and Claims**
**August 2026 Additional Bills List**

| Vendor Name | Account Number | Id | PO Number | Description | Batch | Check # | Amount |
|---|---|---|---|---|---|---|---|
| 3P LEARNING, INC. | 11-190-100-340-60-300 | 5165 | PO-27-00018 | annual license renewal for 26-27 sy Math Seeds and Reading Eggs for OA & PLC Inv: INV-US-27677 | 08/26 - 2 | 005156 | 3,193.75 |
| 3P LEARNING, INC. | 11-190-100-340-65-300 | 5165 | PO-27-00018 | annual license renewal for 26-27 sy Math Seeds and Reading Eggs for OA & PLC Inv: INV-US-27677 | 08/26 - 2 | 005156 | 11,200.00 |
| 3P LEARNING, INC. | 11-190-100-340-75-300 | 5165 | PO-27-00018 | annual license renewal for 26-27 sy Math Seeds and Reading Eggs for OA & PLC Inv: INV-US-27677 | 08/26 - 2 | 005156 | 5,775.00 |
| | | | | | | | **20,168.75** |
| ACTIVE INTERNET TECH., LLC DBA: Finalsite | 11-190-100-340-00-300 | 5499 | PO-27-00124 | FinalSite CMS Platform Inv: INV105292 | 08/26 - 2 | 005141 | 3,500.00 |
| ACTIVE INTERNET TECH., LLC DBA: Finalsite | 11-190-100-340-00-300 | 5499 | PO-27-00124 | FinalSite CMS Platform Inv: INV105293 | 08/26 - 2 | 005141 | 1,500.00 |
| | | | | | | | **5,000.00** |
| ATLANTIC CITY ELECTRIC, INC. | 11-000-262-622-00-100 | 3374 | PO-26-00021-PYPO | Electric Delivery & Supply Charge 2025-2026 Inv: 5501 0291 148 6/12/26 - 7/15/26 MCK | 08/26 - 2 | 005142 | 3,506.20 |
| ATLANTIC CITY ELECTRIC, INC. | 11-000-262-622-00-100 | 3374 | PO-26-00021-PYPO | Electric Delivery & Supply Charge 2025-2026 Inv: 5500 6684 298 6/20/26 - 7/23/26 MCK LTG | 08/26 - 2 | 005142 | 124.86 |
| ATLANTIC CITY ELECTRIC, INC. | 11-000-262-622-00-100 | 3374 | PO-26-00021-PYPO | Electric Delivery & Supply Charge 2025-2026 Inv: 5501 0699 191 6/12/26 - 7/15/26 STAC | 08/26 - 2 | 005142 | 2,951.26 |
| ATLANTIC CITY ELECTRIC, INC. | 11-000-262-622-00-100 | 3374 | PO-26-00021-PYPO | Electric Delivery & Supply Charge 2025-2026 Inv: 5501 0699 407 6/29/26 - 7/30/26 INT | 08/26 - 2 | 005142 | 14,448.65 |
| ATLANTIC CITY ELECTRIC, INC. | 11-000-262-622-00-100 | 3374 | PO-26-00021-PYPO | Electric Delivery & Supply Charge 2025-2026 Inv: 5001 1859 399 6/17/26 - 7/20/26 OA SIGN | 08/26 - 2 | 005142 | 15.86 |
| ATLANTIC CITY ELECTRIC, INC. | 11-000-262-622-00-100 | 3374 | PO-26-00021-PYPO | Electric Delivery & Supply Charge 2025-2026 Inv: 5002 8603 676 6/16/26 - 7/17/26 TRANS | 08/26 - 2 | 005142 | 282.91 |
| ATLANTIC CITY ELECTRIC, INC. | 11-000-262-622-00-100 | 3374 | PO-26-00021-PYPO | Electric Delivery & Supply Charge 2025-2026 Inv: 5500 1953 565 6/16/26 - 7/17/26 OXY | 08/26 - 2 | 005142 | 1,769.43 |
| ATLANTIC CITY ELECTRIC, INC. | 11-000-262-622-00-100 | 3374 | PO-26-00021-PYPO | Electric Delivery & Supply Charge 2025-2026 Inv: 5500 1953 375 6/23/26 - 7/24/26 OXY ST LTG | 08/26 - 2 | 005142 | 838.28 |
| ATLANTIC CITY ELECTRIC, INC. | 11-000-262-622-00-100 | 3374 | PO-26-00021-PYPO | Electric Delivery & Supply Charge 2025-2026 Inv: 5501 0291 411 6/20/26 - 7/23/26 OXY MN LTG | 08/26 - 2 | 005142 | 707.64 |
| ATLANTIC CITY ELECTRIC, INC. | 11-000-262-622-00-100 | 3374 | PO-26-00021-PYPO | Electric Delivery & Supply Charge 2025-2026 Inv: 5500 0148 969 6/18/26 - 7/21/26 OA | 08/26 - 2 | 005142 | 10,434.07 |

Attachments are subject to change without notice

**Stafford Township Board of Education**
**Bills and Claims**
**August 2026 Additional Bills List**

| Vendor Name | Account Number | Id | PO Number | Description | Batch | Check # | Amount |
|---|---|---|---|---|---|---|---|
| ATLANTIC CITY ELECTRIC, INC. | 11-000-262-622-00-100 | 3374 | PO-26-00021-PYPO | Electric Delivery & Supply Charge 2025-2026<br>Inv: 5500 0148 621 6/18/26 - 7/21/26 OA NAUT MN | 08/26 - 2 | 005142 | 2,495.87 |
| ATLANTIC CITY ELECTRIC, INC. | 11-000-262-622-00-100 | 3374 | PO-26-00021-PYPO | Electric Delivery & Supply Charge 2025-2026<br>Inv: 5500 0148 225 6/18/26 - 7/21/26 OA NAUT LTG | 08/26 - 2 | 005142 | 143.43 |
| ATLANTIC CITY ELECTRIC, INC. | 11-000-262-622-00-100 | 3374 | PO-26-00021-PYPO | Electric Delivery & Supply Charge 2025-2026<br>Inv: 5500 0147 649 6/12/26 - 7/15/26 PLC | 08/26 - 2 | 005143 | 2,414.95 |
| ATLANTIC CITY ELECTRIC, INC. | 11-000-262-622-00-100 | 3374 | PO-26-00021-PYPO | Electric Delivery & Supply Charge 2025-2026<br>Inv: 5504 1984 166 06/12/26 - 07-15-26 PLC NORTH | 08/26 - 2 | 005143 | 1,296.65 |
| | | | | | | | **41,430.06** |
| Banach Megan - Petty Cash | 11-000-221-610-00-100 | 5784 | M BANACH | Petty Cash | 27-0066 | 005139 | 23.95 |
| Banach Megan - Petty Cash | 11-000-221-610-00-100 | 5784 | M BANACH | Petty Cash | 27-0066 | 005139 | 43.98 |
| Banach Megan - Petty Cash | 11-000-221-610-00-100 | 5784 | M BANACH | Petty Cash | 27-0066 | 005139 | 42.50 |
| Banach Megan - Petty Cash | 11-000-221-610-00-100 | 5784 | M BANACH | Petty Cash | 27-0066 | 005139 | 32.18 |
| Banach Megan - Petty Cash | 11-000-221-610-00-100 | 5784 | M BANACH | Petty Cash | 27-0066 | 005139 | 4.38 |
| | | | | | | | **146.99** |
| COLUMN SOFTWARE PBC | 11-000-230-590-00-526 | 5788 | PO-27-00235 | Publication of Professional Awards 08/01/2026<br>Inv: 09953D29-0035 | 08/26 - 2 | 005144 | 420.60 |
| | | | | | | | **420.60** |
| COMCAST BUSINESS COMMUNICATIONS, LLS | 20-218-200-330-00-300 | 1460 | PO-27-00227 | WAN Options OA, OXY & MCK Campus<br>Inv: 276970485 7/26 | 08/26 - 2 | 005070 | 2,616.06 |
| COMCAST BUSINESS COMMUNICATIONS, LLS | 20-218-200-330-00-300 | 1460 | PO-27-00227 | WAN Options OA, OXY & MCK Campus<br>Inv: 279528231 8/26 | 08/26 - 2 | 005070 | 1,235.94 |
| COMCAST BUSINESS COMMUNICATIONS, LLS | 11-190-100-340-00-600 | 1460 | PO-27-00227 | WAN Options OA, OXY & MCK Campus<br>Inv: 279528231 8/26 | 08/26 - 2 | 005070 | 1,394.87 |
| | | | | | | | **5,246.87** |
| DISCOUNT SCHOOL SUPPLY | 20-421 | 1316 | PO-26-01875-PYPBL | Preschool Items for Student Use<br>Inv: P43971550101 | 08/26 - 2 | 005157 | 811.19 |
| DISCOUNT SCHOOL SUPPLY | 20-421 | 1316 | PO-26-01875-PYPBL | Preschool Items for Student Use<br>Inv: P43971550103 | 08/26 - 2 | 005157 | 641.82 |
| DISCOUNT SCHOOL SUPPLY | 20-421 | 1316 | PO-26-01875-PYPBL | Preschool Items for Student Use<br>Inv: P43971550102 | 08/26 - 2 | 005157 | 214.19 |
| | | | | | | | **1,667.20** |
| DOWNES FOREST PRODUCTS LLC | 11-000-263-420-00-420 | 4413 | PO-26-01382-PYPO | Certified playground mulch for OA/Mck<br>Inv: 1355 | 08/26 - 2 | 005158 | 3,088.50 |
| DOWNES FOREST PRODUCTS LLC | 11-000-263-420-00-420 | 4413 | PO-26-01382-PYPO | Certified playground mulch for OA/Mck<br>Inv: 1356 | 08/26 - 2 | 005158 | 4,698.00 |
| | | | | | | | **7,786.50** |
| E-Z PASS | 11-000-270-800-00-800 | 2945 | PO-27-00212 | Replenishment for E-Z Pass A/C #2000115251035<br>Inv: ACCT# 2000 1152 5103 5 | 08/26 - 2 | 005068 | 3,000.00 |
| | | | | | | | **3,000.00** |

Attachments are subject to change without notice

**Stafford Township Board of Education**
**Bills and Claims**
**August 2026 Additional Bills List**

| Vendor Name | Account Number | Id | PO Number | Description | Batch | Check # | Amount |
|---|---|---|---|---|---|---|---|
| FP FINANCE, INC. | 11-000-262-590-00-527 | 5294 | PO-27-00041 | Postage Meter Lease 2026-2027<br>Inv: 42600247 7/26 | 08/26 - 2 | 005069 | 190.00 |
| | | | | | | | **190.00** |
| HEINEMANN | 20-421 | 2315 | PO-26-01846-PYPBL | Title I Supply Inter<br>Inv: 956530306 | 08/26 - 2 | 005159 | 1,056.57 |
| HEINEMANN | 20-421 | 2315 | PO-26-01846-PYPBL | Title I Supply Inter<br>Inv: 956522132 | 08/26 - 2 | 005159 | 338.51 |
| | | | | | | | **1,395.08** |
| HOMESTEAD FENCE COMPANY, LLC | 20-421 | 1707 | PO-25-02009-PYPBL-PYPBL | New privacy fence needed for PLC<br>Inv: 455264 | 08/26 - 2 | 005160 | 6,603.51 |
| HOMESTEAD FENCE COMPANY, LLC | 20-421 | 1707 | PO-25-02009-PYPBL-PYPBL | New privacy fence needed for PLC<br>Inv: 455282 | 08/26 - 2 | 005167 | 5,296.49 |
| HOMESTEAD FENCE COMPANY, LLC | 11-000-263-420-00-420 | 1707 | PO-27-00262 | Homestead Fence Landscaping Supplemental PO<br>Inv: 455282 | 08/26 - 2 | 005167 | 703.51 |
| | | | | | | | **12,603.51** |
| KAPLAN EARLY LEARNING COMPANY | 20-421 | 1119 | PO-26-01873-PYPBL | Outdoor Equipment for Preschool Student Use<br>Inv: 0007464236 | 08/26 - 2 | 005161 | 448.44 |
| KAPLAN EARLY LEARNING COMPANY | 20-421 | 1119 | PO-26-01873-PYPBL | Outdoor Equipment for Preschool Student Use<br>Inv: 0007467839 | 08/26 - 2 | 005161 | 1,370.80 |
| | | | | | | | **1,819.24** |
| LAKESHORE LEARNING MATERIALS | 20-421 | 1122 | PO-26-01865-PYPBL | Preschool Student Items<br>Inv: 94274794 | 08/26 - 2 | 005162 | 189.00 |
| LAKESHORE LEARNING MATERIALS | 20-421 | 1122 | PO-26-01865-PYPBL | Preschool Student Items<br>Inv: 94211841 | 08/26 - 2 | 005162 | 5,294.19 |
| LAKESHORE LEARNING MATERIALS | 20-421 | 1122 | PO-26-01866-PYPBL | Preschool Student Items<br>Inv: 94211848 | 08/26 - 2 | 005168 | 1,825.17 |
| | | | | | | | **7,308.36** |
| Laprea Education INC | 20-421 | 5903 | PO-26-01695-PYPBL | BSI needs<br>Inv: INV-2403 | 08/26 - 2 | 005163 | 7,245.00 |
| | | | | | | | **7,245.00** |
| LBJ FLOORING LLC<br>DBA: LBJ INTERIOR SOLUTIONS | 20-421 | 5519 | PO-26-01468-PYPBL | Replacement carpet tiles for rooms at Intermediate School<br>Inv: 02859 | 08/26 - 2 | 005164 | 11,979.09 |
| | | | | | | | **11,979.09** |
| LOURDES LAGUARDIA | 11-000-230-610-00-115 | 5044 | L LAGUARDIA | Petty Cash | 27-0065 | 005138 | 109.00 |
| LOURDES LAGUARDIA | 11-000-270-593-00-525 | 5044 | L LAGUARDIA | Petty Cash | 27-0065 | 005138 | 85.00 |
| | | | | | | | **194.00** |
| MS. MARYBETH WEIDENHOF - Petty Cash | 12-202-330-600-00-100 | 4297 | M WEIDENHOF | Petty Cash | 27-0070 | 005155 | 84.40 |
| | | | | | | | **84.40** |
| MS. STEPHANIE BUSH - Petty Cash | 11-000-221-610-00-100 | 3785 | S BUSH | Petty Cash | 27-0067 | 005140 | 179.16 |
| | | | | | | | **179.16** |
| Newsela, Inc | 11-190-100-340-60-300 | 5923 | 27-00019 | Annual license renewal of science and math software subscription INT, MCK<br>Inv: INV58635 | 08/26 - 2 | 005165 | 2,395.00 |

Attachments are subject to change without notice

**Stafford Township Board of Education**
**Bills and Claims**
**August 2026 Additional Bills List**

| Vendor Name | Account Number | Id | PO Number | Description | Batch | Check # | Amount |
|---|---|---|---|---|---|---|---|
| Newsela, Inc | 11-190-100-340-70-300 | 5923 | 27-00019 | Annual license renewal of science and math software subscription INT, MCK Inv: INV58635 | 08/26 - 2 | 005165 | 2,395.00 |
| | | | | | | | **4,790.00** |
| NJ NATURAL GAS COMPANY | 11-000-262-621-00-100 | 1388 | PO-26-00019-PYPO | Delivery Charges - 2025-2026 Inv: 230000208165 6/17/26 - 7/16/26 INT | 08/26 - 2 | 005145 | 2,398.29 |
| NJ NATURAL GAS COMPANY | 11-000-262-621-00-100 | 1388 | PO-26-00019-PYPO | Delivery Charges - 2025-2026 Inv: 230000101011 6/19/26 - 7/16/26 PLC | 08/26 - 2 | 005145 | 891.88 |
| NJ NATURAL GAS COMPANY | 11-000-262-621-00-100 | 1388 | PO-26-00019-PYPO | Delivery Charges - 2025-2026 Inv: 230001268485 6/30/26 - 7/29/26 TRANS | 08/26 - 2 | 005145 | 56.64 |
| NJ NATURAL GAS COMPANY | 11-000-262-621-00-100 | 1388 | PO-26-00019-PYPO | Delivery Charges - 2025-2026 Inv: 230000319366 7/3/26 - 7/30/26 OA | 08/26 - 2 | 005145 | 1,850.06 |
| NJ NATURAL GAS COMPANY | 11-000-262-621-00-100 | 1388 | PO-26-00019-PYPO | Delivery Charges - 2025-2026 Inv: 230000099956 6/19/26 - 7/16/26 MCK | 08/26 - 2 | 005145 | 1,330.40 |
| | | | | | | | **6,527.27** |
| NJ PRINCIPALS & SUPERVISORS | 11-000-240-800-70-800 | 1114 | PO-27-00199 | 2025-2026 NJPSA memberships Inv: 000119345 KD | 08/26 - 2 | 005071 | 1,189.00 |
| NJ PRINCIPALS & SUPERVISORS | 11-000-221-800-00-800 | 1114 | PO-27-00199 | 2025-2026 NJPSA memberships Inv: 000116781 RM | 08/26 - 2 | 005071 | 930.00 |
| NJ PRINCIPALS & SUPERVISORS | 11-000-240-800-75-800 | 1114 | PO-27-00199 | 2025-2026 NJPSA memberships Inv: 000117425 DR | 08/26 - 2 | 005071 | 1,189.00 |
| NJ PRINCIPALS & SUPERVISORS | 11-000-240-800-60-800 | 1114 | PO-27-00199 | 2025-2026 NJPSA memberships Inv: 000083902 TE | 08/26 - 2 | 005071 | 1,189.00 |
| NJ PRINCIPALS & SUPERVISORS | 11-000-240-800-50-800 | 1114 | PO-27-00199 | 2025-2026 NJPSA memberships Inv: 000116862 WW | 08/26 - 2 | 005071 | 1,189.00 |
| NJ PRINCIPALS & SUPERVISORS | 11-000-221-800-00-800 | 1114 | PO-27-00199 | 2025-2026 NJPSA memberships Inv: 000115049 CD | 08/26 - 2 | 005071 | 930.00 |
| NJ PRINCIPALS & SUPERVISORS | 11-000-219-890-00-800 | 1114 | PO-27-00199 | 2025-2026 NJPSA memberships Inv: 000115050 CR | 08/26 - 2 | 005071 | 930.00 |
| NJ PRINCIPALS & SUPERVISORS | 11-000-221-800-00-800 | 1114 | PO-27-00199 | 2025-2026 NJPSA memberships Inv: 000122496 JA | 08/26 - 2 | 005071 | 930.00 |
| NJ PRINCIPALS & SUPERVISORS | 11-000-240-800-65-800 | 1114 | PO-27-00199 | 2025-2026 NJPSA memberships Inv: 000116824 SD | 08/26 - 2 | 005071 | 1,189.00 |
| NJ PRINCIPALS & SUPERVISORS | 11-000-221-800-00-800 | 1114 | PO-27-00199 | 2025-2026 NJPSA memberships Inv: 000117477 SB | 08/26 - 2 | 005071 | 1,189.00 |
| NJ PRINCIPALS & SUPERVISORS | 11-000-221-800-00-800 | 1114 | PO-27-00199 | 2025-2026 NJPSA memberships Inv: 000114898 MB | 08/26 - 2 | 005071 | 930.00 |
| NJ PRINCIPALS & SUPERVISORS | 11-000-219-890-00-800 | 1114 | PO-27-00199 | 2025-2026 NJPSA memberships Inv: 000120424 HZ | 08/26 - 2 | 005071 | 1,189.00 |
| | | | | | | | **12,973.00** |
| PHILLY PRETZEL FACTORY | 62-992-330-600-00-100 | 5717 | PO-27-00171 | Supplies for Concessions Inv: 006448 | 08/26 - 2 | 005148 | 573.75 |
| | | | | | | | **573.75** |
| PROCARE SOFTWARE HOLDINGS, LLC DBA: PROCARE SOFTWARE | 61-990-320-340-00-300 | 5284 | PO-27-00233 | July 2026 Processing Fees Inv: JULY CONVENIECE FEES | 27-0038 | No Check | 514.51 |
| | | | | | | | **514.51** |

Attachments are subject to change without notice

**Stafford Township Board of Education**
**Bills and Claims**
**August 2026 Additional Bills List**

| Vendor Name | Account Number | Id | PO Number | Description | Batch | Check # | Amount |
|---|---|---|---|---|---|---|---|
| PROPIO LS LLC | 20-421 | 5556 | PO-26-00623-PYPBL | estimated translating services for the 2025-2026 sy<br>Inv: 000223240726 7/26 MCK | 08/26 - 2 | 005146 | 70.35 |
| | | | | | | | **70.35** |
| STAFFORD TWP. BOE | 20-421 | 1219 | PO-26-01877-PYPBL | FICA back to the district<br>Inv: 25-26 GRANT FICA DUE TO DISTRICT | 27-0068 | No Check | 596.00 |
| STAFFORD TWP. BOE | 11-105-100-936-00-900 | 1219 | PO-27-00159 | Districts Contribution to the Preschool Grant<br>Inv: DISTRICT'S PREK CONTRIBUTION | 27-0069 | No Check | 323,800.00 |
| STAFFORD TWP. BOE | 30-402 | 1219 | PO-27-00349 | MOVING 25-26 SY INTEREST<br>Inv: 25-26 CONSTRUCTION/BOND INTEREST-OF | Ocean First 25-26 Interes | No Check | 724,334.50 |
| | | | | | | | **1,048,730.50** |
| TD EQUIPMENT FINANCE, INC. | 11-000-262-837-00-800 | 3945 | PO-27-00043 | Lease Purchase ESIP Phase 1 Lease 1<br>Inv: 193553 | 08/26 - 2 | 005072 | 5,869.02 |
| TD EQUIPMENT FINANCE, INC. | 11-000-262-917-00-900 | 3945 | PO-27-00043 | Lease Purchase ESIP Phase 1 Lease 1<br>Inv: 193552 | 08/26 - 2 | 005072 | 66,507.06 |
| | | | | | | | **72,376.08** |
| TEACHING STRATEGIES, LLC DBA: UTJ HOLDCO, INC | 20-218-100-600-00-100 | 5640 | PO-27-00145 | Preschool Curriculum Gold Online Portfolios<br>Inv: #INV243228 | 08/26 - 2 | 005147 | 11,250.00 |
| | | | | | | | **11,250.00** |
| W.B. MASON CO., INC. | 20-421 | 4070 | PO-26-01825-PYPBL | paper needs for LCA<br>Inv: 263688987 | 08/26 - 2 | 005166 | 63.36 |
| | | | | | | | **63.36** |
| WAWA, INC. | 11-000-230-610-00-114 | 5309 | PO-27-00270 | Wawa Gift Cards - Opening Day/Staff Recognition<br>Inv: CS4141979 | 08/26 - 2 EFT | No Check | 607.99 |
| | | | | | | | **607.99** |
| XEROX CORP. | 11-000-219-592-00-506 | 2623 | PO-27-00056 | Maintenance Agreement 7/1/26 - 6/30/27<br>Inv: 026006863 7/26 | 08/26 - 2 | 005073 | 52.56 |
| XEROX CORP. | 11-000-221-500-00-506 | 2623 | PO-27-00056 | Maintenance Agreement 7/1/26 - 6/30/27<br>Inv: 026006861 7/26 | 08/26 - 2 | 005073 | 36.96 |
| XEROX CORP. | 11-000-270-593-00-506 | 2623 | PO-27-00056 | Maintenance Agreement 7/1/26 - 6/30/27<br>Inv: 026006862 7/26 | 08/26 - 2 | 005073 | 92.69 |
| | | | | | | | **182.21** |

Attachments are subject to change without notice

**Stafford Township Board of Education**
**Bills and Claims**
**August 2026 Additional Bills List**

Resolved that the Bills & Claims against the Board of Education as herein enumerated for equipment, material, and supplies, furnished and delivered and for work done and performance, and certified as correct by the Secretary of the Board of Education be and the same are ordered paid when approved by the Finance Committee, and when funds are available.

| Fund | Program | Purchase Orders | Current | Prior Year | Total |
|---|---|---|---|---|---|
| 11 General Current Expense | 000 Undistributed Expenditures | 51 | 146,717.37 | | 146,717.37 |
| 11 General Current Expense | 105 Regular Programs- Preschool | 1 | 323,800.00 | | 323,800.00 |
| 11 General Current Expense | 190 Regular Programs - Undistributed | 8 | 31,353.62 | | 31,353.62 |
| | **Fund total:** | | **501,870.99** | | **501,870.99** |
| 20 Special Revenue Fund | | 17 | 44,043.68 | | 44,043.68 |
| 20 Special Revenue Fund | 218 Preschool Education | 3 | 15,102.00 | | 15,102.00 |
| | **Fund total:** | | **59,145.68** | | **59,145.68** |
| 30 Capital Projects Fund | | 1 | 724,334.50 | | 724,334.50 |
| | **Fund total:** | | **724,334.50** | | **724,334.50** |
| 61 Imported | 990 Other Enterprise Funds | 1 | 514.51 | | 514.51 |
| | **Fund total:** | | **514.51** | | **514.51** |
| 62 Imported | 992 Imported | 2 | 658.15 | | 658.15 |
| | **Fund total:** | | **658.15** | | **658.15** |
| | **Grand totals:** | 84 | **1,286,523.83** | | **1,286,523.83** |

Attachments are subject to change without notice

# Stafford Township Board of Education
## Budget Check Detail Register
### for 2026-27 8/20/2026 - 8/20/2026 for Oceanfirst Bank (General)

| Account | Desc | PO # | Id | Vendor | Invoice | Issue Date | Amount | Status |
|---|---|---|---|---|---|---|---|---|
| Chk 005149 | | | | | | | | |
| 61-1800-990-01 | Summer Camp Refund | RVR-27-000001 | | Diana Gould | | 8/20/2026 | 690.00 | Paid |
| | | | | | Total for Chk 005149 | | 690.00 | |
| Chk 005150 | | | | | | | | |
| 60-1800-900-01 | Lunch Account Refund | RVR-27-000002 | | Janice Joannides | | 8/20/2026 | 2.40 | Paid |
| | | | | | Total for Chk 005150 | | 2.40 | |
| Chk 005151 | | | | | | | | |
| 60-1800-900-01 | Lunch Account Refund | RVR-27-000003 | | Renee Kuna | | 8/20/2026 | 20.55 | Paid |
| | | | | | Total for Chk 005151 | | 20.55 | |
| Chk 005152 | | | | | | | | |
| 60-1800-900-01 | Lunch Account Refund | RVR-27-000004 | | Lauren Roberts | | 8/20/2026 | 20.75 | Paid |
| | | | | | Total for Chk 005152 | | 20.75 | |
| Chk 005153 | | | | | | | | |
| 60-1800-900-01 | Lunch Account Refund | RVR-27-000005 | | Sherri Nevins | | 8/20/2026 | 42.15 | Paid |
| | | | | | Total for Chk 005153 | | 42.15 | |
| Chk 005154 | | | | | | | | |
| 60-1800-900-01 | Lunch Account Refund | RVR-27-000006 | | Tara DeMarco | | 8/20/2026 | 22.35 | Paid |
| | | | | | Total for Chk 005154 | | 22.35 | |

| Fund | Desc | Amount |
|---|---|---|
| 60 | Enterprise Fund | 108.20 |
| 61 | Imported | 690.00 |
| | | 798.20 |

Attachments are subject to change without notice

President

Vice President

Business Administrator

Attachments are subject to change without notice

**Stafford Township Board of Education**
**Bills and Claims**
**July 2026 Additional Bills List - EFT**

| Vendor Name | Account Number | Id | PO Number | Description | Batch | Check # | Amount |
|---|---|---|---|---|---|---|---|
| PROCARE SOFTWARE HOLDINGS LLC DBA: PROCARE SOFTWARE | 61-990-320-340-00-300 | 5284 | PO-27-00233 | July 2026 Processing Fees Inv: JULY CONVENIECE FEES | 27-0038 | No Check | 514.51 |
| | | | | | | | **514.51** |
| STAFFORD TWP. BOE | 20-421 | 1219 | PO-26-01877-PYPBL | FICA back to the district Inv: 25-26 GRANT FICA DUE TO DISTRICT | 27-0068 | No Check | 596.00 |
| STAFFORD TWP. BOE | 11-105-100-936-00-900 | 1219 | PO-27-00159 | Districts Contribution to the Preschool Grant Inv: DISTRICT'S PREK CONTRIBUTION | 27-0069 | No Check | 323,800.00 |
| STAFFORD TWP. BOE | 30-402 | 1219 | PO-27-00349 | MOVING 25-26 SY INTEREST Inv: 25-26 CONSTRUCTION BOND INTEREST-OF | Ocean First 25-26 Interes | No Check | 724,334.50 |
| | | | | | | | **1,048,730.50** |
| WAWA, INC. | 11-000-230-610-00-114 | 5309 | PO-27-00270 | Wawa Gift Cards - Opening Day/Staff Recognition Inv: CS4141973 | 08/26 - 2 EFT | No Check | 607.99 |
| | | | | | | | **607.99** |

Attachments are subject to change without notice

**Stafford Township Board of Education**
**Bills and Claims**
**July 2026 Additional Bills List - EFT**

Resolved that the Bills & Claims against the Board of Education as herein enumerated for equipment, material, and supplies, furnished and delivered and for work done and performance, and certified as correct by the Secretary of the Board of Education be and the same are ordered paid when approved by the Finance Committee, and when funds are available.

| Fund | Program | Purchase Orders | Current | Prior Year | Total |
|---|---|---|---|---|---|
| 11 General Current Expense | 000 Undistributed Expenditures | 1 | 607.99 | | 607.99 |
| 11 General Current Expense | 105 Regular Programs- Preschool | 1 | 323,800.00 | | 323,800.00 |
| | **Fund total:** | | **324,407.99** | | **324,407.99** |
| 20 Special Revenue Fund | | 1 | 596.00 | | 596.00 |
| | **Fund total:** | | **596.00** | | **596.00** |
| 30 Capital Projects Fund | | 1 | 724,334.50 | | 724,334.50 |
| | **Fund total:** | | **724,334.50** | | **724,334.50** |
| 61 Imported | 990 Other Enterprise Funds | 1 | 514.51 | | 514.51 |
| | **Fund total:** | | **514.51** | | **514.51** |
| | **Grand totals:** | 5 | **1,049,853.00** | | **1,049,853.00** |

Attachments are subject to change without notice

_____
President

_____
Vice President

_____
Business Administrator

Attachments are subject to change without notice

**Stafford Township Board of Education**
**Bills and Claims**
**July 2026 Additional Bills List**

| Vendor Name | Account Number | Id | PO Number | Description | Batch | Check # | Amount |
|---|---|---|---|---|---|---|---|
| PROCARE SOFTWARE HOLDINGS LLC<br>DBA: PROCARE SOFTWARE | 61-421 | 5284 | PO-26-01837-PYPBL | JUNE 2026<br>Inv: JUNE 2026 CONVENIENCE FEES | 27-0039 | No Check | 1,215.05 |
| | | | | | | | **1,215.05** |

Attachments are subject to change without notice

**Stafford Township Board of Education**
**Bills and Claims**
**July 2026 Additional Bills List**

Resolved that the Bills & Claims against the Board of Education as herein enumerated for equipment, material, and supplies, furnished and delivered and for work done and performance, and certified as correct by the Secretary of the Board of Education be and the same are ordered paid when approved by the Finance Committee, and when funds are available.

| Fund | Program | Purchase Orders | Current | Prior Year | Total |
|---|---|---|---|---|---|
| 61 Imported | | 1 | 1,215.05 | | 1,215.05 |
| | **Fund total:** | | **1,215.05** | | **1,215.05** |
| | **Grand totals:** | 1 | **1,215.05** | | **1,215.05** |

Attachments are subject to change without notice

_____
President

_____
Vice President

_____
Business Administrator

Attachments are subject to change without notice

**Stafford Township Board of Education**
**Bills and Claims**
**July 2026 Additional Bills List - EFT**

| Vendor Name | Account Number | Id | PO Number | Description | Batch | Check # | Amount |
|---|---|---|---|---|---|---|---|
| PROCARE SOFTWARE HOLDINGS LLC<br>DBA: PROCARE SOFTWARE | 61-421 | 5284 | PO-26-01837-PYPBL | JUNE 2026<br>Inv: JUNE 2026 CONVENIENCE FEES | 27-0039 | No Check | 1,215.05 |
| | | | | | | | **1,215.05** |

Attachments are subject to change without notice

**Stafford Township Board of Education**
**Bills and Claims**
**July 2026 Additional Bills List - EFT**

Resolved that the Bills & Claims against the Board of Education as herein enumerated for equipment, material, and supplies, furnished and delivered and for work done and performance, and certified as correct by the Secretary of the Board of Education be and the same are ordered paid when approved by the Finance Committee, and when funds are available.

| Fund | Program | Purchase Orders | Current | Prior Year | Total |
|---|---|---|---|---|---|
| 61 Imported | | 1 | 1,215.05 | | 1,215.05 |
| | **Fund total:** | | **1,215.05** | | **1,215.05** |
| | **Grand totals:** | 1 | **1,215.05** | | **1,215.05** |

Attachments are subject to change without notice

_____
President

_____
Vice President

_____
Business Administrator

Attachments are subject to change without notice

# STAFFORD TOWNSHIP BOARD OF EDUCATION

## BOARD SECRETARY'S REPORT/TREASURER'S REPORT

ATTACHMENT:G-3. & G-4.

MONTH OF JULY 2026

| | Opening Balances | Cash Receipts | Cash Disbursements | Ending Balances |
|---|---|---|---|---|
| **Fund 10** Current Expense Health Benefit Capital Outlay Special Schools | $ 19,049,876.90 | $ 7,404,700.51 | $ 2,317,796.57 | $ 24,136,780.84 |
| **Fund 20** Special Revenue | $ (595,058.70) | $ 741,398.00 | $ 38,280.89 | $ 108,058.41 |
| **Fund 30** Capital Projects | $ 70,643,431.00 | $ 219,811.17 | $ 2,032,114.18 | $ 68,831,127.99 |
| **Fund 40** Debt Service | $ 0.52 | $ 4,607,365.00 | $ 3,266,622.44 | $ 1,340,743.08 |
| **Fund 60** Food Service | $ 180,872.72 | $ 48,264.25 | $ - | $ 229,136.97 |
| **Fund 61** Extended Day | $ 348,406.94 | $ 18,219.75 | $ 25,272.45 | $ 341,354.24 |
| **Fund 62** STAC | $ 882,907.35 | $ 24,543.25 | $ 44,350.37 | $ 863,100.23 |
| **Balances** | **$ 90,510,436.73** | **$ 13,064,301.93** | **$ 7,724,436.90** | **$ 95,850,301.76** |

| **Treasurer** | | | | |
|---|---|---|---|---|
| **Fund 10** | $ 19,049,876.90 | $ 7,404,700.51 | $ 2,317,796.57 | $ 24,136,780.84 |
| **Fund 20** | $ (595,058.70) | $ 741,398.00 | $ 38,280.89 | $ 108,058.41 |
| **Fund 30** | $ 70,643,431.00 | $ 219,811.17 | $ 2,032,114.18 | $ 68,831,127.99 |
| **Fund 40** | $ 0.52 | $ 4,607,365.00 | $ 3,266,622.44 | $ 1,340,743.08 |
| **Fund 60** | $ 180,872.72 | $ 48,264.25 | $ - | $ 229,136.97 |
| **Fund 61** | $ 348,406.94 | $ 18,219.75 | $ 25,272.45 | $ 341,354.24 |
| **Fund 62** | $ 882,907.35 | $ 24,543.25 | $ 44,350.37 | $ 863,100.23 |
| **Balances** | **$ 90,510,436.73** | **$ 13,064,301.93** | **$ 7,724,436.90** | **$ 95,850,301.76** |

Attachments are subject to change without notice

I certify that the Treasurer of School Monies and the Board Secretary's ending cash balances of Funds 10 through 61 for the month of July 2026 are correct and in agreement.

Lourdes LaGuardia, SBA/BS

# REPORT OF THE TREASURER
# TO THE STAFFORD TOWNSHIP BOARD OF EDUCATION
## ALL FUNDS
**As of :** 07/31/26

| | CASH REPORT | | | | |
|---|---|---|---|---|---|
| | FUNDS | Beginning Cash Balance (1) | Cash Receipts This Month (2) | Cash Disbursements This Month (3) | Ending Cash Balance (1) + (2) - (3) |
| | **GOVERNMENTAL FUNDS** | | | | |
| 1 | General Fund - Funds 10, 16 & 17 | $ 19,049,876.90 | $ 7,404,700.51 | $ 2,317,796.57 | $ 24,136,780.84 |
| 2 | Special Revenue Fund - Fund 20 | $ (595,058.70) | $ 741,398.00 | $ 38,280.89 | $ 108,058.41 |
| 3 | Capital Projects Fund - Fund 30 | $ 70,643,431.00 | $ 219,811.17 | $ 2,032,114.18 | $ 68,831,127.99 |
| 4 | Debt Service Fund - Fund 40 | $ 0.52 | $ 4,607,365.00 | $ 3,266,622.44 | $ 1,340,743.08 |
| 5 | **Total Governmental Funds [Ln 1 thru 4]** | $ 89,098,249.72 | $ 12,973,274.68 | $ 7,654,814.08 | $ 94,416,710.32 |
| | **ENTERPRISE FUNDS** | | | | |
| 6 | Fund 60 - Cafeteria | $ 180,872.72 | $ 48,264.25 | $ - | $ 229,136.97 |
| 7 | Fund 61 - Preschool, Extended Day, STAC | $ 348,406.94 | $ 18,219.75 | $ 25,272.45 | $ 341,354.24 |
| 8 | Fund 62 | $ 882,907.35 | $ 24,543.25 | $ 44,350.37 | $ 863,100.23 |
| 9 | **Total Enterprise Funds** | $ 1,412,187.01 | $ 91,027.25 | $ 69,622.82 | $ 1,433,591.44 |
| 10 | Total General Account [Ln 5-Ln 3+Ln 10] | $ 19,867,005.73 | $ 12,844,490.76 | $ 5,692,322.72 | $ 27,019,173.77 |
| 11 | **Total General Account + Capital Projects** | $ 90,510,436.73 | $ 13,064,301.93 | $ 7,724,436.90 | $ 95,850,301.76 |
| 12 | **TRUST AND AGENCY FUNDS (Fund 90)** | | | | |
| 13 | Payroll | $ 5,395.98 | $ 472,315.42 | $ 472,231.82 | $ 5,479.58 |
| 14 | Payroll Agency | $ 308,671.89 | $ 362,166.28 | $ 391,261.68 | $ 279,576.49 |
| 15 | Unemployment Trust | $ 454,506.48 | $ 1,062.75 | $0.00 | $ 455,569.23 |
| 16 | McKinley Student Activity | $ 37,663.13 | $ 88.39 | $ - | $ 37,751.52 |
| 17 | Oxycocus Student Activity | $ 8,944.60 | $ 20.91 | $ - | $ 8,965.51 |
| 18 | Intermediate Student Activity | $ 31,208.07 | $ 73.51 | $ 6,735.00 | $ 24,546.58 |
| 19 | Ocean Acres Student Activity | $ 40,960.98 | $ 96.82 | $ - | $ 41,057.80 |
| 20 | PLC Student Activity | $ 31,034.23 | $ 1,732.56 | $ - | $ 32,766.79 |
| 21 | FSA Account | $ 1,673.65 | $ 12,429.60 | $ 4,754.46 | $ 9,348.79 |
| 22 | **Total Trust & Agency Funds (Lines 14-23)** | $ 920,059.01 | $ 849,986.24 | $ - | $ 895,062.29 |
| 23 | **Total All Funds (Lines 5+10+24)** | $ 91,430,495.74 | $ 13,914,288.17 | $ 7,724,436.90 | $ 96,745,364.05 |

Attachments are subject to change without notice

Prepared and Submitted By:

*Stephen J. Brennan, MBA, CPA*
Stephen J. Brennan, MBA, CPA
Treasurer of School Monies

August 20, 2026

BANK RECONCILIATION

**General Account**

| | | | | | |
|---|---|---|---|---|---|
| Bank Name | Ocean First | | | | Prepared by: SB |
| Account Number | 16006006442 | | | | 8/20/2026 |
| Statement Date | July 31, 2026 | | | | |
| Fund/Funds | 10, 20, 40, 60, 61 | | | | |
| 1 | Balance per Bank | | | | $ 27,448,053.08 |
| | Reconciling Items | | | | |
| | Additions | | | | |
| | Deposits in Transit | | | | |
| | Date | Amount | | | |
| 2a | from below | 3,150.15 | | | |
| 2b | | | | | |
| 2c | | | | | |
| 2d | | | | | |
| 2 | Total D.I.T.'s | | 3,150.15 | | |
| 3 | Total Additions | | | 3,150.15 | |
| | Deductions | | | | |
| | Outstanding Checks | | | | |
| 4 | (Attach List) | | 515,498.50 | | |
| 5 | Other (Explain) | | - | | |
| 6 | Total Deductions | | | 515,498.50 | |
| 7 | Net Reconciling Items | | | | (512,348.35) |
| 8 | Adjusted Balance per Bank as of: | | July 31, 2026 | | $ 26,935,704.73 |

General Account

Outstanding Checks & Deposits In Transit

Month Ending: July 31, 2026

| Check Number | Check Amount | Check Number | Check Amount |
|---|---|---|---|
| | | 5028 | 300.00 |
| 4213 | 6,000.00 | 5029 | 9,785.24 |
| 4268 | 588.50 | 5030 | 2,550.12 |
| 4386 | 100.00 | 5032 | 48.95 |
| | | 5033 | 19,627.00 |
| 4650 | 7,482.00 | 5034 | 1,789.36 |
| 4892 | 583.50 | 5035 | 782.10 |
| 4909 | 1,477.00 | 5036 | 1,469.00 |
| 4907 | 568.50 | 5037 | 34.34 |
| 4984 | 1,340.00 | 5038 | 563.94 |
| 4985 | 1,245.00 | 5039 | 187,385.07 |
| 4993 | 238.00 | 5040 | 4,000.00 |
| 4996 | 1,276.47 | 5041 | 801.65 |
| 5000 | 1,000.00 | 5042 | 1,593.75 |
| 5002 | 1,100.00 | 5043 | 3,748.50 |
| 5012 | 680.00 | 5044 | 24,414.77 |
| 5015 | 731.00 | 5045 | 2,317.50 |
| 5016 | 1,775.22 | 5046 | 35,496.50 |
| 5018 | 1,330.00 | 5047 | 36,200.00 |
| 5021 | 11,876.37 | 5048 | 695.00 |
| 5022 | 10,498.50 | | |
| | | Page 2 | $ 131,980.65 |
| | | | $ 515,498.50 |

| Deposit Number | Deposit Amount |
|---|---|
| 7/31/2026 | $ 60.00 |
| 7/31/2026 | $ 3,090.15 |
| | $ 3,150.15 |

For Note Purposes Only

| Returned Check Date | Returned Check Amount |
|---|---|
| | $ - |

Attachments are subject to change without notice

BANK RECONCILIATION

**General Account**

| | |
|---|---|
| Bank Name | Ocean First |
| Account Number | 16006006442 |
| Statement Date | July 31, 2026 |
| Fund/Funds | 10, 20, 40, 60, 61 |

| |
|---|
| Prepared by: SB |
| 8/20/2026 |

General Account

Outstanding Checks

Month Ending:

July 31, 2026

| Check Number | Check Amount | Check Number | Check Amount | Check Number | Check Amount |
|---|---|---|---|---|---|
| 5049 | $14,533.95 | | | | |
| 5050 | $639.19 | | | | |
| 5051 | $5,849.00 | | | | |
| 5052 | $1,250.00 | | | | |
| 5053 | $750.00 | | | | |
| 5054 | $19,692.73 | | | | |
| 5055 | $32,500.00 | | | | |
| 5056 | $9,201.16 | | | | |
| 5057 | $307.00 | | | | |
| 5058 | $2,082.98 | | | | |
| 5059 | $9,843.00 | | | | |
| 5060 | $350.00 | | | | |
| 5061 | $355.00 | | | | |
| 5062 | $1,144.00 | | | | |
| 5063 | $1,769.22 | | | | |
| 5064 | $1,321.56 | | | | |
| 5065 | $857.37 | | | | |
| 5066 | $6,797.65 | | | | |
| 5067 | $4,784.34 | | | | |
| 5074 | $49.50 | | | | |
| 4912 | $1,177.00 | | | | |
| 4914 | $1,177.00 | | | | |
| 4922 | $588.50 | | | | |
| 4927 | $1,765.50 | | | | |
| 4964 | $250.00 | | | | |
| 5007 | $1,637.00 | | | | |
| 5011 | $11,118.00 | | | | |
| 4957 | $190.00 | | | | |
| | | | | Total | $131,980.65 |

Attachments are subject to change without notice

BANK RECONCILIATION

**STAC Account**

| | | | | | | |
|---|---|---|---|---|---|---|
| Bank Name | | | Ocean First | | | Prepared by: SB |
| Account Number | | | 16006009685 | | | 8/20/2026 |
| Statement Date | | | July 31, 2026 | | | |
| Fund/Funds | | | 10, 20, 40, 60, 61 | | | |
| 1 | Balance per Bank | | | | | $ 17,931.96 |
| | Reconciling Items | | | | | |
| | Additions | | | | | |
| | | Deposits in Transit | | | | |
| | | Date | Amount | | | |
| | 2a | from below | - | | | |
| | 2b | ACH needed in GL | | | | |
| | 2c | | | | | |
| | 2d | | | | | |
| 2 | | Total D.I.T.'s | | - | | |
| 3 | | Total Additions | | | - | |
| | Deductions | | | | | |
| | | Outstanding Checks | | | | |
| 4 | | (Attach List) | | - | | |
| 5 | | Other (Explain Const. Acct. * | | | | |
| 6 | | Total Deductions | | | - | |
| 7 | Net Reconciling Items | | | | | - |
| 8 | Adjusted Balance per Bank as of: | | July 31, 2026 | | | $ 17,931.96 |

General Account

Outstanding Checks & Deposits In Transit

Month Ending July 31, 2026

| Check Number | Check Amount | Check Number | Check Amount |
|---|---|---|---|
| | | | |
| | $ - | | $ - |
| Total Outstanding Checks: | | | $ - |

| Deposit Number | Deposit Amount |
|---|---|
| | |
| | $ - |

| For Note Purposes Only | |
|---|---|
| Returned Check Date | Returned Check Amount |
| | |
| | $ - |

Attachments are subject to change without notice

* ROD grant reimbursements received in the General Acct to be transferred to Construction Projects Account

BANK RECONCILIATION

**Extended Day Account**

| | | | | | | |
|---|---|---|---|---|---|---|
| Bank Name | | Ocean First | | | | Prepared by: SB |
| Account Number | | 16006002144 | | | | 8/20/2026 |
| Statement Date | | July 31, 2026 | | | | |
| Fund/Funds | | 10, 20, 40, 60, 61 | | | | |
| 1 | Balance per Bank | | | | | $ 64,636.98 |
| | Reconciling Items | | | | | |
| | Additions | | | | | |
| | Deposits in Transit | | | | | |
| | Date | Amount | | | | |
| 2a | from below | - | | | | |
| 2b | | | | | | |
| 2c | | | | | | |
| 2d | | | | | | |
| 2 | Total D.I.T.'s | | - | | | |
| 3 | Total Additions | | | - | | |
| | Deductions | | | | | |
| | Outstanding Checks | | | | | |
| 4 | (Attach List) | | - | | | |
| 5 | Other (Explain Const. Acct. * | | | | | |
| 6 | Total Deductions | | | - | | |
| 7 | Net Reconciling Items | | | | | - |
| 8 | Adjusted Balance per Bank as of: | July 31, 2026 | | | | $ 64,636.98 |

General Account

Outstanding Checks & Deposits In Transit

Month Ending July 31, 2026

| Check Number | Check Amount | Check Number | Check Amount |
|---|---|---|---|
| | | | |
| | $ - | | $ - |
| Total Outstanding Checks: | | | $ - |

| Deposit Number | Deposit Amount |
|---|---|
| | |
| | $ - |

| For Note Purposes Only | |
|---|---|
| Returned Check Date | Returned Check Amount |
| | |
| | $ - |

Attachments are subject to change without notice

* ROD grant reimbursements received in the General Acct to be transferred to Construction Projects Account

BANK RECONCILIATION

**Device Insurance Account**

| | | | | | | |
|---|---|---|---|---|---|---|
| Bank Name | | Ocean First | | | | Prepared by: SB |
| Account Number | | 16006001010 | | | | 8/20/2026 |
| Statement Date | | July 31, 2026 | | | | |
| Fund/Funds | | 10, 20, 40, 60, 61 | | | | |
| 1 | Balance per Bank | | | | | $ 900.10 |
| | Reconciling Items | | | | | |
| | Additions | | | | | |
| | Deposits in Transit | | | | | |
| | Date | Amount | | | | |
| 2a | from below | - | | | | |
| 2b | | | | | | |
| 2c | | | | | | |
| 2d | | | | | | |
| 2 | Total D.I.T.'s | | - | | | |
| 3 | Total Additions | | | | - | |
| | Deductions | | | | | |
| | Outstanding Checks | | | | | |
| 4 | (Attach List) | | - | | | |
| 5 | Other (Explain Const. Acct. * | | | | | |
| 6 | Total Deductions | | | | - | |
| 7 | Net Reconciling Items | | | | | - |
| 8 | Adjusted Balance per Bank as of: | July 31, 2026 | | | | $ 900.10 |

General Account

Outstanding Checks & Deposits In Transit

Month Ending July 31, 2026

| Check Number | Check Amount | Check Number | Check Amount |
|---|---|---|---|
| | | | |
| | $ - | | $ - |
| | Total Outstanding Checks: | | $ - |

| Deposit Number | Deposit Amount |
|---|---|
| | |
| | $ - |

For Note Purposes Only

| Returned Check Date | Returned Check Amount |
|---|---|
| | |
| | $ - |

* ROD grant reimbursements received in the General Acct to be transferred to Construction Projects Account

Attachments are subject to change without notice

BANK RECONCILIATION

**Construction Projects**

30-101

| | | | | | |
|---|---|---|---|---|---|
| Bank Name | Ocean First Bank | | | | Prepared by: SB |
| Account Number | 16006006558 | | | | 8/20/2026 |
| Statement Date | July 31, 2026 | | | | |
| Fund/Funds | 30 | | | | |
| 1 | Balance per Bank | | | | $ 3,126,148.94 |
| | Reconciling Items | | | | |
| | Additions | | | | |
| | Deposits in Transit | | | | |
| | Date | Amount | | | |
| 2a | | $ - | | | |
| 2b | | | | | |
| 2c | | | | | |
| 2d | | | | | |
| 2 | Total D.I.T.'s | | - | | |
| 3 | Total Additions | | | - | |
| | Deductions | | | | |
| | Outstanding Checks | | | | |
| 4 | (Attach List) | | 2,860.00 | | |
| 5 | Other (Explain) | | | | |
| 6 | Total Deductions | | | 2,860.00 | |
| 7 | Net Reconciling Items | | | | (2,860.00) |
| 8 | Adjusted Balance per Bank as of: July 31, 2026 | | | | $ 3,123,288.94 |

Construction Projects Account

Outstanding Checks & Deposits In Transit

Month Ending July 31, 2026

| Check Number | Check Amount | | Deposit Number | Deposit Amount |
|---|---|---|---|---|
| 24 | $ 2,860.00 | | | |
| | $ 2,860.00 | | | $ - |

Attachments are subject to change without notice

BANK RECONCILIATION

**Construction Bond**

30-101

| | | | | |
|---|---|---|---|---|
| Bank Name | OCEAN FIRST BANK | | | Prepared by: SB |
| Account Number | 16006007276 | | | 8/20/2026 |
| Statement Date | July 31, 2026 | | | |
| Fund/Funds | 30 | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | Balance per Bank | | | | | $ 12,534,900.34 |
| | Reconciling Items | | | | | |
| | Additions | | | | | |
| | | Deposits in Transit | | | | |
| | | Date | Amount | | | |
| | 2a | | | | | |
| | 2b | | | | | |
| | 2c | | | | | |
| | 2d | | | | | |
| 2 | | Total D.I.T.'s | - | | | |
| 3 | | Total Additions | | - | | |
| | Deductions | | | | | |
| | | Outstanding Checks | | | | |
| 4 | | (Attach List) | | | | |
| 5 | | Other (Explain) | | | | |
| 6 | | Total Deductions | | - | | |
| 7 | Net Reconciling Items | | | | | - |
| 8 | Adjusted Balance per Bank as of: | | July 31, 2026 | | | $ 12,534,900.34 |

Construction Projects Account

Outstanding Checks & Deposits In Transit

Month Ending July 31, 2026

| Check Number | Check Amount | Deposit Number | Deposit Amount |
|---|---|---|---|
| | | Oct Wire | $ 159,933.60 |
| | | Oct Wire | $ 1.08 |
| | $ - | | $ 159,934.68 |

Attachments are subject to change without notice

BANK RECONCILIATION

**Charles Schwab**

30-101

| | | | | | |
|---|---|---|---|---|---|
| Bank Name | Charles Schwab | | | | Prepared by: SB |
| Account Number | 2968-6645 | | | | 8/20/2026 |
| Statement Date | July 31, 2026 | | | | |
| Fund/Funds | 30 | | | | |
| | | | | | |
| 1 | Balance per Bank | | | | $ 53,172,938.71 |
| | Reconciling Items | | | | |
| | Additions | | | | |
| | Deposits in Transit | | | | |
| | Date | Amount | | | |
| 2a | | | | | |
| 2b | | | | | |
| 2c | | | | | |
| 2d | | | | | |
| 2 | Total D.I.T.'s | | - | | |
| 3 | Total Additions | | | - | |
| | Deductions | | | | |
| | Outstanding Checks | | | | |
| 4 | (Attach List) | | | | |
| 5 | Other (Explain) | | | | |
| 6 | Total Deductions | | | - | |
| 7 | Net Reconciling Items | | | | - |
| 8 | Adjusted Balance per Bank as of: | July 31, 2026 | | | $ 53,172,938.71 |

Construction Projects Account

Outstanding Checks & Deposits In Transit

Month Ending July 31, 2026

| Check Number | Check Amount |
|---|---|
| | |
| | $ - |

| Deposit Number | Deposit Amount |
|---|---|
| Oct Wire | $ 159,933.60 |
| Oct Wire | $ 1.08 |
| | $ 159,934.68 |

Attachments are subject to change without notice

# BANK RECONCILIATION
## Payroll Account

| | | | | | | |
|---|---|---|---|---|---|---|
| Bank Name | | | Ocean First Bank | | | Prepared by: SB |
| Account Number | | | 16006006459 | | | 8/20/2026 |
| Statement Date | | | July 31, 2026 | | | |
| Fund/Funds | | | 90 | | | |
| 1 | Balance per Bank | | | | | $ 5,642.56 |
| | Reconciling Items | | | | | |
| | Additions | | | | | |
| | Deposits in Transit | | | | | |
| | Date | Amount | | | | |
| 2a | | - | | | | |
| 2b | | | | | | |
| 2c | | | | | | |
| 2d | | | | | | |
| 2 | Total D.I.T.'s | | - | | | |
| 3 | Total Additions | | | - | | |
| | Deductions | | | | | |
| | Outstanding Checks | | | | | |
| 4 | (Attach List) | | 162.98 | | | |
| 5 | Other (Explain) | | | | | |
| 6 | Total Deductions | | | 162.98 | | |
| 7 | Net Reconciling Items | | | | | (162.98) |
| 8 | Adjusted Balance per Bank as of: | | July 31, 2026 | | | $ 5,479.58 |

Payroll Account
Outstanding Checks & Deposits In Transit

Month Ending: July 31, 2026

| Check Number | Check Amount | Deposit Number | Deposit Amount |
|---|---|---|---|
| See attached | $ 162.98 | | |
| | $ 162.98 | | $ - |

Attachments are subject to change without notice

BANK RECONCILIATION

**Agency Account**

| | |
|---|---|
| Bank Name | Ocean First |
| Account Number | 16006006467 |
| Statement Date | July 31, 2026 |
| Fund/Funds | 90 |

Prepared by: SB
8/20/2026

Agency Account
Outstanding Checks

Month Ending:
July 31, 2026

| Check Number | Check Amount | Check Number | Check Amount | Check Number | Check Amount |
|---|---|---|---|---|---|
| 176 | $43.42 | | | | |
| 177 | $41.25 | | | | |
| 179 | $78.31 | | | | |
| | | | | | 162.98 |

Attachments are subject to change without notice

# BANK RECONCILIATION

## Agency Account

90-101

| | | | | |
|---|---|---|---|---|
| Bank Name | Ocean First Bank | | | Prepared by: SB |
| Account Number | 16006006467 | | | 8/20/2026 |
| Statement Date | July 31, 2026 | | | |
| Fund/Funds | 90 | | | |

| | | | | | |
|---|---|---|---|---|---|
| 1 | Balance per Bank | | | | $ 280,219.45 |
| | Reconciling Items | | | | |
| | Additions | | | | |
| | Deposits in Transit | | | | |
| | Date | Amount | | | |
| 2a | | 0.49 | | | |
| 2b | | | | | |
| 2c | | | | | |
| 2d | | | | | |
| 2 | Total D.I.T.'s | | 0.49 | | |
| 3 | Total Additions | | | 0.49 | |
| | Deductions | | | | |
| | Outstanding Checks | | | | |
| 4 | (Attach List) | | 643.45 | | |
| 5 | Other (Explain) | | | | |
| 6 | Total Deductions | | | 643.45 | |
| 7 | Net Reconciling Items | | | | (642.96) |
| 8 | Adjusted Balance per Bank as of: | July 31, 2026 | | | $ 279,576.49 |

Attachments are subject to change without notice

Agency Account

Outstanding Checks & Deposits In Transit

Month Ending: July 31, 2026

| Check Number | Check Amount |
|---|---|
| Per Attached | 643.45 |
| Misc Adj | |
| | $ 643.45 |

| Deposit Number | Deposit Amount |
|---|---|
| Misc | $ 0.49 |
| | $ 0.49 |

BANK RECONCILIATION

**Agency Account**

| | | | |
|---|---|---|---|
| Bank Name | Ocean First | | Prepared by: SB |
| Account Number | 16006006467 | | 8/20/2026 |
| Statement Date | July 31, 2026 | | |
| Fund/Funds | 90 | | |

Agency Account

Outstanding Checks

1 En July 31, 2026

| Check Number | Check Amount | Check Number | Check Amount | Check Number | |
|---|---|---|---|---|---|
| 312 | 363.48 | | | | |
| 317 | 253.57 | | | | |
| 318 | 26.40 | | | | |
| PENSERV | | | | | |
| AFLAC | | | | | |
| Colonial | | | | | |
| PERS | | | | | |
| TPAF | | | | | |
| | | Outstanding | 643.45 | | |

Attachments are subject to change without notice

# BANK RECONCILIATION

## McKinley Student Activity Account

| | | | | | |
|---|---|---|---|---|---|
| Bank Name | Ocean First Bank | | | | Prepared by: SB |
| Account Number | 16006006517 | | | | 8/20/2026 |
| Statement Date | July 31, 2026 | | | | |
| Fund/Funds | 90 | | | | |
| | Balance per Bank | | | | $ 37,891.52 |
| | Reconciling Items | | | | |
| | Additions | | | | |
| | Deposits in Transit | | | | |
| | Date | Amount | | | |
| 2a | | - | | | |
| 2b | | | | | |
| 2c | | | | | |
| 2d | | | | | |
| 2 | Total D.I.T.'s | | - | | |
| 3 | Total Additions | | | - | |
| | Deductions | | | | |
| | Outstanding Checks | | | | |
| 4 | (Attach List) | | 140.00 | | |
| 5 | Other (Explain)* | | | | |
| 6 | Total Deductions | | | 140.00 | |
| 7 | Net Reconciling Items | | | | (140.00) |
| 8 | Adjusted Balance per Bank as of: | July 31, 2026 | | | $ 37,751.52 |

McKinley Student Activity

Outstanding Checks & Deposits In Transit

Month Ending: July 31, 2026

| Check Number | Check Amount |
|---|---|
| 1131 | $ 140.00 |
| | $ 140.00 |

| Deposit Number | Deposit Amount |
|---|---|
| | $ - |

Attachments are subject to change without notice

# BANK RECONCILIATION

## SUI Unemployment Account

| | |
|---|---|
| Bank Name | Ocean First Bank |
| Account Number | 16006006541 |
| Statement Date | July 31, 2026 |
| Fund/Funds | 90 |

Prepared by: SB
8/20/2026

| | | | | | |
|---|---|---|---|---|---|
| 1 | Balance per Bank | | | | $ 455,569.23 |
| | Reconciling Items | | | | |
| | Additions | | | | |
| | Deposits in Transit | | | | |
| | Date | Amount | | | |
| | 2a | | | | |
| | 2b | | | | |
| | 2c | | | | |
| | 2d | | | | |
| 2 | Total D.I.T.'s | | - | | |
| 3 | Total Additions | | | - | |
| | Deductions | | | | |
| | Outstanding Checks | | | | |
| 4 | (Attach List) | | - | | |
| 5 | Other (Explain) | | | | |
| 6 | Total Deductions | | | - | |
| 7 | Net Reconciling Items | | | | - |
| 8 | Adjusted Balance per Bank as of: | July 31, 2026 | | | $ 455,569.23 |

Attachments are subject to change without notice

### Unemployment Account
### Outstanding Checks & Deposits In Transit

Month Ending: July 31, 2026

| Check Number | Check Amount | | Deposit Number | Deposit Amount |
|---|---|---|---|---|
| | | | | |
| | $ - | | | |

# BANK RECONCILIATION

## Oxycocus Student Activity Account

| | | | | | |
|---|---|---|---|---|---|
| Bank Name | | Ocean First Bank | | | Prepared by: SB |
| Account Number | | 16006006491 | | | 8/20/2026 |
| Statement Date | | July 31, 2026 | | | |
| Fund/Funds | | 63 | | | |
| 1 | Balance per Bank | | | | 8,965.51 |
| | Reconciling Items | | | | |
| | Additions | | | | |
| | Deposits in Transit | | | | |
| | Date | Amount | | | |
| 2a | | | | | |
| 2b | | | | | |
| 2c | | | | | |
| 2d | | | | | |
| 2 | Total D.I.T.'s | | - | | |
| 3 | Total Additions | | | - | |
| | Deductions | | | | |
| | Outstanding Checks | | | | |
| 4 | (Attach List) | | - | | |
| 5 | Other (Explain) | | | | |
| 6 | Total Deductions | | | - | |
| 7 | Net Reconciling Items | | | | - |
| 8 | Adjusted Balance per Bank as of: | July 31, 2026 | | | $ 8,965.51 |

Oxycocus Student Activity Account

Outstanding Checks & Deposits In Transit

Month Ending: July 31, 2026

| Check Number | Check Amount |
|---|---|
| | |
| | $ - |

| Deposit Number | Deposit Amount |
|---|---|
| | |
| | |

Attachments are subject to change without notice

# BANK RECONCILIATION

## Intermediate Student Activity Account

| | | | | | |
|---|---|---|---|---|---|
| Bank Name | | Ocean First Bank | | | Prepared by: SB |
| Account Number | | 16006006525 | | | 8/20/2026 |
| Statement Date | | July 31, 2026 | | | |
| Fund/Funds | | 90 | | | |
| 1 | Balance per Bank | | | | $ 31,281.58 |
| | Reconciling Items | | | | |
| | Deposits in Transit | | | | |
| | Date | Amount | | | |
| 2a | | - | | | |
| 2b | | | | | |
| 2c | | | | | |
| 2d | | | | | |
| 2 | Total D.I.T.'s | | - | | |
| 3 | Total Additions | | | - | |
| | Deductions | | | | |
| | Outstanding Checks | | | | |
| 4 | (Attach List) | | 6,735.00 | | |
| 5 | Other (Explain) | | | | |
| 6 | Total Deductions | | | 6,735.00 | |
| 7 | Net Reconciling Items | | | | (6,735.00) |
| 8 | Adjusted Balance per Bank as of: | July 31, 2026 | | | $ 24,546.58 |

Intermediate Student Activity Account
Outstanding Checks & Deposits In Transit

Month Ending: July 31, 2026

| Check Number | Check Amount | Deposit Number | Deposit Amount |
|---|---|---|---|
| 1236 | $ 4,955.00 | | |
| 1237 | $ 890.00 | | |
| 1238 | $ 890.00 | | |
| | | | $ - |
| | $ 6,735.00 | | |

Attachments are subject to change without notice

# BANK RECONCILIATION

## Primary Learning Center Student Activity Account

High School activities

| | | | | | |
|---|---|---|---|---|---|
| Bank Name | Ocean First Bank | | | | Prepared by: SB |
| Account Number | 16006006483 | | | | 8/20/2026 |
| Statement Date | July 31, 2026 | | | | |
| Fund/Funds | | | | | |
| 1 | Balance per Bank | | | | $ 32,766.79 |
| | Reconciling Items | | | | |
| | Deposits in Transit | | | | |
| | Date | Amount | | | |
| 2a | | | | | |
| 2b | | | | | |
| 2c | | | | | |
| 2d | | | | | |
| 2 | Total D.I.T.'s | | - | | |
| 3 | Total Additions | | | - | |
| | Deductions | | | | |
| | Outstanding Checks | | | | |
| 4 | (Attach List) | | | | |
| 5 | Other (Explain) | | | | |
| 6 | Total Deductions | | | - | |
| 7 | Net Reconciling Items | | | | - |
| 8 | Adjusted Balance per Bank as of: | July 31, 2026 | | | $ 32,766.79 |

Attachments are subject to change without notice

Primary Learning Center Student Activity
Outstanding Checks & Deposits In Transit

Month Ending: July 31, 2026

| Check Number | Check Amount | | Deposit Number | Deposit Amount |
|---|---|---|---|---|
| | | | | |
| | $ - | | | |

# BANK RECONCILIATION

## Flexible Spending Account (FSA)

| | | | | | | |
|---|---|---|---|---|---|---|
| Bank Name | | | Ocean First Bank | | | Prepared by: SB |
| Account Number | | | 16006006475 | | | 8/20/2026 |
| Statement Date | | | July 31, 2026 | | | |
| Fund/Funds | | | 90 | | | |
| 1 | Balance per Bank | | | | | $ 10,057.11 |
| | Reconciling Items | | | | | |
| | Additions | | | | | |
| | | Deposits in Transit | | | | |
| | | Date | Amount | | | |
| | 2a | | | | | |
| | 2b | | | | | |
| | 2c | | | | | |
| | 2d | | | | | |
| 2 | | Total D.I.T.'s | | - | | |
| 3 | | Total Additions | | | - | |
| | Deductions | | | | | |
| | | Outstanding Checks | | | | |
| 4 | | (Attach List) | | 708.32 | | |
| 5 | | Other (Explain) | | | | |
| 6 | | Total Deductions | | | 708.32 | |
| 7 | Net Reconciling Items | | | | | (708.32) |
| 8 | Adjusted Balance per Bank as of: | | July 31, 2026 | | | $ 9,348.79 |

Flexible Spending Account

Outstanding Checks & Deposits In Transit

Month Ending: July 31, 2026

| Check Number | Check Amount | Deposit Number | Deposit Amount |
|---|---|---|---|
| Claims | $ 708.32 | | |
| Claims | | | |
| | $ 708.32 | | $ - |

Attachments are subject to change without notice

# BANK RECONCILIATION

## Ocean Acres Student Activity Account

| | | | | | |
|---|---|---|---|---|---|
| Bank Name | Ocean First Bank | | | | Prepared by: SB |
| Account Number | 16006006509 | | | | 8/20/2026 |
| Statement Date | July 31, 2026 | | | | |
| Fund/Funds | 63 | | | | |
| 1 | Balance per Bank | | | | 41,502.14 |
| | Reconciling Items | | | | |
| | Additions | | | | |
| | Deposits in Transit | | | | |
| | Date | Amount | | | |
| 2a | | | | | |
| 2b | | | | | |
| 2c | | | | | |
| 2d | | | | | |
| 2 | Total D.I.T.'s | | - | | |
| 3 | Total Additions | | | - | |
| | Deductions | | | | |
| | Outstanding Checks | | | | |
| 4 | (Attach List) | | 444.34 | | |
| 5 | Other (Explain) | | | | |
| 6 | Total Deductions | | | 444.34 | |
| 7 | Net Reconciling Items | | | | (444.34) |
| 8 | Adjusted Balance per Bank as of: | July 31, 2026 | | | $ 41,057.80 |

Ocean Acres Student Activity Account

Outstanding Checks & Deposits In Transit

Month Ending: July 31, 2026

| Check Number | Check Amount |
|---|---|
| | $ 444.34 |
| | $ 444.34 |

| Deposit Number | Deposit Amount |
|---|---|
| | |
| | |

Attachments are subject to change without notice

# Report of the Secretary to the Board of Education
# Stafford Township Board of Education

## Fund 10 - Interim Balance Sheet
For the two month period ending 08/31/2026

### Assets and Resources

**Assets:**

| Account Number | Account Name | Subtotal Balance | Balance |
|---|---|---|---|
| 101 | Cash in Bank | | 17,593,527.72 |
| 102-107 | Cash Equivalents | | 1,950.00 |
| 116 | Investment - Capital Reserve Account | | 2,297,931.07 |
| 117 | Investment - Maintenance Reserve Account | | 2,575,354.04 |
| 118 | Investment - Current Expense Emergency Reserve Account | | 170,300.00 |
| 121 | Tax Levy Receivable | | 33,490,044.00 |
| | Accounts Receivable: | | |
| 132 | InterfundAccounts Receivable: | 738,208.19 | |
| 141 | Intergovernmental - StateAccounts Receivable: | 6,027,119.85 | |
| 143 | Intergovernmental - OtherAccounts Receivable: | (3,377.80) | |
| 154 | Allowance for Uncollectible Accounts Receivable (Credit)Accounts Receivable: | 0.00 | 6,761,950.44 |
| | Loans Receivable: | | |
| | | | 62,891,057.27 |

**Resources:**

| Account Number | Account Name | Subtotal Balance | Balance |
|---|---|---|---|
| 301 | Estimated Revenues | 46,688,015.00 | |
| 302 | Less Revenues | 46,018,859.59 | 669,155.41 |
| | | | 669,155.41 |
| | | Total Assets and Resources: | 63,560,212.68 |

### Liabilities and Fund Equity

**Liabilities:**

| Account Number | Account Name | Subtotal Balance | Balance |
|---|---|---|---|
| 421 | Accounts Payable | | 968,173.98 |
| | | | 968,173.98 |

**Fund Balance:**

| Account Number | Account Name | Subtotal Balance | Subtotal Balance 2 | Subtotal Balance 3 | Balance |
|---|---|---|---|---|---|
| | Appropriated: | | | | |
| 753 | Reserve for Encumbrances - Current Year | | 13,910,888.42 | | |
| 754 | Reserve for Encumbrances - Prior Year | | 418,449.54 | | |
| 754+753 | Reserve for Encumbrances - Current + Prior | | | 14,329,337.96 | |
| | Reserve Fund Balance: | | | | |
| 761 | Capital Reserve Account | | 2,297,931.07 | | |
| 604 | Add: Increase in Capital Reserve | | 500.00 | | |
| 307 | Less: Budgeted Withdrawal from Capital Reserve-Eligible Costs | | 277,000.00 | | |
| 317 | Less: Budgeted Withdrawal from Capital Reserve-Transfer to Debt Service | | 0.00 | 2,021,431.07 | |
| 764 | Maintenance Reserve Account | | 2,575,354.04 | | |
| 606 | Add: Increase in Maintenance Reserve | | 500.00 | | |
| 310 | Less: Budgeted Withdrawal from Maintenance Reserve | | 400,000.00 | 2,175,854.04 | |
| 766 | Current Expense Emergency Reserve Account | | 170,300.00 | | |
| 607 | Add: Increase in Current Expense Emergency Reserve | | 100.00 | | |
| 312 | Less: Budgeted Withdrawal from Current Expense Emergency Reserve | | 50,583.00 | 119,817.00 | |
| | Appropriations | | | | |
| 601 | Appropriations | | 54,703,235.40 | | |
| 602 | Less: Expenditures | 3,597,496.81 | | | |
| 603 | Encumbrances | 14,329,337.96 | (17,926,834.77) | 36,776,400.63 | |
| | Total Appropriated | | | 55,422,840.70 | |
| | Unappropriated | | | | |
| 770 | Unassigned Fund Balance | | | 13,969,695.00 | |
| 303 | Budgeted Fund Balance | | | 6,800,497.00 | |
| | | | | | 62,592,038.70 |
| | | | | Total Liabilities and Fund Equity: | 63,560,212.68 |

Attachments are subject to change without notice

## Report of the Secretary to the Board of Education
## Stafford Township Board of Education

### Fund 10 - Recapitulation of Budgeted Fund Balance

| | Budgeted | Actual | Variance |
|---|---|---|---|
| Appropriations | 54,703,235.40 | 17,926,834.77 | 36,776,400.63 |
| Revenues | (46,688,015.00) | (46,018,859.59) | (669,155.41) |
| | **8,015,220.40** | **(28,092,024.82)** | **36,107,245.22** |
| Change in Capital Reserve: | | | |
| Plus: Increase in Capital Reserves (604) | 500.00 | 500.00 | .00 |
| Less: Budgeted Withdrawal from Cap Reserve (307) | 277,000.00 | 277,000.00 | .00 |
| | **(276,500.00)** | **(276,500.00)** | **.00** |
| Change in Maintenance Reserve: | | | |
| Plus: Increase in Maintenance Reserve (606) | 500.00 | 500.00 | .00 |
| Less: Budgeted Withdrawal from Maintenance Reserve (310) | 400,000.00 | 400,000.00 | .00 |
| | **(399,500.00)** | **(399,500.00)** | **.00** |
| Change in Emergency Reserve: | | | |
| Plus: Increase in Current Expense Emergency Reserve/Interest Deposits (607) | 100.00 | 100.00 | .00 |
| Less: Budgeted Withdrawal from Current Expense Emergency Reserve (312) | 50,583.00 | 50,583.00 | .00 |
| | **(50,483.00)** | **(50,483.00)** | **.00** |

Attachments are subject to change without notice

# Report of the Secretary to the Board of Education
# Stafford Township Board of Education

## Fund 10 - Interim Statements Comparing Budgeted Revenue with Actual to Date and Appropriations with Expenditures and Encumbrances to Date
**For the two month period ending 08/31/2026**

### Revenues/Sources of Funds

| Account Number | Line | Revenues/Sources of Funds | Original Budget Certified for Taxes | Budget Transfers | Budgeted / Estimated | Actual to Date | Note | Unrealized Balance |
|---|---|---|---|---|---|---|---|---|
| 10-1xxx | 370 | From Local Sources | 40,901,970.00 | 0.00 | 40,901,970.00 | 40,260,408.59 | Under | 641,561.41 |
| 10-3xxx | 520 | From State Sources | 5,758,451.00 | 0.00 | 5,758,451.00 | 5,758,451.00 | | 0.00 |
| 10-4xxx | 570 | From Federal Sources | 27,594.00 | 0.00 | 27,594.00 | 0.00 | Under | 27,594.00 |
| | - | **Total Revenues/Sources Of Funds** | **46,688,015.00** | **0.00** | **46,688,015.00** | **46,018,859.59** | **Under** | **669,155.41** |

### General Fund

**Current Expense**

| Account Number | Line | Expenditures Description | Original Budget Certified For Taxes | Budget Transfers | Appropriations | Expenditures | Encumbrances | Available Balance |
|---|---|---|---|---|---|---|---|---|
| 11-1xx-100-xxx | 3200 | Regular Programs - Instruction | 11,536,322.00 | (90,131.42) | 11,446,190.58 | 206,358.51 | 565,753.63 | 10,674,078.44 |
| 11-2xx-100-xxx | 10300 | Special Education - Instruction | 6,203,175.00 | 2,600.00 | 6,205,775.00 | 40,229.50 | 9,113.92 | 6,156,431.58 |
| 11-230-100-xxx | 11160 | Basic Skills/Remedial - Instruction | 710,962.00 | 0.00 | 710,962.00 | 0.00 | 282.51 | 710,679.49 |
| 11-401-100-xxx | 17100 | School-Sponsored Cocurricular/Extracurricular Activities - Instruction | 147,308.00 | 0.00 | 147,308.00 | 500.00 | 0.00 | 146,808.00 |
| | 72140 | *Undistributed Expenditures:* | | | | | | |
| 11-000-100-xxx | 29180 | Instruction (Tuition) | 656,586.00 | 14,000.00 | 670,586.00 | 0.00 | 14,000.00 | 656,586.00 |
| 11-000-211-xxx | 29680 | Attendance and Social Work Services | 72,956.00 | 0.00 | 72,956.00 | 6,079.66 | 66,876.26 | 0.08 |
| 11-000-213-xxx | 30620 | Health Services | 410,252.00 | 0.00 | 410,252.00 | 1,159.97 | 6,144.44 | 402,947.59 |
| 11-000-216-xxx | 40580 | Speech, OT, PT and Related Services | 1,032,781.00 | 0.00 | 1,032,781.00 | 13,403.52 | 1,891.04 | 1,017,486.44 |
| 11-000-217-xxx | 41080 | Other Support Services Students - Extraordinary Services | 1,257,433.00 | 90,783.00 | 1,348,216.00 | 12,313.32 | 0.00 | 1,335,902.68 |
| 11-000-218-xxx | 41660 | Guidance | 513,531.00 | 0.00 | 513,531.00 | 0.00 | 669.90 | 512,861.10 |
| 11-000-219-xxx | 42200 | Child Study Teams | 1,458,175.00 | 79,783.00 | 1,537,958.00 | 75,874.27 | 347,237.17 | 1,114,846.56 |
| 11-000-221-xxx | 43200 | Improvement of Instruction | 1,121,456.00 | (28,707.00) | 1,092,749.00 | 95,715.76 | 957,555.27 | 39,477.97 |
| 11-000-222-xxx | 43620 | Educational Media Services/School Library | 39,485.00 | 0.00 | 39,485.00 | 0.00 | 0.00 | 39,485.00 |
| 11-000-223-xxx | 44180 | Instructional Staff Training | 64,540.00 | 0.00 | 64,540.00 | 3,790.00 | 0.00 | 60,750.00 |
| 11-000-230-xxx | 45300 | General Administration | 1,054,743.00 | 25,443.41 | 1,080,186.41 | 146,327.81 | 673,389.91 | 260,468.69 |
| 11-000-240-xxx | 46160 | School Administration | 1,083,597.00 | (50,759.00) | 1,032,838.00 | 90,761.74 | 819,333.34 | 122,742.92 |
| 11-000-251-xxx | 47200 | Central Services | 655,664.00 | 0.00 | 655,664.00 | 54,662.57 | 544,047.48 | 56,953.95 |
| 11-000-252-xxx | 47620 | Administrative Information Technology | 94,094.00 | 0.00 | 94,094.00 | 6,299.50 | 69,294.50 | 18,500.00 |
| 11-000-261-xxx | 48580 | Required Maintenance for School Facilities | 661,005.00 | 240,541.17 | 901,546.17 | 68,350.34 | 667,306.26 | 165,889.57 |
| 11-000-262-xxx | 49340 | Custodial Services | 3,617,227.00 | 337,126.94 | 3,954,353.94 | 482,952.09 | 2,710,634.46 | 760,767.39 |
| 11-000-263-xxx | 50100 | Care and Upkeep of Grounds | 268,373.00 | 8,829.22 | 277,202.22 | 17,402.82 | 198,083.75 | 61,715.65 |
| 11-000-266-xxx | 51100 | Security | 250,530.00 | 12,565.00 | 263,095.00 | 7,476.90 | 6,670.35 | 248,947.75 |
| 11-000-270-xxx | 52460 | Student Transportation | 3,810,070.00 | 0.00 | 3,810,070.00 | 120,743.66 | 462,411.24 | 3,226,915.10 |
| 11-xxx-xxx-2xx | 71260 | Employee Benefits | 17,092,418.00 | (163,925.92) | 16,928,492.08 | 2,147,094.87 | 6,002,005.38 | 8,779,391.83 |
| | | **Total General Expense** | **53,812,683.00** | **478,148.40** | **54,290,831.40** | **3,597,496.81** | **14,122,700.81** | **36,570,633.78** |

**Capital Outlay**

| Account Number | Line | Expenditures Description | Original Budget Certified For Taxes | Budget Transfers | Appropriations | Expenditures | Encumbrances | Available Balance |
|---|---|---|---|---|---|---|---|---|
| 12-xxx-xxx-73x | 75880 | Equipment | 66,108.00 | 10,092.00 | 76,200.00 | 0.00 | 25,932.00 | 50,268.00 |
| 12-000-4xx-xxx | 76260 | Facilities Acquisition and Construction | 336,204.00 | 0.00 | 336,204.00 | 0.00 | 180,705.15 | 155,498.85 |
| | | **Total Capital Outlay** | **402,312.00** | **10,092.00** | **412,404.00** | **0.00** | **206,637.15** | **205,766.85** |
| | | **Total General Fund** | **54,214,995.00** | **488,240.40** | **54,703,235.40** | **3,597,496.81** | **14,329,337.96** | **36,776,400.63** |

Attachments are subject to change without notice

# Report of the Secretary to the Board of Education
# Stafford Township Board of Education

## Fund 10 - Schedule of Revenues
## Actual Compared with Estimate
### For the two month period ending 08/31/2026

| Account Number | Line | Account Name | Original Budget Certified For Taxes | Budget Transfers | Estimated | Actual | Unrealized |
|---|---|---|---|---|---|---|---|
| **Revenues/Sources of Funds** | | | | | | | |
| **- Local Sources** | | | | | | | |
| 10-121x | 114 | Local Tax Levy | 40,188,054.00 | 0.00 | 40,188,054.00 | 40,188,054.00 | 0.00 |
| 10-1320 | 150 | Tuition from LEAs Within State | 110,112.00 | 0.00 | 110,112.00 | 0.00 | 110,112.00 |
| 10-1xxx | 340 | Interest Earned on Capital Reserve Funds | 500.00 | 0.00 | 500.00 | 500.00 | 0.00 |
| 10-1xxx | 330 | Interest Earned on Maintenance Reserve Funds | 500.00 | 0.00 | 500.00 | 500.00 | 0.00 |
| 10-1xxx | 320 | Interest Earned on Current Expense Emergency Reserve Funds | 100.00 | 0.00 | 100.00 | 100.00 | 0.00 |
| 10-1xxx | 300 | Unrestricted Miscellaneous Revenues | 45,000.00 | 0.00 | 45,000.00 | 0.00 | 45,000.00 |
| 10-1xxx | 350 | Other Restricted Miscellaneous Revenues | 557,704.00 | 0.00 | 557,704.00 | 71,254.59 | 486,449.41 |
| **10-1xxx** | **370** | **Total Revenue from Local Sources** | **40,901,970.00** | **0.00** | **40,901,970.00** | **40,260,408.59** | **641,561.41** |
| **- State Sources** | | | | | | | |
| 10-3116 | 410 | School Choice Aid | 563,456.00 | 0.00 | 563,456.00 | 563,456.00 | 0.00 |
| 10-3121 | 420 | Categorical Transportation Aid | 1,452,985.00 | 0.00 | 1,452,985.00 | 1,452,985.00 | 0.00 |
| 10-3131 | 430 | Extraordinary Aid | 275,000.00 | 0.00 | 275,000.00 | 275,000.00 | 0.00 |
| 10-3132 | 440 | Categorical Special Education Aid | 2,878,951.00 | 0.00 | 2,878,951.00 | 2,878,951.00 | 0.00 |
| 10-3176 | 460 | Equalization Aid | 149,891.00 | 0.00 | 149,891.00 | 149,891.00 | 0.00 |
| 10-3177 | 470 | Categorical Security Aid | 438,168.00 | 0.00 | 438,168.00 | 438,168.00 | 0.00 |
| **10-3xxx** | **520** | **Total Revenue from State Sources** | **5,758,451.00** | **0.00** | **5,758,451.00** | **5,758,451.00** | **0.00** |
| **- Federal Sources** | | | | | | | |
| 10-4200 | 540 | Medicaid Reimbursement | 27,594.00 | 0.00 | 27,594.00 | 0.00 | 27,594.00 |
| **10-4xxx** | **570** | **Total Revenue from Federal Sources** | **27,594.00** | **0.00** | **27,594.00** | **0.00** | **27,594.00** |
| | - | **Total Revenues/Sources of Funds** | **46,688,015.00** | **0.00** | **46,688,015.00** | **46,018,859.59** | **669,155.41** |

Attachments are subject to change without notice

# Report of the Secretary to the Board of Education
# Stafford Township Board of Education

## Fund 10 - Statement of Appropriations
## Compared with Expenditures and Encumbrances
For the two month period ending 08/31/2026

| Account Number | Line | Account Name | Original Budget Certified For Taxes | Budget Transfers | Appropriations | Expenditures | Encumbrances | Available Balance |
|---|---|---|---|---|---|---|---|---|
| **General Fund** | | | | | | | | |
| **- General Current Expense** | | | | | | | | |
| **-- Regular Programs - Instruction** | | | | | | | | |
| **--- Regular Programs - Instruction** | | | | | | | | |
| 11-105-100-936 | 2060 | Local Contribution - Transfer to Special Revenue - Inclusion | 323,800.00 | 0.00 | 323,800.00 | 0.00 | 323,800.00 | 0.00 |
| 11-110-100-101 | 2080 | Kindergarten - Salaries of Teachers | 1,442,144.00 | 0.00 | 1,442,144.00 | 0.00 | 0.00 | 1,442,144.00 |
| 11-120-100-101 | 2100 | Grades 1-5 - Salaries of Teachers | 7,483,620.00 | (90,783.00) | 7,392,837.00 | 1,627.75 | 0.00 | 7,391,209.25 |
| 11-130-100-101 | 2120 | Grades 6-8 - Salaries of Teachers | 1,328,721.00 | 0.00 | 1,328,721.00 | 0.00 | 0.00 | 1,328,721.00 |
| **subtotal** | **subtotal** | **Total Regular Programs - Instruction** | **10,578,285.00** | **(90,783.00)** | **10,487,502.00** | **1,627.75** | **323,800.00** | **10,162,074.25** |
| **--- Regular Programs - Home Instruction** | | | | | | | | |
| 11-150-100-101 | 2500 | Salaries of Teachers | 15,287.00 | 0.00 | 15,287.00 | 0.00 | 0.00 | 15,287.00 |
| 11-150-100-320 | 2540 | Purchased Professional-Educational Services | 5,000.00 | 0.00 | 5,000.00 | 0.00 | 0.00 | 5,000.00 |
| **subtotal** | **subtotal** | **Total Regular Programs - Home Instruction** | **20,287.00** | **0.00** | **20,287.00** | **0.00** | **0.00** | **20,287.00** |
| **--- Regular Programs - Undistributed Instruction** | | | | | | | | |
| 11-190-100-340 | 3040 | Purchased Technical Services | 473,671.00 | 0.00 | 473,671.00 | 188,067.33 | 135,569.24 | 150,034.43 |
| 11-190-100-500 | 3060 | Other Purchased Services (400-500 series) | 37,267.00 | 0.00 | 37,267.00 | 0.00 | 0.00 | 37,267.00 |
| 11-190-100-610 | 3080 | General Supplies | 265,700.00 | 651.58 | 266,351.58 | 16,663.43 | 104,977.75 | 144,710.40 |
| 11-190-100-640 | 3100 | Textbooks | 153,857.00 | 0.00 | 153,857.00 | 0.00 | 1,406.64 | 152,450.36 |
| 11-190-100-800 | 3120 | Other Objects | 7,255.00 | 0.00 | 7,255.00 | 0.00 | 0.00 | 7,255.00 |
| **subtotal** | **subtotal** | **Total Regular Programs - Undistributed Instruction** | **937,750.00** | **651.58** | **938,401.58** | **204,730.76** | **241,953.63** | **491,717.19** |
| **11-1xx-100-xxxx** | **3200** | **Total Regular Programs - Instruction** | **11,536,322.00** | **(90,131.42)** | **11,446,190.58** | **206,358.51** | **565,753.63** | **10,674,078.44** |
| **-- Special Education Programs** | | | | | | | | |
| **--- Learning and/or Language Disabilities - Mild/Moderate:** | | | | | | | | |
| 11-204-100-101 | 4500 | Salaries of Teachers | 827,633.00 | 0.00 | 827,633.00 | 12,974.58 | 0.00 | 814,658.42 |
| 11-204-100-106 | 4520 | Other Salaries for Instruction | 293,228.00 | 0.00 | 293,228.00 | 4,624.84 | 0.00 | 288,603.16 |
| 11-204-100-610 | 4600 | General Supplies | 1,750.00 | 0.00 | 1,750.00 | 0.00 | 372.29 | 1,377.71 |
| 11-204-100-640 | 4620 | Textbooks | 11,400.00 | 0.00 | 11,400.00 | 0.00 | 0.00 | 11,400.00 |
| **11-204-100-xxx** | **4660** | **Total Learning and/or Language Disabilities - Mild/Moderate** | **1,134,011.00** | **0.00** | **1,134,011.00** | **17,599.42** | **372.29** | **1,116,039.29** |
| **--- Emotional Regulation Impairment:** | | | | | | | | |
| 11-209-100-101 | 6000 | Salaries of Teachers | 277,945.00 | 0.00 | 277,945.00 | 2,777.76 | 0.00 | 275,167.24 |
| 11-209-100-106 | 6020 | Other Salaries for Instruction | 252,166.00 | 0.00 | 252,166.00 | 2,320.12 | 0.00 | 249,845.88 |
| 11-209-100-610 | 6100 | General Supplies | 700.00 | 661.15 | 1,361.15 | 0.00 | 1,235.43 | 125.72 |
| 11-209-100-640 | 6120 | Textbooks | 1,000.00 | 0.00 | 1,000.00 | 0.00 | 0.00 | 1,000.00 |
| 11-209-100-800 | 6140 | Other Objects | 3,300.00 | 0.00 | 3,300.00 | 0.00 | 0.00 | 3,300.00 |
| **11-209-100-xxx** | **6160** | **Total Emotional Regulation Impairment** | **535,111.00** | **661.15** | **535,772.15** | **5,097.88** | **1,235.43** | **529,438.84** |
| **--- Multiple Disabilities:** | | | | | | | | |
| 11-212-100-101 | 6500 | Salaries of Teachers | 286,692.00 | 0.00 | 286,692.00 | 8,196.45 | 0.00 | 278,495.55 |
| 11-212-100-106 | 6520 | Other Salaries for Instruction | 670,997.00 | 0.00 | 670,997.00 | 1,683.00 | 0.00 | 669,314.00 |
| 11-212-100-610 | 6600 | General Supplies | 4,400.00 | (61.15) | 4,338.85 | 0.00 | 916.16 | 3,422.69 |
| 11-212-100-800 | 6640 | Other Objects | 3,050.00 | 0.00 | 3,050.00 | 0.00 | 0.00 | 3,050.00 |
| **11-212-100-xxx** | **6660** | **Total Multiple Disabilities** | **965,139.00** | **(61.15)** | **965,077.85** | **9,879.45** | **916.16** | **954,282.24** |
| **--- Resource Room/Resource Center:** | | | | | | | | |
| 11-213-100-101 | 7000 | Salaries of Teachers | 1,582,327.00 | 0.00 | 1,582,327.00 | 0.00 | 0.00 | 1,582,327.00 |
| 11-213-100-106 | 7020 | Other Salaries for Instruction | 432,810.00 | 0.00 | 432,810.00 | 0.00 | 0.00 | 432,810.00 |
| 11-213-100-610 | 7100 | General Supplies | 2,975.00 | (600.00) | 2,375.00 | 0.00 | 1,386.96 | 988.04 |
| 11-213-100-640 | 7120 | Textbooks | 7,300.00 | 0.00 | 7,300.00 | 0.00 | 0.00 | 7,300.00 |
| **11-213-100-xxx** | **7160** | **Total Resource Room/Resource Center** | **2,025,412.00** | **(600.00)** | **2,024,812.00** | **0.00** | **1,386.96** | **2,023,425.04** |
| **--- Autism:** | | | | | | | | |
| 11-214-100-101 | 7500 | Salaries of Teachers | 382,848.00 | 0.00 | 382,848.00 | 0.00 | 0.00 | 382,848.00 |
| 11-214-100-106 | 7520 | Other Salaries for Instruction | 311,017.00 | 0.00 | 311,017.00 | 0.00 | 0.00 | 311,017.00 |
| 11-214-100-610 | 7600 | General Supplies | 375.00 | 0.00 | 375.00 | 0.00 | 0.00 | 375.00 |

Attachments are subject to change without notice

| Account Number | Line | Account Name | Original Budget Certified For Taxes | Budget Transfers | Appropriations | Expenditures | Encumbrances | Available Balance |
|---|---|---|---|---|---|---|---|---|
| **11-214-100-xxx** | **7660** | **Total Autism** | **694,240.00** | **0.00** | **694,240.00** | **0.00** | **0.00** | **694,240.00** |
| **--- Preschool Disabilities - Full-Time:** | | | | | | | | |
| 11-216-100-101 | 8500 | Salaries of Teachers | 381,653.00 | 0.00 | 381,653.00 | 3,935.16 | 0.00 | 377,717.84 |
| 11-216-100-106 | 8520 | Other Salaries for Instruction | 441,154.00 | 0.00 | 441,154.00 | 3,717.59 | 0.00 | 437,436.41 |
| 11-216-100-600 | 8600 | General Supplies | 4,850.00 | 0.00 | 4,850.00 | 0.00 | 2,547.08 | 2,302.92 |
| **11-216-100-xxx** | **8640** | **Total Preschool Disabilities - Full-Time** | **827,657.00** | **0.00** | **827,657.00** | **7,652.75** | **2,547.08** | **817,457.17** |
| **--- Home Instruction:** | | | | | | | | |
| 11-219-100-101 | 9260 | Salaries of Teachers | 12,855.00 | 0.00 | 12,855.00 | 0.00 | 0.00 | 12,855.00 |
| 11-219-100-320 | 9300 | Purchased Professional-Educational Services | 8,750.00 | 2,600.00 | 11,350.00 | 0.00 | 2,656.00 | 8,694.00 |
| **11-219-100-xxx** | **9420** | **Total Home Instruction** | **21,605.00** | **2,600.00** | **24,205.00** | **0.00** | **2,656.00** | **21,549.00** |
| **subtotal special ed** | **10300** | **Total Special Education - Instruction** | **6,203,175.00** | **2,600.00** | **6,205,775.00** | **40,229.50** | **9,113.92** | **6,156,431.58** |
| **-- Basic Skills/Remedial - Instruction** | | | | | | | | |
| 11-230-100-101 | 11000 | Salaries of Teachers | 417,969.00 | 0.00 | 417,969.00 | 0.00 | 0.00 | 417,969.00 |
| 11-230-100-106 | 11020 | Other Salaries for Instruction | 290,783.00 | 0.00 | 290,783.00 | 0.00 | 0.00 | 290,783.00 |
| 11-230-100-610 | 11100 | General Supplies | 2,210.00 | 0.00 | 2,210.00 | 0.00 | 282.51 | 1,927.49 |
| **11-230-100-xxx** | **11160** | **Total Basic Skills/Remedial - Instruction** | **710,962.00** | **0.00** | **710,962.00** | **0.00** | **282.51** | **710,679.49** |
| **-- School-Sponsored Cocurricular/Extracurricular Activities - Instruction** | | | | | | | | |
| 11-401-100-100 | 17000 | Salaries | 146,308.00 | 0.00 | 146,308.00 | 0.00 | 0.00 | 146,308.00 |
| 11-401-100-600 | 17040 | Supplies and Materials | 500.00 | 0.00 | 500.00 | 500.00 | 0.00 | 0.00 |
| 11-401-100-800 | 17060 | Other Objects | 500.00 | 0.00 | 500.00 | 0.00 | 0.00 | 500.00 |
| **11-401-100-xxx** | **17100** | **Total School-Spon. Co/Extra-curricular Actvts. - Inst.** | **147,308.00** | **0.00** | **147,308.00** | **500.00** | **0.00** | **146,808.00** |
| **-- Total Undistributed Expenditures** | | | | | | | | |
| **--- Undistributed Expenditures - Instruction (Tuition)** | | | | | | | | |
| 11-000-100-561 | 29000 | Tuition to Other LEAs Within the State-Regular | 16,000.00 | 0.00 | 16,000.00 | 0.00 | 0.00 | 16,000.00 |
| 11-000-100-562 | 29020 | Tuition to Other LEAs Within the State-Special | 245,149.00 | 0.00 | 245,149.00 | 0.00 | 0.00 | 245,149.00 |
| 11-000-100-566 | 29100 | Tuition to Priv. Sch. for the Disabled - Within the State | 378,921.00 | 14,000.00 | 392,921.00 | 0.00 | 14,000.00 | 378,921.00 |
| 11-000-100-569 | 29160 | Tuition - Other | 16,516.00 | 0.00 | 16,516.00 | 0.00 | 0.00 | 16,516.00 |
| **11-000-100-xxx** | **29180** | **Total Undistributed Expenditures - Instruction (Tuition)** | **656,586.00** | **14,000.00** | **670,586.00** | **0.00** | **14,000.00** | **656,586.00** |
| **--- Undistributed Expenditures - Attendance and Social Work** | | | | | | | | |
| 11-000-211-100 | 29500 | Salaries | 72,956.00 | 0.00 | 72,956.00 | 6,079.66 | 66,876.26 | 0.08 |
| **11-000-211-xxx** | **29680** | **Total Attendance and Work** | **72,956.00** | **0.00** | **72,956.00** | **6,079.66** | **66,876.26** | **0.08** |
| **--- Undistributed Expenditures - Health Services** | | | | | | | | |
| 11-000-213-100 | 30500 | Salaries | 350,109.00 | 0.00 | 350,109.00 | 1,159.97 | 0.00 | 348,949.03 |
| 11-000-213-300 | 30540 | Purchased Professional and Technical Services | 49,560.00 | 0.00 | 49,560.00 | 0.00 | 2,600.00 | 46,960.00 |
| 11-000-213-500 | 30560 | Other Purchased Services (400-500 series) | 1,043.00 | 0.00 | 1,043.00 | 0.00 | 0.00 | 1,043.00 |
| 11-000-213-600 | 30580 | Supplies and Materials | 9,340.00 | 0.00 | 9,340.00 | 0.00 | 3,544.44 | 5,795.56 |
| 11-000-213-616 | 30585 | Supplies - Menstrual Products | 200.00 | 0.00 | 200.00 | 0.00 | 0.00 | 200.00 |
| **11-000-213-xxx** | **30620** | **Total Undistributed Expenditures - Health Services** | **410,252.00** | **0.00** | **410,252.00** | **1,159.97** | **6,144.44** | **402,947.59** |
| **--- Undistributed Expenditures - Speech, OT, PT and Related Services** | | | | | | | | |
| 11-000-216-100 | 40500 | Salaries | 914,415.00 | 0.00 | 914,415.00 | 13,403.52 | 0.00 | 901,011.48 |
| 11-000-216-320 | 40520 | Purchased Professional - Educational Services | 115,166.00 | (925.00) | 114,241.00 | 0.00 | 0.00 | 114,241.00 |
| 11-000-216-600 | 40540 | Supplies and Materials | 3,200.00 | 925.00 | 4,125.00 | 0.00 | 1,891.04 | 2,233.96 |
| **11-000-216-xxx** | **40580** | **Total Speech, OT, PT and Related Services** | **1,032,781.00** | **0.00** | **1,032,781.00** | **13,403.52** | **1,891.04** | **1,017,486.44** |
| **--- Undistributed Expenditures-Other Supp. Serv. Students-Extraordinary Svcs** | | | | | | | | |
| 11-000-217-100 | 41000 | Salaries | 944,433.00 | 90,783.00 | 1,035,216.00 | 12,313.32 | 0.00 | 1,022,902.68 |
| 11-000-217-320 | 41020 | Purchased Professional - Educational Services | 312,000.00 | 0.00 | 312,000.00 | 0.00 | 0.00 | 312,000.00 |
| 11-000-217-600 | 41040 | Supplies and Materials | 1,000.00 | 0.00 | 1,000.00 | 0.00 | 0.00 | 1,000.00 |
| **11-000-217-xxx** | **41080** | **Total Other Support Services Students-Extraordinary Serv.** | **1,257,433.00** | **90,783.00** | **1,348,216.00** | **12,313.32** | **0.00** | **1,335,902.68** |
| **--- Undistributed Expenditures - Guidance** | | | | | | | | |
| 11-000-218-104 | 41500 | Salaries of Other Professional Staff | 512,331.00 | 0.00 | 512,331.00 | 0.00 | 0.00 | 512,331.00 |

Attachments are subject to change without notice

| Account Number | Line | Account Name | Original Budget Certified For Taxes | Budget Transfers | Appropriations | Expenditures | Encumbrances | Available Balance |
|---|---|---|---|---|---|---|---|---|
| 11-000-218-500 | 41600 | Other Purchased Services (400-500 series) | 200.00 | 0.00 | 200.00 | 0.00 | 0.00 | 200.00 |
| 11-000-218-600 | 41620 | Supplies and Materials | 1,000.00 | 0.00 | 1,000.00 | 0.00 | 669.90 | 330.10 |
| **11-000-218-xxx** | **41660** | **Total Undistributed Expenditures - Guidance** | **513,531.00** | **0.00** | **513,531.00** | **0.00** | **669.90** | **512,861.10** |
| **--- Undistributed Expenditures - Child Study Teams** | | | | | | | | |
| 11-000-219-104 | 42000 | Salaries of Other Professional Staff | 1,218,265.00 | 79,783.00 | 1,298,048.00 | 33,524.68 | 208,996.48 | 1,055,526.84 |
| 11-000-219-105 | 42020 | Salaries of Secretarial and Clerical Assistants | 143,788.00 | 0.00 | 143,788.00 | 11,982.32 | 131,805.52 | 0.16 |
| 11-000-219-390 | 42080 | Other Purchased Prof. and Tech. Services | 86,600.00 | 0.00 | 86,600.00 | 27,355.37 | 3,608.65 | 55,635.98 |
| 11-000-219-500 | 42100 | Other Purchased Services (400-500 series) (voc and cssd only) | 4,200.00 | 0.00 | 4,200.00 | 310.56 | 1,447.44 | 2,442.00 |
| 11-000-219-600 | 42160 | Supplies and Materials | 3,075.00 | 0.00 | 3,075.00 | 582.34 | 1,379.08 | 1,113.58 |
| 11-000-219-800 | 42180 | Other Objects | 2,247.00 | 0.00 | 2,247.00 | 2,119.00 | 0.00 | 128.00 |
| **11-000-219-xxx** | **42200** | **Total Child Study Teams** | **1,458,175.00** | **79,783.00** | **1,537,958.00** | **75,874.27** | **347,237.17** | **1,114,846.56** |
| **--- Undistributed Expenditures - Improvement of Instruction Services** | | | | | | | | |
| 11-000-221-102 | 43000 | Salaries of Supervisor of Instruction | 227,913.00 | (35,993.04) | 191,919.96 | 15,993.32 | 175,926.52 | 0.12 |
| 11-000-221-104 | 43020 | Salaries of Other Professional Staff | 127,532.00 | 1,729.04 | 129,261.04 | 30,006.92 | 99,076.12 | 21,178.00 |
| 11-000-221-105 | 43040 | Salaries of Secretarial and Clerical Assist. | 111,777.00 | 0.00 | 111,777.00 | 9,148.08 | 100,628.88 | 2,000.04 |
| 11-000-221-110 | 43060 | Other Salaries | 336,774.00 | 7,557.00 | 344,331.00 | 28,194.25 | 310,136.64 | 6,000.11 |
| 11-000-221-176 | 43080 | Salaries of Facilitators, Math and Literacy Coaches | 296,350.00 | (2,000.00) | 294,350.00 | 24,522.08 | 269,742.88 | 85.04 |
| 11-000-221-390 | 43120 | Other Purchased Professional and Technical Services | 300.00 | 0.00 | 300.00 | 0.00 | 0.00 | 300.00 |
| 11-000-221-500 | 43140 | Other Purchased Services (400-500) | 4,800.00 | 0.00 | 4,800.00 | 36.96 | 1,463.04 | 3,300.00 |
| 11-000-221-600 | 43160 | Supplies and Materials | 5,410.00 | 0.00 | 5,410.00 | 375.15 | 581.19 | 4,453.66 |
| 11-000-221-800 | 43180 | Other Objects | 10,600.00 | 0.00 | 10,600.00 | 8,439.00 | 0.00 | 2,161.00 |
| **11-000-221-xxx** | **43200** | **Total Improvement of Instruction Services** | **1,121,456.00** | **(28,707.00)** | **1,092,749.00** | **95,715.76** | **957,555.27** | **39,477.97** |
| **--- Undistributed Expenditures - Educational Media Services/School Library** | | | | | | | | |
| 11-000-222-500 | 43560 | Other Purchased Services (400-500 series) | 2,500.00 | 0.00 | 2,500.00 | 0.00 | 0.00 | 2,500.00 |
| 11-000-222-600 | 43580 | Supplies and Materials | 36,750.00 | 0.00 | 36,750.00 | 0.00 | 0.00 | 36,750.00 |
| 11-000-222-800 | 43600 | Other Objects | 235.00 | 0.00 | 235.00 | 0.00 | 0.00 | 235.00 |
| **11-000-222-xxx** | **43620** | **Total Educational Media Services/School Library** | **39,485.00** | **0.00** | **39,485.00** | **0.00** | **0.00** | **39,485.00** |
| **--- Undistributed Expenditures - Instructional Staff Training Services** | | | | | | | | |
| 11-000-223-320 | 44080 | Purchased Professional Educational Servic | 53,690.00 | 0.00 | 53,690.00 | 3,790.00 | 0.00 | 49,900.00 |
| 11-000-223-390 | 44100 | Other Purchased Prof. and Tech. Services | 3,450.00 | 0.00 | 3,450.00 | 0.00 | 0.00 | 3,450.00 |
| 11-000-223-500 | 44120 | Other Purchased Services (400-500 series) | 6,700.00 | 0.00 | 6,700.00 | 0.00 | 0.00 | 6,700.00 |
| 11-000-223-600 | 44140 | Supplies and Materials | 700.00 | 0.00 | 700.00 | 0.00 | 0.00 | 700.00 |
| **11-000-223-xxx** | **44180** | **Total Instructional Staff Training Services** | **64,540.00** | **0.00** | **64,540.00** | **3,790.00** | **0.00** | **60,750.00** |
| **--- Undistributed Expenditures - Support Services - General Administration** | | | | | | | | |
| 11-000-230-100 | 45000 | Salaries | 539,574.00 | 0.00 | 539,574.00 | 43,464.49 | 478,109.28 | 18,000.23 |
| 11-000-230-331 | 45040 | Legal Services | 87,400.00 | (20,000.00) | 67,400.00 | 133.22 | 4,049.98 | 63,216.80 |
| 11-000-230-332 | 45060 | Audit Fees | 40,000.00 | 0.00 | 40,000.00 | 0.00 | 36,000.00 | 4,000.00 |
| 11-000-230-334 | 45080 | Architectural/Engineering Services | 20,000.00 | 0.00 | 20,000.00 | 0.00 | 0.00 | 20,000.00 |
| 11-000-230-339 | 45100 | Other Purchased Professional Services | 33,100.00 | 0.00 | 33,100.00 | 0.00 | 0.00 | 33,100.00 |
| 11-000-230-340 | 45120 | Purchased Technical Services | 24,720.00 | 0.00 | 24,720.00 | 4,105.00 | 0.00 | 20,615.00 |
| 11-000-230-530 | 45140 | Communications / Telephone | 80,800.00 | 25,443.41 | 106,243.41 | 4,960.57 | 84,792.84 | 16,490.00 |
| 11-000-230-590 | 45180 | Misc Purchased Services (400-500 series, O/T 530 and 585) | 174,260.00 | 0.00 | 174,260.00 | 68,500.60 | 67,313.20 | 38,446.20 |
| 11-000-230-610 | 45200 | General Supplies | 18,560.00 | 0.00 | 18,560.00 | 1,157.20 | 2,374.61 | 15,028.19 |
| 11-000-230-820 | 45240 | Judgments Against The School District | 0.00 | 20,000.00 | 20,000.00 | 0.00 | 0.00 | 20,000.00 |
| 11-000-230-890 | 45260 | Miscellaneous Expenditures | 16,354.00 | 0.00 | 16,354.00 | 6,614.00 | 750.00 | 8,990.00 |
| 11-000-230-895 | 45280 | BOE Membership Dues and Fees | 19,975.00 | 0.00 | 19,975.00 | 17,392.73 | 0.00 | 2,582.27 |

Attachments are subject to change without notice

| Account Number | Line | Account Name | Original Budget Certified For Taxes | Budget Transfers | Appropriations | Expenditures | Encumbrances | Available Balance |
|---|---|---|---|---|---|---|---|---|
| **11-000-230-xxx** | **45300** | **Total Support Services - General Administration** | **1,054,743.00** | **25,443.41** | **1,080,186.41** | **146,327.81** | **673,389.91** | **260,468.69** |
| **--- Undistributed Expenditures - Support Services - School Administration** | | | | | | | | |
| 11-000-240-103 | 46000 | Salaries of Principals/Assistant Principals | 587,355.00 | (51,076.00) | 536,279.00 | 44,189.93 | 486,089.34 | 5,999.73 |
| 11-000-240-105 | 46040 | Salaries of Secretarial and Clerical Assistants | 468,897.00 | 0.00 | 468,897.00 | 39,082.42 | 326,034.97 | 103,779.61 |
| 11-000-240-300 | 46080 | Purchased Professional and Technical Services | 3,800.00 | 0.00 | 3,800.00 | 0.00 | 0.00 | 3,800.00 |
| 11-000-240-500 | 46100 | Other Purchased Services (400-500 series) | 810.00 | 0.00 | 810.00 | 0.00 | 0.00 | 810.00 |
| 11-000-240-600 | 46120 | Supplies and Materials | 16,065.00 | 299.00 | 16,364.00 | 899.39 | 7,209.03 | 8,255.58 |
| 11-000-240-800 | 46140 | Other Objects | 6,670.00 | 18.00 | 6,688.00 | 6,590.00 | 0.00 | 98.00 |
| **11-000-240-xxx** | **46160** | **Total Support Services - School Administration** | **1,083,597.00** | **(50,759.00)** | **1,032,838.00** | **90,761.74** | **819,333.34** | **122,742.92** |
| **--- Undistributed Expenditures - Central Services** | | | | | | | | |
| 11-000-251-100 | 47000 | Salaries | 602,086.00 | 0.00 | 602,086.00 | 48,847.74 | 537,324.92 | 15,913.34 |
| 11-000-251-330 | 47020 | Purchased Professional Services | 22,670.00 | 0.00 | 22,670.00 | 779.00 | 0.00 | 21,891.00 |
| 11-000-251-340 | 47040 | Purchased Technical Services | 15,000.00 | 0.00 | 15,000.00 | 1,593.75 | 4,906.25 | 8,500.00 |
| 11-000-251-592 | 47060 | Miscellaneous Purchased Services (400-500 series) | 8,983.00 | (27.00) | 8,956.00 | 1,170.00 | 0.00 | 7,786.00 |
| 11-000-251-600 | 47100 | Supplies and Materials | 4,425.00 | 27.00 | 4,452.00 | 723.08 | 1,466.31 | 2,262.61 |
| 11-000-251-890 | 47180 | Miscellaneous Expenditures | 2,500.00 | 0.00 | 2,500.00 | 1,549.00 | 350.00 | 601.00 |
| **11-000-251-xxx** | **47200** | **Total Central Services** | **655,664.00** | **0.00** | **655,664.00** | **54,662.57** | **544,047.48** | **56,953.95** |
| **--- Undistributed Expenditures - Administrative Information Technology** | | | | | | | | |
| 11-000-252-100 | 47500 | Salaries | 75,594.00 | 0.00 | 75,594.00 | 6,299.50 | 69,294.50 | 0.00 |
| 11-000-252-340 | 47540 | Purchased Technical Services | 14,000.00 | 0.00 | 14,000.00 | 0.00 | 0.00 | 14,000.00 |
| 11-000-252-600 | 47580 | Supplies and Materials | 4,500.00 | 0.00 | 4,500.00 | 0.00 | 0.00 | 4,500.00 |
| **11-000-252-xxx** | **47620** | **Total Administrative Information Technology** | **94,094.00** | **0.00** | **94,094.00** | **6,299.50** | **69,294.50** | **18,500.00** |
| **--- Operation and Maintenance of Plant Services** | | | | | | | | |
| **---- Undistributed Expenditures - Required Maintenance for School Facilities** | | | | | | | | |
| 11-000-261-100 | 48500 | Salaries | 374,438.00 | 0.00 | 374,438.00 | 27,536.51 | 302,901.50 | 43,999.99 |
| 11-000-261-420 | 48520 | Cleaning, Repair, and Maintenance Services | 240,067.00 | 240,541.17 | 480,608.17 | 39,921.89 | 351,220.70 | 89,465.58 |
| 11-000-261-610 | 48540 | General Supplies | 46,500.00 | 0.00 | 46,500.00 | 891.94 | 13,184.06 | 32,424.00 |
| **11-000-261-xxx** | **48580** | **Total Required Maintenance for School Facilities** | **660,005.00** | **240,541.17** | **901,546.17** | **68,350.34** | **667,306.26** | **165,889.57** |
| **---- Undistributed Expenditures - Custodial Services** | | | | | | | | |
| 11-000-262-100 | 49000 | Salaries | 1,193,334.00 | 0.00 | 1,193,334.00 | 90,091.80 | 991,009.58 | 112,232.62 |
| 11-000-262-107 | 49020 | Salaries of Non-Instructional Aides | 352,153.00 | 0.00 | 352,153.00 | 0.00 | 0.00 | 352,153.00 |
| 11-000-262-300 | 49040 | Purchased Professional and Technical Services | 12,250.00 | 449.30 | 12,699.30 | 2,317.50 | 7,190.90 | 3,190.90 |
| 11-000-262-420 | 49060 | Cleaning, Repair, and Maintenance Services | 208,826.00 | 0.00 | 208,826.00 | 36,200.00 | 102,669.00 | 69,957.00 |
| 11-000-262-490 | 49120 | Other Purchased Property Services | 95,000.00 | 0.00 | 95,000.00 | 0.00 | 95,000.00 | 0.00 |
| 11-000-262-520 | 49140 | Insurance | 266,987.00 | (12,565.00) | 254,422.00 | 104,571.00 | 104,569.00 | 45,282.00 |
| 11-000-262-590 | 49160 | Miscellaneous Purchased Services | 43,914.00 | (449.30) | 43,464.70 | 20,041.12 | 14,981.16 | 8,442.42 |
| 11-000-262-610 | 49180 | General Supplies | 123,321.00 | 0.00 | 123,321.00 | 261.71 | 115.38 | 122,943.91 |
| 11-000-262-621 | 49200 | Energy (Natural Gas) | 322,112.00 | 84,986.29 | 407,098.29 | 6,527.27 | 400,571.02 | 0.00 |
| 11-000-262-622 | 49220 | Energy (Electricity) | 622,800.00 | 264,705.65 | 887,505.65 | 59,493.33 | 828,012.32 | 0.00 |
| 11-000-262-626 | 49260 | Energy (Gasoline) | 7,000.00 | 0.00 | 7,000.00 | 0.00 | 0.00 | 7,000.00 |
| 11-000-262-800 | 49280 | Other Objects | 15,690.00 | 0.00 | 15,690.00 | 1,050.00 | 4,927.62 | 9,712.38 |
| 11-000-262-837 | 49300 | Interest - Energy Savings Improvement Program Bonds | 31,228.00 | 0.00 | 31,228.00 | 16,489.97 | 14,736.15 | 1.88 |
| 11-000-262-917 | 49320 | Principal - Energy Savings Improvement Program Bonds | 322,612.00 | 0.00 | 322,612.00 | 145,908.39 | 146,852.33 | 29,851.28 |
| **11-000-262-xxx** | **49340** | **Total Custodial Services** | **3,617,227.00** | **337,126.94** | **3,954,353.94** | **482,952.09** | **2,710,634.46** | **760,767.39** |
| **---- Undistributed Expenditures - Care and Upkeep of Grounds** | | | | | | | | |
| 11-000-263-100 | 50000 | Salaries | 203,728.00 | 0.00 | 203,728.00 | 16,560.66 | 182,167.26 | 5,000.08 |
| 11-000-263-420 | 50040 | Cleaning, Repair, and Maintenance Services | 19,170.00 | 7,961.50 | 27,131.50 | 48.95 | 12,116.06 | 14,966.49 |
| 11-000-263-610 | 50060 | General Supplies | 45,425.00 | 867.72 | 46,292.72 | 793.21 | 3,800.43 | 41,699.08 |
| 11-000-263-800 | 50080 | Other Objects | 50.00 | 0.00 | 50.00 | 0.00 | 0.00 | 50.00 |

Attachments are subject to change without notice

| Account Number | Line | Account Name | Original Budget Certified For Taxes | Budget Transfers | Appropriations | Expenditures | Encumbrances | Available Balance |
|---|---|---|---|---|---|---|---|---|
| **11-000-263-xxx** | **50100** | **Total Care And Upkeep Of Grounds** | **268,373.00** | **8,829.22** | **277,202.22** | **17,402.82** | **198,083.75** | **61,715.65** |
| **---- Undistributed Expenditures - Security** | | | | | | | | |
| 11-000-266-100 | 51000 | Salaries | 225,941.00 | 0.00 | 225,941.00 | 1,193.40 | 0.00 | 224,747.60 |
| 11-000-266-300 | 51020 | Purchased Professional and Technical Services | 0.00 | 12,565.00 | 12,565.00 | 6,283.50 | 6,281.50 | 0.00 |
| 11-000-266-610 | 51060 | General Supplies | 22,589.00 | 0.00 | 22,589.00 | 0.00 | 388.85 | 22,200.15 |
| 11-000-266-800 | 51080 | Other Objects | 2,000.00 | 0.00 | 2,000.00 | 0.00 | 0.00 | 2,000.00 |
| **11-000-266-xxx** | **51100** | **Total Security** | **250,530.00** | **12,565.00** | **263,095.00** | **7,476.90** | **6,670.35** | **248,947.75** |
| **subtotal of 11-000-26x-xxx** | **51120** | **Total Operation and Maintenance of Plant Services** | **4,797,135.00** | **599,062.33** | **5,396,197.33** | **576,182.15** | **3,582,694.82** | **1,237,320.36** |
| **--- Undistributed Expenditures - Student Transportation Services** | | | | | | | | |
| 11-000-270-107 | 52000 | Salaries of Non-Instructional Aides | 704,530.00 | 0.00 | 704,530.00 | 4,965.39 | 0.00 | 699,564.61 |
| 11-000-270-160 | 52020 | Salaries for Pupil Trans. (Between Home and Sch)-Regular | 1,597,954.00 | 0.00 | 1,597,954.00 | 31,296.01 | 340,252.88 | 1,226,405.11 |
| 11-000-270-161 | 52040 | Salaries for Pupil Trans. (Bet Home and Sch)-Special Ed. | 35,422.00 | 0.00 | 35,422.00 | 8,905.20 | 0.00 | 26,516.80 |
| 11-000-270-162 | 52060 | Salaries for Pupil Trans. (Other than Between Home and Sch) | 9,700.00 | 0.00 | 9,700.00 | 0.00 | 0.00 | 9,700.00 |
| 11-000-270-390 | 52120 | Other Purchased Professional and Technical Services | 34,652.00 | 0.00 | 34,652.00 | 10,930.28 | 440.00 | 23,281.72 |
| 11-000-270-420 | 52140 | Cleaning, Repair, and Maintenance Services | 18,860.00 | 0.00 | 18,860.00 | 0.00 | 6,424.19 | 12,435.81 |
| 11-000-270-443 | 52180 | Lease Purchase Payments - School Buses | 200,000.00 | 0.00 | 200,000.00 | 0.00 | 67,454.60 | 132,545.40 |
| 11-000-270-503 | 52200 | Contracted Services-Aid in Lieu Pymts- Non-Public School | 81,213.00 | 0.00 | 81,213.00 | 0.00 | 0.00 | 81,213.00 |
| 11-000-270-505 | 52240 | Contracted Services-Aid in Lieu Pymts- Choice School | 61,200.00 | 0.00 | 61,200.00 | 0.00 | 0.00 | 61,200.00 |
| 11-000-270-511 | 52260 | Contracted Services (Between Home and Sch)-Vendors | 45,500.00 | 0.00 | 45,500.00 | 0.00 | 0.00 | 45,500.00 |
| 11-000-270-515 | 52340 | Contracted Services (Special Ed Students)-Joint Agreements | 54,000.00 | 0.00 | 54,000.00 | 0.00 | 0.00 | 54,000.00 |
| 11-000-270-517 | 52360 | Contracted Services (Regular Students)-ESCs and CTSAs | 80,000.00 | 0.00 | 80,000.00 | 0.00 | 0.00 | 80,000.00 |
| 11-000-270-518 | 52380 | Contracted Services (Special Ed. Students)-ESCs and CTSAs | 426,285.00 | 0.00 | 426,285.00 | 0.00 | 0.00 | 426,285.00 |
| 11-000-270-593 | 52400 | Miscellaneous Purchased Services - Transportation | 55,257.00 | 0.00 | 55,257.00 | 24,557.19 | 25,684.81 | 5,015.00 |
| 11-000-270-610 | 52420 | General Supplies | 10,700.00 | 0.00 | 10,700.00 | 805.38 | 3,233.59 | 6,661.03 |
| 11-000-270-615 | 52440 | Transportation Supplies | 388,877.00 | 0.00 | 388,877.00 | 36,284.21 | 18,465.62 | 334,127.17 |
| 11-000-270-800 | 52460 | Other Objects | 5,920.00 | 0.00 | 5,920.00 | 3,000.00 | 455.55 | 2,464.45 |
| **11-000-270-xxx** | **52480** | **Total Student Transportation Services** | **3,810,070.00** | **0.00** | **3,810,070.00** | **120,743.66** | **462,411.24** | **3,226,915.10** |
| **--- Employee Benefits** | | | | | | | | |
| **---- Unallocated Benefits** | | | | | | | | |
| 11-000-291-220 | 71020 | Social Security Contributions | 1,102,032.00 | 0.00 | 1,102,032.00 | 37,745.79 | 0.00 | 1,064,286.21 |
| 11-000-291-241 | 71060 | Other Retirement Contributions - PERS | 1,225,340.00 | 0.00 | 1,225,340.00 | 0.00 | 1,225,340.00 | 0.00 |
| 11-000-291-260 | 71160 | Workers Compensation | 380,815.00 | 0.00 | 380,815.00 | 180,011.00 | 180,009.00 | 20,795.00 |
| 11-000-291-270 | 71180 | Health Benefits | 13,882,200.00 | (235,925.92) | 13,646,274.08 | 1,926,490.57 | 4,341,922.73 | 7,377,860.78 |
| 11-000-291-280 | 71200 | Tuition Reimbursement | 18,000.00 | 0.00 | 18,000.00 | 0.00 | 0.00 | 18,000.00 |
| 11-000-291-290 | 71220 | Other Employee Benefits | 314,750.00 | 72,000.00 | 386,750.00 | 2,847.51 | 254,733.65 | 129,168.84 |
| 11-000-291-299 | 71227 | Unused Sick Payments to Terminated / Retired Staff | 169,281.00 | 0.00 | 169,281.00 | 0.00 | 0.00 | 169,281.00 |
| **total unallocated benefits** | **71240** | **11-000-291-2xx** | **17,092,418.00** | **(163,925.92)** | **16,928,492.08** | **2,147,094.87** | **6,002,005.38** | **8,779,391.83** |
| **11-xxx-xxx-2xx** | **71260** | **Total Employee Benefits** | **17,092,418.00** | **(163,925.92)** | **16,928,492.08** | **2,147,094.87** | **6,002,005.38** | **8,779,391.83** |
| | **72140** | **Total Undistributed Expenditures** | **35,214,916.00** | **565,679.82** | **35,780,595.82** | **3,350,408.80** | **13,547,550.75** | **18,882,636.27** |
| | **72260** | **Total General Expense** | **53,812,683.00** | **478,148.40** | **54,290,831.40** | **3,597,496.81** | **14,122,700.81** | **36,570,633.78** |
| **- Capital Outlay** | | | | | | | | |
| **-- Equipment** | | | | | | | | |
| **--- Instructional Equipment - Regular Education:** | | | | | | | | |
| 12-110-100-730 | 73020 | Kindergarten | 7,833.00 | 0.00 | 7,833.00 | 0.00 | 0.00 | 7,833.00 |
| 12-120-100-730 | 73040 | Grades 1-5 | 10,167.00 | 0.00 | 10,167.00 | 0.00 | 0.00 | 10,167.00 |
| 12-130-100-730 | 73060 | Grades 6-8 | 2,500.00 | 0.00 | 2,500.00 | 0.00 | 0.00 | 2,500.00 |
| | - | **Total Instructional Equipment - Regular Education** | **20,500.00** | **0.00** | **20,500.00** | **0.00** | **0.00** | **20,500.00** |

Attachments are subject to change without notice

| Account Number | Line | Account Name | Original Budget Certified For Taxes | Budget Transfers | Appropriations | Expenditures | Encumbrances | Available Balance |
|---|---|---|---|---|---|---|---|---|
| **--- Equipment - Undistributed:** | | | | | | | | |
| 12-000-219-730 | 75580 | Undist. Expend.-Support Services -Child Study Teams | 2,500.00 | 0.00 | 2,500.00 | 0.00 | 0.00 | 2,500.00 |
| 12-000-261-730 | 75700 | Undist. Expend.- Required Maintenance for School Facilities | 23,000.00 | 0.00 | 23,000.00 | 0.00 | 0.00 | 23,000.00 |
| 12-000-270-732 | 75780 | Undist. Expend.-Student Transportation-Non-Instructional Equip. | 20,108.00 | 0.00 | 20,108.00 | 0.00 | 15,840.00 | 4,268.00 |
| 12-000-300-730 | 75840 | Undistributed Expenditures - Non-Instructional Services | 0.00 | 10,092.00 | 10,092.00 | 0.00 | 10,092.00 | 0.00 |
| | - | **Total Equipment - Undistributed** | **45,608.00** | **10,092.00** | **55,700.00** | **0.00** | **25,932.00** | **29,768.00** |
| **12-xxx-xxx-73x** | **75880** | **Total Equipment** | **66,108.00** | **10,092.00** | **76,200.00** | **0.00** | **25,932.00** | **50,268.00** |
| **-- Facilities Acquisition and Construction Services** | | | | | | | | |
| 12-000-400-390 | 76060 | Other Purchased Professional and Technical Services | 37,000.00 | 0.00 | 37,000.00 | 0.00 | 0.00 | 37,000.00 |
| 12-000-400-450 | 76080 | Construction Services | 240,000.00 | 0.00 | 240,000.00 | 0.00 | 180,705.15 | 59,294.85 |
| 12-000-400-896 | 76210 | Assessment for Debt Service on SDA Funding | 59,204.00 | 0.00 | 59,204.00 | 0.00 | 0.00 | 59,204.00 |
| **12-000-400-xxx** | **76260** | **Total Facilities Acquisition and Construction Services** | **336,204.00** | **0.00** | **336,204.00** | **0.00** | **180,705.15** | **155,498.85** |
| **12-xxx-xxx-xxx** | **76400** | **Total Capital Outlay** | **402,312.00** | **10,092.00** | **412,404.00** | **0.00** | **206,637.15** | **205,766.85** |
| | **84060** | **Total General Fund** | **54,214,995.00** | **488,240.40** | **54,703,235.40** | **3,597,496.81** | **14,329,337.96** | **36,776,400.63** |

Attachments are subject to change without notice

# Report of the Secretary to the Board of Education
# Stafford Township Board of Education

## Fund 20 - Interim Balance Sheet
For the two month period ending 08/31/2026

### Assets and Resources

**Assets:**

| Account Number | Account Name | Subtotal Balance | Balance |
|---|---|---|---|
| 101 | Cash in Bank | | (104,691.06) |
| | Accounts Receivable: | | |
| 141 | Intergovernmental - StateAccounts Receivable: | 1,872.00 | |
| 142 | Intergovernmental - FederalAccounts Receivable: | 184,609.00 | |
| xxx | Other Current AssetsAccounts Receivable: | 0.00 | 186,481.00 |
| | Loans Receivable: | | |
| | | | 81,789.94 |

**Resources:**

| Account Number | Account Name | Subtotal Balance | Balance |
|---|---|---|---|
| 301 | Estimated Revenues | 7,762,698.19 | |
| 302 | Less Revenues | 43,046.45 | 7,719,651.74 |
| | | | 7,719,651.74 |
| | | Total Assets and Resources: | 7,801,441.68 |

### Liabilities and Fund Equity

**Liabilities:**

| Account Number | Account Name | Subtotal Balance | Balance |
|---|---|---|---|
| 411 | Intergovernmental Accounts Payable - State | | 12.06 |
| 421 | Accounts Payable | | 70,136.38 |
| 481 | Deferred Revenues | | 210,934.43 |
| | | | 281,082.87 |

**Fund Balance:**

| Account Number | Account Name | Subtotal Balance | Subtotal Balance 2 | Subtotal Balance 3 | Balance |
|---|---|---|---|---|---|
| | Appropriated: | | | | |
| 753 | Reserve for Encumbrances - Current Year | | 2,371,023.11 | | |
| 754 | Reserve for Encumbrances - Prior Year | | 385.03 | | |
| 754+753 | Reserve for Encumbrances - Current + Prior | | | 2,371,408.14 | |
| | Reserve Fund Balance: | | | | |
| 601 | Appropriations | | 7,763,083.22 | | |
| 602 | Less: Expenditures | 242,724.41 | | | |
| 603 | Encumbrances | 2,371,408.14 | (2,614,132.55) | 5,148,950.67 | |
| | | | | | 7,520,358.81 |
| | | | | Total Liabilities and Fund Equity: | 7,801,441.68 |

Attachments are subject to change without notice

## Report of the Secretary to the Board of Education
## Stafford Township Board of Education

### Fund 20 - Recapitulation of Budgeted Fund Balance

| | Budgeted | Actual | Variance |
|---|---|---|---|
| Appropriations | 7,763,083.22 | 2,614,132.55 | 5,148,950.67 |
| Revenues | (7,762,698.19) | (43,046.45) | (7,719,651.74) |
| | **385.03** | **2,571,086.10** | **(2,570,701.07)** |

Attachments are subject to change without notice

# Report of the Secretary to the Board of Education
# Stafford Township Board of Education

## Fund 20 - Interim Statements Comparing Budgeted Revenue with Actual to Date and Appropriations with Expenditures and Encumbrances to Date
For the two month period ending 08/31/2026

### Revenues/Sources of Funds

| Account Number | Line | Revenues/Sources of Funds | Original Budget Certified for Taxes | Budget Transfers | Budgeted / Estimated | Actual to Date | Note | Unrealized Balance |
|---|---|---|---|---|---|---|---|---|
| 20-1xxx | 745 | From Local Sources | 0.00 | 6,899.74 | 6,899.74 | 6,901.98 | Over | (2.24) |
| 20-3xxx | 770 | From State Sources | 7,468,709.00 | 99,657.47 | 7,568,366.47 | 36,144.47 | Under | 7,532,223.00 |
| 20-4xxx | 830 | From Federal Sources | 0.00 | 187,431.98 | 187,431.98 | 0.00 | Under | 187,431.98 |
| | - | **Total Revenues/Sources Of Funds** | **7,468,709.00** | **293,989.19** | **7,762,698.19** | **43,046.45** | **Under** | **7,719,651.74** |

### Special Revenue Fund

**Local Projects**

| Account Number | Line | Expenditures Description | Original Budget Certified For Taxes | Budget Transfers | Appropriations | Expenditures | Encumbrances | Available Balance |
|---|---|---|---|---|---|---|---|---|
| 20-xxx-xxx-xxx | 84100 | Local Projects | 0.00 | 6,899.74 | 6,899.74 | 0.00 | 0.00 | 6,899.74 |
| | | **Total Local Projects** | **0.00** | **6,899.74** | **6,899.74** | **0.00** | **0.00** | **6,899.74** |

**State Projects**

| Account Number | Line | Expenditures Description | Original Budget Certified For Taxes | Budget Transfers | Appropriations | Expenditures | Encumbrances | Available Balance |
|---|---|---|---|---|---|---|---|---|
| 20-218-100-xxx | 87100 | Total Preschool Education Aid | 7,468,709.00 | 0.00 | 7,468,709.00 | 242,724.41 | 2,293,973.41 | 4,932,011.18 |
| 20-xxx-xxx-xxx | 88190 | Total Other State Projects | 0.00 | 99,657.47 | 99,657.47 | 0.00 | 11,159.97 | 88,497.50 |
| **20-xxx-xxx-xxx** | | **Total State Projects** | **7,468,709.00** | **99,657.47** | **7,568,366.47** | **242,724.41** | **2,305,133.38** | **5,020,508.68** |

**Federal Projects**

| Account Number | Line | Expenditures Description | Original Budget Certified For Taxes | Budget Transfers | Appropriations | Expenditures | Encumbrances | Available Balance |
|---|---|---|---|---|---|---|---|---|
| 20-xxx-xxx-xxx | 88500 | Title I | 0.00 | 91,259.83 | 91,259.83 | 0.00 | 45,268.09 | 45,991.74 |
| 20-xxx-xxx-xxx | 88520 | Title II | 0.00 | 60,144.64 | 60,144.64 | 0.00 | 13,571.64 | 46,573.00 |
| 20-xxx-xxx-xxx | 88540 | Title III | 0.00 | 18,206.03 | 18,206.03 | 0.00 | 7,435.03 | 10,771.00 |
| 20-xxx-xxx-xxx | 88560 | Title IV | 0.00 | 10,128.46 | 10,128.46 | 0.00 | 0.00 | 10,128.46 |
| 20-xxx-xxx-xxx | 88620 | I.D.E.A. Part B (Handicapped) | 0.00 | 4,648.10 | 4,648.10 | 0.00 | 0.00 | 4,648.10 |
| 20-xxx-xxx-xxx | 88640 | Vocational Education | 0.00 | 3,429.95 | 3,429.95 | 0.00 | 0.00 | 3,429.95 |
| **20-xxx-xxx-xxx** | | **Total Federal Projects** | **0.00** | **187,817.01** | **187,817.01** | **0.00** | **66,274.76** | **121,542.25** |
| | | **Total Special Revenue Fund** | **7,468,709.00** | **294,374.22** | **7,763,083.22** | **242,724.41** | **2,371,408.14** | **5,148,950.67** |

Attachments are subject to change without notice

# Report of the Secretary to the Board of Education
# Stafford Township Board of Education

## Fund 20 - Schedule of Revenues
## Actual Compared with Estimate
**For the two month period ending 08/31/2026**

| Account Number | Line | Account Name | Original Budget Certified For Taxes | Budget Transfers | Estimated | Actual | Unrealized |
|---|---|---|---|---|---|---|---|
| **Revenues/Sources of Funds** | | | | | | | |
| **- Local Sources** | | | | | | | |
| 20-1xxx | 740 | Other Revenue from Local Sources | 0.00 | 6,899.74 | 6,899.74 | 6,901.98 | (2.24) |
| **20-1xxx** | **745** | **Total Local Sources** | **0.00** | **6,899.74** | **6,899.74** | **6,901.98** | **(2.24)** |
| **- State Sources** | | | | | | | |
| 20-3218 | 760 | Preschool Education Aid | 7,468,709.00 | 0.00 | 7,468,709.00 | 0.00 | 7,468,709.00 |
| 20-3257 | 761 | SDA Emergent Needs and Capital Maintenance in School Districts | 0.00 | 21,077.47 | 21,077.47 | 21,077.47 | 0.00 |
| 20-32xx | 765 | Other Restricted Entitlements | 0.00 | 78,580.00 | 78,580.00 | 15,067.00 | 63,513.00 |
| **20-3xxx** | **770** | **Total from State Sources** | **7,468,709.00** | **99,657.47** | **7,568,366.47** | **36,144.47** | **7,532,222.00** |
| **- Federal Sources** | | | | | | | |
| 20-4411-4414 | 775 | Title I | 0.00 | 113,243.83 | 113,243.83 | 0.00 | 113,243.83 |
| 20-4451-4455 | 780 | Title II | 0.00 | 38,160.64 | 38,160.64 | 0.00 | 38,160.64 |
| 20-4491-4494 | 785 | Title III | 0.00 | 17,821.00 | 17,821.00 | 0.00 | 17,821.00 |
| 20-4471-4474 | 790 | Title IV | 0.00 | 10,128.46 | 10,128.46 | 0.00 | 10,128.46 |
| 20-4420-4429 | 805 | I.D.E.A. Part B (Handicapped) | 0.00 | 8,078.05 | 8,078.05 | 0.00 | 8,078.05 |
| **20-4xxx** | **830** | **Total from Federal Sources** | **0.00** | **187,431.98** | **187,431.98** | **0.00** | **187,431.98** |
| | **-** | **Total Revenues/Sources of Funds** | **7,468,709.00** | **293,989.19** | **7,762,698.19** | **43,046.45** | **7,719,651.74** |

Attachments are subject to change without notice

# Report of the Secretary to the Board of Education
# Stafford Township Board of Education

## Fund 20 - Statement of Appropriations
## Compared with Expenditures and Encumbrances
### For the two month period ending 08/31/2026

| Account Number | Line | Account Name | Original Budget Certified For Taxes | Budget Transfers | Appropriations | Expenditures | Encumbrances | Available Balance |
|---|---|---|---|---|---|---|---|---|
| **Special Revenue Fund** | | | | | | | | |
| **- Local Projects** | | | | | | | | |
| **-- Local Projects** | | | | | | | | |
| 20-xxx-xxx-xxx | 84100 | Local Projects | 0.00 | 6,899.74 | 6,899.74 | 0.00 | 0.00 | 6,899.74 |
| **20-xxx-xxx-xxx** | **84100** | | **0.00** | **6,899.74** | **6,899.74** | **0.00** | **0.00** | **6,899.74** |
| | **-** | **Total Local Projects** | **0.00** | **6,899.74** | **6,899.74** | **0.00** | **0.00** | **6,899.74** |
| **- State Projects** | | | | | | | | |
| **-- Preschool Education Aid** | | | | | | | | |
| **--- PEA Instruction** | | | | | | | | |
| 20-218-100-101 | 85000 | Salaries of Teachers | 1,787,884.00 | 0.00 | 1,787,884.00 | 0.00 | 0.00 | 1,787,884.00 |
| 20-218-100-106 | 85020 | Other Salaries for Instruction | 903,828.00 | 0.00 | 903,828.00 | 0.00 | 0.00 | 903,828.00 |
| 20-218-100-500 | 85040 | Other Purchased Services (400-500 series) | 12,767.00 | 0.00 | 12,767.00 | 0.00 | 0.00 | 12,767.00 |
| 20-218-100-600 | 85080 | General Supplies | 50,000.00 | 0.00 | 50,000.00 | 11,605.00 | 16,008.15 | 22,386.85 |
| 20-218-100-800 | 85100 | Other Objects | 3,000.00 | 0.00 | 3,000.00 | 0.00 | 0.00 | 3,000.00 |
| **20-218-100-xxx** | **85120** | **Total Preschool Education Aid** | **2,757,479.00** | **0.00** | **2,757,479.00** | **11,605.00** | **16,008.15** | **2,729,865.85** |
| **--- PEA - Support Services** | | | | | | | | |
| 20-218-200-102 | 86000 | Salaries of Supervisors of Instruction | 70,911.00 | 0.12 | 70,911.12 | 5,909.26 | 65,001.86 | 0.00 |
| 20-218-200-103 | 86020 | Salaries of Program Directors | 136,654.00 | (0.12) | 136,653.88 | 11,387.83 | 125,266.02 | 0.03 |
| 20-218-200-104 | 86040 | Salaries of Other Professional Staff | 280,332.00 | 0.00 | 280,332.00 | 0.00 | 0.00 | 280,332.00 |
| 20-218-200-105 | 86060 | Salaries of Secretarial and Clerical Assistants | 106,267.00 | 0.00 | 106,267.00 | 8,855.58 | 97,411.38 | 0.04 |
| 20-218-200-110 | 86080 | Other Salaries | 438,328.00 | 0.00 | 438,328.00 | 11,773.22 | 129,505.42 | 297,049.36 |
| 20-218-200-173 | 86100 | Salaries of Community Parent Involvement Specialist | 61,783.00 | 0.00 | 61,783.00 | 0.00 | 0.00 | 61,783.00 |
| 20-218-200-176 | 86120 | Salaries of Master Teachers | 281,324.00 | 0.00 | 281,324.00 | 0.00 | 0.00 | 281,324.00 |
| 20-218-200-200 | 86140 | Personal Services - Employee Benefits | 1,202,439.00 | 0.00 | 1,202,439.00 | 0.00 | 0.00 | 1,202,439.00 |
| 20-218-200-321 | 86160 | Purchased Educational Services - Contracted Pre-K | 2,046,055.00 | 0.00 | 2,046,055.00 | 186,004.44 | 1,860,044.56 | 6.00 |
| 20-218-200-329 | 86200 | Other Purchased Educational Services | 7,000.00 | 0.00 | 7,000.00 | 1,820.00 | 0.00 | 5,180.00 |
| 20-218-200-330 | 86220 | Other Purchased Professional Services | 6,000.00 | 0.00 | 6,000.00 | 5,369.08 | 0.00 | 630.92 |
| 20-218-200-420 | 86240 | Cleaning, Repair and Maintenance Services | 61,420.00 | 0.00 | 61,420.00 | 0.00 | 0.00 | 61,420.00 |
| 20-218-200-580 | 86320 | Travel | 350.00 | 0.00 | 350.00 | 0.00 | 0.00 | 350.00 |
| 20-218-200-590 | 86330 | Miscellaneous Purchased Services | 6,561.00 | 0.00 | 6,561.00 | 0.00 | 0.00 | 6,561.00 |
| 20-218-200-600 | 86340 | Supplies and Materials | 4,000.00 | 0.00 | 4,000.00 | 0.00 | 736.02 | 3,263.98 |
| 20-218-200-800 | 86360 | Other Objects | 1,806.00 | 0.00 | 1,806.00 | 0.00 | 0.00 | 1,806.00 |
| **20-218-200-xxx** | **86380** | **Total PEA - Support Services** | **4,711,230.00** | **0.00** | **4,711,230.00** | **231,119.41** | **2,277,965.26** | **2,202,145.33** |
| **20-218-xxx-xxx** | **87100** | **Total Preschool Education Aid** | **7,468,709.00** | **0.00** | **7,468,709.00** | **242,724.41** | **2,293,973.41** | **4,932,011.18** |
| **-- Other State Projects** | | | | | | | | |
| 20-xxx-xxx-xxx | 88000 | Nonpublic Textbooks | 0.00 | 8,834.00 | 8,834.00 | 0.00 | 7,275.54 | 1,558.46 |
| 20-xxx-xxx-xxx | 88050 | Nonpublic Nursing Services | 0.00 | 23,151.00 | 23,151.00 | 0.00 | 0.00 | 23,151.00 |
| 20-xxx-xxx-xxx | 88080 | Nonpublic Technology Initiative | 0.00 | 6,233.00 | 6,233.00 | 0.00 | 0.00 | 6,233.00 |
| 20-xxx-xxx-xxx | 88090 | Nonpublic Security Aid | 0.00 | 40,362.00 | 40,362.00 | 0.00 | 0.00 | 40,362.00 |
| 20-492-xxx-xxx | 88136 | SDA Emergent Needs and Capital Maintenance in School Districts | 0.00 | 21,077.47 | 21,077.47 | 0.00 | 3,884.43 | 17,193.04 |
| **20-xxx-xxx-xxx** | **88190** | **Total Other State Projects** | **0.00** | **99,657.47** | **99,657.47** | **0.00** | **11,159.97** | **88,497.50** |
| | **88200** | **Total State Projects** | **7,468,709.00** | **99,657.47** | **7,568,366.47** | **242,724.41** | **2,305,133.38** | **5,020,508.68** |
| **Federal Projects** | | | | | | | | |
| **-- Title I** | | | | | | | | |
| 20-xxx-100-600 | 88484 | Instructional Supplies- Instruction | 0.00 | 38,895.74 | 38,895.74 | 0.00 | 14,904.00 | 23,991.74 |
| 20-xxx-200-600 | 88495 | Supplies and Materials-Support | 0.00 | 52,364.09 | 52,364.09 | 0.00 | 30,364.09 | 22,000.00 |
| **20-xxx-xxx-xxx** | **88500** | **Total Title I** | **0.00** | **91,259.83** | **91,259.83** | **0.00** | **45,268.09** | **45,991.74** |
| **-- Title II** | | | | | | | | |
| 20-xxx-100-101 | 88501 | Salaries- Instruction- Salaries of Teacher | 0.00 | 1,800.00 | 1,800.00 | 0.00 | 0.00 | 1,800.00 |
| 20-xxx-200-100 | 88510 | Salaries-Support | 0.00 | 6,300.00 | 6,300.00 | 0.00 | 0.00 | 6,300.00 |

Attachments are subject to change without notice

| Account Number | Line | Account Name | Original Budget Certified For Taxes | Budget Transfers | Appropriations | Expenditures | Encumbrances | Available Balance |
|---|---|---|---|---|---|---|---|---|
| 20-xxx-200-200 | 88511 | Benefits | 0.00 | 620.00 | 620.00 | 0.00 | 0.00 | 620.00 |
| 20-xxx-200-300 | 88512 | Professional Tech Services-Support | 0.00 | 32,984.00 | 32,984.00 | 0.00 | 13,300.00 | 19,684.00 |
| 20-xxx-200-500 | 88514 | Other Purchased Services - Support | 0.00 | 10,750.00 | 10,750.00 | 0.00 | 0.00 | 10,750.00 |
| 20-xxx-200-600 | 88515 | Supplies and Materials-Support | 0.00 | 7,690.64 | 7,690.64 | 0.00 | 271.64 | 7,419.00 |
| **20-xxx-xxx-xxx** | **88520** | **Total Title II** | **0.00** | **60,144.64** | **60,144.64** | **0.00** | **13,571.64** | **46,572.00** |
| **-- Title III** | | | | | | | | |
| 20-xxx-100-110 | 88522 | Salaries- Other Salaries | 0.00 | 1,080.00 | 1,080.00 | 0.00 | 0.00 | 1,080.00 |
| 20-xxx-100-300 | 88523 | Purchased Services- Instruction | 0.00 | 3,000.00 | 3,000.00 | 0.00 | 3,000.00 | 0.00 |
| 20-xxx-100-600 | 88525 | Instructional Supplies- Instruction | 0.00 | 1,268.03 | 1,268.03 | 0.00 | 385.03 | 883.00 |
| 20-xxx-100-800 | 88526 | Other Objects-Instruction | 0.00 | 2,000.00 | 2,000.00 | 0.00 | 0.00 | 2,000.00 |
| 20-xxx-200-200 | 88531 | Benefits | 0.00 | 83.00 | 83.00 | 0.00 | 0.00 | 83.00 |
| 20-xxx-200-500 | 88534 | Other Purchased Services - Support | 0.00 | 1,725.00 | 1,725.00 | 0.00 | 0.00 | 1,725.00 |
| 20-xxx-200-600 | 88535 | Supplies and Materials-Support | 0.00 | 9,050.00 | 9,050.00 | 0.00 | 4,050.00 | 5,000.00 |
| **20-xxx-xxx-xxx** | **88540** | **Total Title III** | **0.00** | **18,206.03** | **18,206.03** | **0.00** | **7,435.03** | **10,771.00** |
| **-- Title IV** | | | | | | | | |
| 20-xxx-100-500 | 88544 | Other Purchased Services-Instruction (400-500 series) | 0.00 | 1,700.00 | 1,700.00 | 0.00 | 0.00 | 1,700.00 |
| 20-xxx-100-600 | 88545 | Instructional Supplies- Instruction | 0.00 | 1,628.46 | 1,628.46 | 0.00 | 0.00 | 1,628.46 |
| 20-xxx-200-400 | 88553 | Purchased Property-Support | 0.00 | 1,500.00 | 1,500.00 | 0.00 | 0.00 | 1,500.00 |
| 20-xxx-200-600 | 88555 | Supplies and Materials-Support | 0.00 | 5,300.00 | 5,300.00 | 0.00 | 0.00 | 5,300.00 |
| **20-xxx-xxx-xxx** | **88560** | **Total Title IV** | **0.00** | **10,128.46** | **10,128.46** | **0.00** | **0.00** | **10,128.46** |
| **-- I.D.E.A. Part B (Handicapped)** | | | | | | | | |
| 20-xxx-200-300 | 88612 | Professional Tech Services-Support | 0.00 | 4,648.10 | 4,648.10 | 0.00 | 0.00 | 4,648.10 |
| **20-xxx-xxx-xxx** | **88620** | **Total I.D.E.A. Part B (Handicapped)** | **0.00** | **4,648.10** | **4,648.10** | **0.00** | **0.00** | **4,648.10** |
| **-- Vocational Education** | | | | | | | | |
| 20-xxx-100-300 | 88623 | Purchased Services- Instruction | 0.00 | 3,429.95 | 3,429.95 | 0.00 | 0.00 | 3,429.95 |
| **20-xxx-xxx-xxx** | **88640** | **Total Vocational Education** | **0.00** | **3,429.95** | **3,429.95** | **0.00** | **0.00** | **3,429.95** |
| **20-xxx-xxx-xxx** | **88740** | **Total Federal Projects** | **0.00** | **187,817.01** | **187,817.01** | **0.00** | **66,274.76** | **121,542.25** |
| | **88760** | **Total Special Revenue Fund** | **7,456,709.00** | **294,374.22** | **7,763,083.22** | **242,724.41** | **2,371,408.14** | **5,148,950.67** |

Attachments are subject to change without notice

# Report of the Secretary to the Board of Education
# Stafford Township Board of Education

## Fund 30 - Interim Balance Sheet
For the two month period ending 08/31/2026

### Assets and Resources

**Assets:**

| Account Number | Account Name | Subtotal Balance | Balance |
|---|---|---|---|
| 101 | Cash in Bank | | 63,473,028.10 |
| | Accounts Receivable: | | |
| | Loans Receivable: | | |
| | | | 63,473,028.10 |

**Resources:**

| Account Number | Account Name | Subtotal Balance | Balance |
|---|---|---|---|
| 301 | Estimated Revenues | 0.00 | |
| 302 | Less Revenues | 219,811.17 | (219,811.17) |
| | | | (219,811.17) |
| | | Total Assets and Resources | 63,253,216.93 |

### Liabilities and Fund Equity

**Liabilities:**

| Account Number | Account Name | Subtotal Balance | Balance |
|---|---|---|---|
| 402 | Interfund Accounts Payable | | 2,037,895.38 |
| 421 | Accounts Payable | | 3,308.69 |
| | | | 2,041,204.07 |

**Fund Balance:**

| Account Number | Account Name | Subtotal Balance | Subtotal Balance 2 | Subtotal Balance 3 | Balance |
|---|---|---|---|---|---|
| | Appropriated: | | | | |
| 753 | Reserve for Encumbrances - Current Year | | | 45,407.31 | |
| 754 | Reserve for Encumbrances - Prior Year | | | 31,367,957.36 | |
| 601 | Appropriations | | 68,601,576.93 | | |
| 602 | Less: Expenditures | 7,390,214.07 | | | |
| 603 | Encumbrances | 31,413,364.67 | (38,803,578.74) | 29,797,998.19 | |
| | Unappropriated: | | | | |
| 770 | Unassigned Fund Balance | | 29,844,055.50 | | |
| 303 | Budgeted Fund Balance | | 29,843,405.50 | 650.00 | |
| | Total Fund Balance | | | 61,212,012.86 | |
| | | | | | 61,212,012.86 |
| | | | | Total Liabilities and Fund Equity: | 63,253,216.93 |

Attachments are subject to change without notice

## Report of the Secretary to the Board of Education
## Stafford Township Board of Education

### Fund 30 - Recapitulation of Budgeted Fund Balance

| | Budgeted | Actual | Variance |
|---|---|---|---|
| Appropriations | 68,601,576.93 | 38,803,578.74 | 29,797,998.19 |
| Revenues | (.00) | (219,811.17) | (-219,811.17) |
| | 68,601,576.93 | 38,583,767.57 | 30,017,809.36 |

Attachments are subject to change without notice

# Report of the Secretary to the Board of Education
# Stafford Township Board of Education

## Fund 30 - Interim Statements Comparing Budgeted Revenue with Actual to Date and Appropriations with Expenditures and Encumbrances to Date
For the two month period ending 08/31/2026

### Revenues/Sources of Funds

| Account Number | Line | Revenues/Sources of Funds | Original Budget Certified for Taxes | Budget Transfers | Budgeted / Estimated | Actual to Date | Note | Unrealized Balance |
|---|---|---|---|---|---|---|---|---|
| 30-1xxx | | From Local Sources | 0.00 | 0.00 | 0.00 | 219,811.17 | Over | (219,811.17) |
| | - | Total Revenues/Sources Of Funds | 0.00 | 0.00 | 0.00 | 219,811.17 | Over | (219,811.17) |

### Total Capital Projects Fund Expenditures

**Facilities Acquisition and Construction Services**

| Account Number | Line | Expenditures Description | Original Budget Certified For Taxes | Budget Transfers | Appropriations | Expenditures | Encumbrances | Available Balance |
|---|---|---|---|---|---|---|---|---|
| 30-000-4xx-390 | 89060 | Other Purchased Professional and Technical Services | 0.00 | 11,635,859.15 | 11,635,859.15 | 56,025.00 | 1,551,251.89 | 10,021,582.26 |
| 30-000-4xx-450 | 89080 | Construction Services | 0.00 | 56,965,647.78 | 56,965,647.78 | 7,334,189.07 | 29,855,112.78 | 19,776,345.93 |
| 30-000-4xx-610 | 89100 | General Supplies | 0.00 | 45.00 | 45.00 | 0.00 | 0.00 | 45.00 |
| 30-000-4xx-800 | 89180 | Other Objects | 0.00 | 25.00 | 25.00 | 0.00 | 0.00 | 25.00 |
| | | | 0.00 | 68,601,576.93 | 68,601,576.93 | 7,390,214.07 | 31,413,364.67 | 29,797,998.19 |
| | | **Total Capital Projects Fund Expenditures** | 0.00 | 68,601,576.93 | 68,601,576.93 | 7,390,214.07 | 31,413,364.67 | 29,797,998.19 |

Attachments are subject to change without notice

# Report of the Secretary to the Board of Education
# Stafford Township Board of Education

## Fund 30 - Schedule of Revenues
## Actual Compared with Estimate
**For the two month period ending 08/31/2026**

| Account Number | Line | Account Name | Original Budget Certified For Taxes | Budget Transfers | Estimated | Actual | Unrealized |
|---|---|---|---|---|---|---|---|
| **Revenues/Sources of Funds** | | | | | | | |
| **- Local Sources** | | | | | | | |
| 30-1510 | 950 | Earnings on Investments | 0.00 | 0.00 | 0.00 | 219,811.17 | (219,811.17) |
| **30-1xxx** | | **Total Revenue from Local Sources** | **0.00** | **0.00** | **0.00** | **219,811.17** | **(219,811.17)** |
| | - | **Total Revenues/Sources of Funds** | **0.00** | **0.00** | **0.00** | **219,811.17** | **(219,811.17)** |

Attachments are subject to change without notice

# Report of the Secretary to the Board of Education
# Stafford Township Board of Education

## Fund 30 - Statement of Appropriations Compared with Expenditures and Encumbrances
For the two month period ending 08/31/2026

| Account Number | Line | Account Name | Original Budget Certified For Taxes | Budget Transfers | Appropriations | Expenditures | Encumbrances | Available Balance |
|---|---|---|---|---|---|---|---|---|
| **Total Capital Projects Fund Expenditures** | | | | | | | | |
| **- Facilities Acquisition and Construction Services** | | | | | | | | |
| **-- Other Purchased Professional and Technical Services** | | | | | | | | |
| 30-000-4xx-390 | 89060 | Other Purchased Professional and Technical Services | 0.00 | 11,635,859.15 | 11,635,859.15 | 56,025.00 | 1,558,251.89 | 10,021,582.26 |
| **30-000-4xx-390** | **89060** | | **0.00** | **11,635,859.15** | **11,635,859.15** | **56,025.00** | **1,558,251.89** | **10,021,582.26** |
| **-- Construction Services** | | | | | | | | |
| 30-000-4xx-450 | 89080 | Construction Services | 0.00 | 56,965,647.78 | 56,965,647.78 | 7,334,189.07 | 29,855,112.78 | 19,776,345.93 |
| **30-000-4xx-450** | **89080** | | **0.00** | **56,965,647.78** | **56,965,647.78** | **7,334,189.07** | **29,855,112.78** | **19,776,345.93** |
| **-- General Supplies** | | | | | | | | |
| 30-000-4xx-610 | 89100 | General Supplies | 0.00 | 45.00 | 45.00 | 0.00 | 0.00 | 45.00 |
| **30-000-4xx-610** | **89100** | | **0.00** | **45.00** | **45.00** | **0.00** | **0.00** | **45.00** |
| **-- Other Objects** | | | | | | | | |
| 30-000-4xx-800 | 89180 | Other Objects | 0.00 | 25.00 | 25.00 | 0.00 | 0.00 | 25.00 |
| **30-000-4xx-800** | **89180** | | **0.00** | **25.00** | **25.00** | **0.00** | **0.00** | **25.00** |
| | **89200** | | **0.00** | **68,601,576.93** | **68,601,576.93** | **7,390,214.07** | **31,413,364.67** | **29,797,998.19** |
| | **84060** | **Total Capital Projects Fund Expenditures** | **0.00** | **68,601,576.93** | **68,601,576.93** | **7,390,214.07** | **31,413,364.67** | **29,797,998.19** |

Attachments are subject to change without notice

# Report of the Secretary to the Board of Education
# Stafford Township Board of Education

## Fund 40 - Interim Balance Sheet
For the two month period ending 08/31/2026

### Assets and Resources

**Assets:**

| Account Number | Account Name | Subtotal Balance | Balance |
|---|---|---|---|
| 101 | Cash in Bank | | 1,340,743.08 |
| | Accounts Receivable: | | |
| 132 | InterfundAccounts Receivable: | 1,313,560.88 | |
| 141 | Intergovernmental - StateAccounts Receivable: | 337,630.00 | |
| 153,154 | Other (net of estimated uncollectible of $10,000)Accounts Receivable: | 0.00 | 1,651,190.88 |
| | Loans Receivable: | | |
| | | | 2,991,933.96 |

**Resources:**

| Account Number | Account Name | Subtotal Balance | Balance |
|---|---|---|---|
| 301 | Estimated Revenues | 4,944,995.00 | |
| 302 | Less Revenues | 4,944,995.00 | 0.00 |
| | | | 0.00 |
| | | Total Assets and Resources: | 2,991,933.96 |

### Liabilities and Fund Equity

**Liabilities:**

| Account Number | Account Name | Subtotal Balance | Balance |
|---|---|---|---|
| | | | 0.00 |

**Fund Balance:**

| Account Number | Account Name | Subtotal Balance | Subtotal Balance 2 | Subtotal Balance 3 | Balance |
|---|---|---|---|---|---|
| | Appropriated: | | | | |
| 753 | Reserve for Encumbrances - Current Year | | 1,678,371.88 | | |
| 754+753 | Reserve for Encumbrances - Current + Prior | | | 1,678,371.88 | |
| | Reserve Fund Balance: | | | | |
| | Appropriations | | | | |
| 601 | Appropriations | | 4,944,995.00 | | |
| 602 | Less: Expenditures | 3,266,622.44 | | | |
| 603 | Encumbrances | 1,678,371.88 | (4,944,994.32) | 0.68 | |
| | Total Appropriated | | | 1,678,372.56 | |
| | Unappropriated | | | | |
| 770 | Unassigned Fund Balance | | | 1,313,561.40 | |
| | | | | | 2,991,933.96 |
| | | | | Total Liabilities and Fund Equity: | 2,991,933.96 |

Attachments are subject to change without notice

## Report of the Secretary to the Board of Education
## Stafford Township Board of Education

### Fund 40 - Recapitulation of Budgeted Fund Balance

| | Budgeted | Actual | Variance |
|---|---|---|---|
| Appropriations | 4,944,995.00 | 4,944,994.32 | .68 |
| Revenues | (4,944,995.00) | (4,944,995.00) | (.00) |
| | .00 | (.68) | .68 |

Attachments are subject to change without notice

# Report of the Secretary to the Board of Education
# Stafford Township Board of Education

## Fund 40 - Interim Statements Comparing Budgeted Revenue with Actual to Date and Appropriations with Expenditures and Encumbrances to Date
For the two month period ending 08/31/2026

### Revenues

| Account Number | Line | Revenues/Sources of Funds | Original Budget Certified for Taxes | Budget Transfers | Budgeted / Estimated | Actual to Date | Note | Unrealized Balance |
|---|---|---|---|---|---|---|---|---|
| | - | Total Revenue from Local Sources | 3,950,236.00 | 0.00 | 3,950,236.00 | 3,950,236.00 | | 0.00 |
| | - | Total from Revenue from State Sources | 994,759.00 | 0.00 | 994,759.00 | 994,759.00 | | 0.00 |
| | - | **Total Revenues** | **4,944,995.00** | **0.00** | **4,944,995.00** | **4,944,995.00** | | **0.00** |

### Expenditures

**Regular Debt Service**

| Account Number | Line | Expenditures Description | Original Budget Certified For Taxes | Budget Transfers | Appropriations | Expenditures | Encumbrances | Available Balance |
|---|---|---|---|---|---|---|---|---|
| 40-701-510-910 | 89560 | Redemption of Principal on Early Retirement Bonds | 485,000.00 | 0.00 | 485,000.00 | 485,000.00 | 0.00 | 0.00 |
| 40-701-510-834 | 89600 | Interest on Bonds | 4,459,995.00 | 0.00 | 4,459,995.00 | 2,781,623.44 | 1,678,371.88 | 0.68 |
| | | **Total Regular Debt Service Expenditures** | **4,944,995.00** | **0.00** | **4,944,995.00** | **3,266,622.44** | **1,678,371.88** | **0.68** |
| | | **Total Debt Service Fund Expenditures** | **4,944,995.00** | **0.00** | **4,944,995.00** | **3,266,622.44** | **1,678,371.88** | **0.68** |

Attachments are subject to change without notice

## Report of the Secretary to the Board of Education
## Stafford Township Board of Education

### Fund 40 - Schedule of Revenues
### Actual Compared with Estimate
**For the two month period ending 08/31/2026**

| Account Number | Line | Account Name | Original Budget Certified For Taxes | Budget Transfers | Estimated | Actual | Unrealized |
|---|---|---|---|---|---|---|---|
| **Revenues** | | | | | | | |
| **- Local Sources** | | | | | | | |
| 40-1210 | 860 | Local Tax Levy | 3,950,236.00 | 0.00 | 3,950,236.00 | 3,950,236.00 | 0.00 |
| | - | **Total Revenue from Local Sources** | **3,950,236.00** | **0.00** | **3,950,236.00** | **3,950,236.00** | **0.00** |
| **- State Sources** | | | | | | | |
| 40-3160 | 890 | Debt Service Aid Type II | 994,759.00 | 0.00 | 994,759.00 | 994,759.00 | 0.00 |
| | - | **Total from Revenue from State Sources** | **994,759.00** | **0.00** | **994,759.00** | **994,759.00** | **0.00** |
| | - | **Total Revenues** | **4,944,995.00** | **0.00** | **4,944,995.00** | **4,944,995.00** | **0.00** |
| **Expenditures** | | | | | | | |
| | - | **Total Debt Service Fund Expenditures** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

Attachments are subject to change without notice

# Report of the Secretary to the Board of Education
# Stafford Township Board of Education

## Fund 40 - Statement of Appropriations
## Compared with Expenditures and Encumbrances
For the two month period ending 08/31/2026

| Account Number | Line | Account Name | Original Budget Certified For Taxes | Budget Transfers | Appropriations | Expenditures | Encumbrances | Available Balance |
|---|---|---|---|---|---|---|---|---|
| **Expenditures** | | | | | | | | |
| **- Regular Debt Service** | | | | | | | | |
| **-- Redemption of Principal on Early Retirement Bonds** | | | | | | | | |
| 40-701-510-910 | 89560 | Redemption of Principal on Early Retirement Bonds | 485,000.00 | 0.00 | 485,000.00 | 485,000.00 | 0.00 | 0.00 |
| **40-701-510-910** | **89560** | | **485,000.00** | **0.00** | **485,000.00** | **485,000.00** | **0.00** | **0.00** |
| **-- Interest on Bonds** | | | | | | | | |
| 40-701-510-834 | 89600 | Interest on Bonds | 4,459,995.00 | 0.00 | 4,459,995.00 | 2,781,622.44 | 1,678,371.88 | 0.68 |
| **40-701-510-834** | **89600** | | **4,459,995.00** | **0.00** | **4,459,995.00** | **2,781,622.44** | **1,678,371.88** | **0.68** |
| | **89660** | **Total Regular Debt Service Expenditures** | **4,944,995.00** | **0.00** | **4,944,995.00** | **3,266,622.44** | **1,678,371.88** | **0.68** |
| | **-** | **Total Debt Service Fund Expenditures** | **4,944,995.00** | **0.00** | **4,944,995.00** | **3,266,622.44** | **1,678,371.88** | **0.68** |

School Business Administrator Signature

Date

Attachments are subject to change without notice

# Stafford Township Board of Education
## Monthly Transfer Report
## 7/1/2026 - 7/31/2026

| Budget Category | Accounts | Original Budget | Prior Year Encumbrances | Original Budget For 10% Calc | Maximum Transfer Out Allowed | YTD Net Transfers | % change of transfers | Remaining Transfers Out Allowed | Account Balance |
|---|---|---|---|---|---|---|---|---|---|
| Regular Programs | 11-1xx-100-xxx<br>12-1xx-100-xxx<br>13-1xx-100-xxx<br>18-1xx-100-xxx | 11,556,822.00 | 968.58 | 11,557,790.58 | 1,155,779.06 | -91,100.00 | -.79 | 1,064,679.06 | 10,741,530.49 |
| Special Education, Basic Skills/Remedial and Bilingual Instruction and Speech/OT/PT and Ex | 1x-2xx-100-xxx<br>1x-000-216-xxx<br>1x-000-217-xxx | 9,204,351.00 | 2,600.00 | 9,206,951.00 | 920,695.10 | 90,783.00 | .99 | 1,011,478.10 | 9,222,428.39 |
| Vocational Programs-Local | 1x-3xx-100-xxx | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| School-Spon. Co/Extr a-Curr. Activities,School Sponsored Athletics, and Other Instructional | 11-4xx-100-0xx<br>11-4xx-100-1xx<br>11-4xx-100-3xx<br>11-4xx-100-4xx<br>11-4xx-100-5xx<br>11-4xx-100-6xx<br>11-4xx-100-7xx<br>11-4xx-100-8xx<br>11-4xx-100-9xx<br>11-4xx-2xx-xxx<br>12-4xx-100-xxx | 147,308.00 | .00 | 147,308.00 | 14,730.80 | .00 | .00 | 14,730.80 | 146,808.00 |
| Community Services Programs/Operations | 1x-800-330-xxx | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| **UNDISTRIBUTED EXPENSES** | | **20,908,481.00** | **3,568.58** | **20,912,049.58** | **2,091,204.96** | **-317.00** | **.00** | **2,090,887.96** | **20,110,766.88** |
| Tuition | 11-000-100-xxx<br>16-000-100-xxx<br>17-000-100-xxx<br>18-000-100-xxx | 656,586.00 | 14,000.00 | 670,586.00 | 67,058.60 | .00 | .00 | 67,058.60 | 656,586.00 |
| Attendance and Social Work, Health, Guidance, Child Study Teams, Education, Media Services | 1x-000-211-xxx<br>1x-000-213-xxx<br>1x-000-218-xxx<br>1x-000-219-xxx<br>1x-000-222-xxx | 2,496,899.00 | .00 | 2,496,899.00 | 249,689.90 | 79,783.00 | 3.20 | 329,472.90 | 2,076,248.98 |
| Improvement of Instruction Services and Instructional Staff Training Services | 1x-000-221-xxx<br>1x-000-223-xxx | 1,185,996.00 | .00 | 1,185,996.00 | 118,599.60 | -28,707.00 | -2.42 | 89,892.60 | 100,721.47 |
| General Administration | 11-000-230-xxx | 1,054,743.00 | 25,443.41 | 1,080,186.41 | 108,018.64 | .00 | .00 | 108,018.64 | 266,774.86 |
| School Administration | 11-000-240-xxx | 1,083,597.00 | .00 | 1,083,597.00 | 108,359.70 | -50,759.00 | -4.68 | 57,600.70 | 123,033.07 |
| Central Services & Administrative Information Technology | 11-000-25x-xxx | 749,758.00 | .00 | 749,758.00 | 74,975.80 | .00 | .00 | 74,975.80 | 75,803.95 |
| Operation and Maintenance of Plant Services | 11-000-26x-xxx | 4,797,135.00 | 363,136.41 | 5,160,271.41 | 516,027.14 | 235,925.92 | 4.57 | 751,953.06 | 1,367,745.62 |
| Student Transportation Services | 11-000-270-xxx | 3,810,070.00 | .00 | 3,810,070.00 | 381,007.00 | .00 | .00 | 381,007.00 | 3,127,487.73 |
| Personal Services-Employee Benefits | 11-xxx-xxx-2xx | 17,092,418.00 | 72,000.00 | 17,164,418.00 | 1,716,441.80 | -235,925.92 | -1.37 | 1,480,515.88 | 8,779,391.83 |
| Food Services | 11-000-310-xxx | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| Transfer Property Sale Proceeds to Debt Service Reserve | 11-000-520-934 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |

Attachments are subject to change without notice

# Stafford Township Board of Education
## Monthly Transfer Report
## 7/1/2026 - 7/31/2026

| Budget Category | Accounts | Original Budget | Prior Year Encumbrances | Original Budget For 10% Calc | Maximum Transfer Out Allowed | YTD Net Transfers | % change of transfers | Remaining Transfers Out Allowed | Account Balance |
|---|---|---|---|---|---|---|---|---|---|
| Transfer from General Fund Surplus to Debt Service Fund to Repay CDL | 11-000-520-936 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| **TOTAL GENERAL CURRENT EXPENSE** | | **32,927,202.00** | **474,579.82** | **33,401,781.82** | **3,340,178.18** | **317.00** | **.00** | **3,340,495.18** | **16,573,793.51** |
| Equipment | 12-xxx-xxx-73x | 43,108.00 | 10,092.00 | 53,200.00 | 5,320.00 | .00 | .00 | 5,320.00 | 27,268.00 |
| Facilities Acquisition and Construction Services | 12-000-4xx-xxx | 336,204.00 | .00 | 336,204.00 | 33,620.40 | .00 | .00 | 33,620.40 | 236,204.00 |
| Capital Reserve-Transfer to Capital Expend. Fund | 12-000-4xx-931 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| Capital Reserve-Transfer to Repayment of Debt | 12-000-4xx-933 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| **TOTAL CAPITAL EXPENDITURES** | | **379,312.00** | **10,092.00** | **389,404.00** | **38,940.40** | **.00** | **.00** | **38,940.40** | **263,472.00** |
| TOTAL SPECIAL SCHOOLS | 13-xxx-xxx-xxx | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| Transfer of Funds to Charter Schools | 10-000-100-56x | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| General Fund Contribution to School Based Budgets | 10-000-520-930 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| **OPERATING BUDGET GRAND TOTAL** | | **54,214,995.00** | **488,240.40** | **5,703,235.40** | **5,470,323.54** | **.00** | **.00** | **5,470,323.54** | **36,948,032.39** |

School Business Administrator Signature

Date

Attachments are subject to change without notice

**Stafford Township Board of Education**
**Account Maintenance Report**
**Appropriation Adjustments and Transfers for July 2026-27**

**[Adjustment] Tx: 62354 Budget Transfer request from 5400 Jenkins, Tina M**

| Date | Fund | Act # | Act Desc | Type | Pre | Adjustment | Post |
|---|---|---|---|---|---|---|---|
| 7/1/2026 | 11 | 11-000-261-420-00-400 | ADMIN BLDG REPAIRS M1 | Adjustment | 64,448.00 | -278.48 | 64,169.52 |
| 7/1/2026 | 11 | 11-000-261-420-55-401 | GARAGE BLDG REPAIR M1 | Adjustment | 4,000.00 | 278.48 | 4,278.48 |
| | | | | | | .00 | |

**[Adjustment] Tx: 62447 SETUP STAC 26-27 ACCOUNTS**

| Date | Fund | Act # | Act Desc | Type | Pre | Adjustment | Post |
|---|---|---|---|---|---|---|---|
| 7/1/2026 | 62 | 62-992-330-100-00-001-001 | STAC CUSTODIAN SALARY | Adjustment | .00 | 38,000.00 | 38,000.00 |
| 7/1/2026 | 62 | 62-992-330-100-00-001-002 | STAC SAFETY OFFICER SALARY | Adjustment | .00 | 18,000.00 | 18,000.00 |
| 7/1/2026 | 62 | 62-992-330-100-00-001-003 | STAC TRANSPORTATION SALARY | Adjustment | .00 | 500.00 | 500.00 |
| 7/1/2026 | 62 | 62-992-330-100-00-002 | STAC STAFF SUBS | Adjustment | .00 | 21,000.00 | 21,000.00 |
| 7/1/2026 | 62 | 62-992-330-220-00-200 | STAC STAFF TAX MATCH | Adjustment | .00 | 25,000.00 | 25,000.00 |
| 7/1/2026 | 62 | 62-992-330-270-00-200 | STAC STAFF HEALTH BENEFITS | Adjustment | .00 | 75,000.00 | 75,000.00 |
| 7/1/2026 | 62 | 62-992-330-300-00-300 | STAC PUR PROF SERVICE | Adjustment | .00 | 45,000.00 | 45,000.00 |
| 7/1/2026 | 62 | 62-992-330-400-00-400 | STAC REPAIRS | Adjustment | .00 | 27,000.00 | 27,000.00 |
| 7/1/2026 | 62 | 62-992-330-420-00-420 | STAC PURCHASED SERVICE | Adjustment | .00 | 12,000.00 | 12,000.00 |
| 7/1/2026 | 62 | 62-992-330-590-00-500 | STAC ADVERTISING | Adjustment | .00 | 43,300.00 | 43,300.00 |
| 7/1/2026 | 62 | 62-992-330-600-00-100 | STAC CONCESSION SUPPLIES | Adjustment | .00 | 25,000.00 | 25,000.00 |
| 7/1/2026 | 62 | 62-992-330-600-00-101 | STAC VENDING MACHINE SUPPLIES | Adjustment | .00 | 500.00 | 500.00 |
| 7/1/2026 | 62 | 62-992-330-600-00-105 | STAC SUPPLY | Adjustment | .00 | 7,500.00 | 7,500.00 |
| 7/1/2026 | 62 | 62-992-330-600-01-105 | STAC MAINT. SUPPLY | Adjustment | .00 | 1,800.00 | 1,800.00 |
| 7/1/2026 | 62 | 62-992-330-731-00-700 | STAC EQUIPMENT | Adjustment | .00 | 8,000.00 | 8,000.00 |
| 7/1/2026 | 62 | 62-992-330-800-00-800 | STAC MISC EXPENSE | Adjustment | .00 | 200.00 | 200.00 |
| | | | | | | 347,800.00 | |

Attachments are subject to change without notice

**[Adjustment] Tx: 62448 SETUP EXTENDED DAY 26-27 ACCOUNTS**

| Date | Fund | Act # | Act Desc | Type | Pre | Adjustment | Post |
|---|---|---|---|---|---|---|---|
| 7/1/2026 | 61 | 61-990-100-100-00-001 | EXTEND DAY TEACH AID SAL | Adjustment | .00 | 282,832.00 | 282,832.00 |
| 7/1/2026 | 61 | 61-990-100-100-00-001-001 | SUMMER CAMP | Adjustment | .00 | 97,007.00 | 97,007.00 |
| 7/1/2026 | 61 | 61-990-266-600-00-100 | EXTENDED DAY SECURITY SUPPLY | Adjustment | .00 | 700.00 | 700.00 |
| 7/1/2026 | 61 | 61-990-291-220-00-200 | EXTENDED DAY TAX MATCH | Adjustment | .00 | 41,500.00 | 41,500.00 |
| 7/1/2026 | 61 | 61-990-291-270-00-200 | EXTENDED DAY HEALTH BENE | Adjustment | .00 | 43,000.00 | 43,000.00 |
| 7/1/2026 | 61 | 61-990-320-100-00-001 | EXTENDED DAY COOR SAL | Adjustment | .00 | 2,161.00 | 2,161.00 |
| 7/1/2026 | 61 | 61-990-320-100-00-002 | EXTEND DAY SUB SEC SAL | Adjustment | .00 | 300.00 | 300.00 |
| 7/1/2026 | 61 | 61-990-320-340-00-300 | EXTEND DAY PUR TECH SERV | Adjustment | .00 | 20,000.00 | 20,000.00 |
| 7/1/2026 | 61 | 61-990-320-610-00-100 | EXTENDED DAY SUPPLIES | Adjustment | .00 | 7,500.00 | 7,500.00 |
| | | | | | | **495,000.00** | |

**[Adjustment] Tx: 65043 25-26 FUND 20 RECON-MCK COURTYARD**

| Date | Fund | Act # | Act Desc | Type | Pre | Adjustment | Post |
|---|---|---|---|---|---|---|---|
| 7/1/2026 | 20 | 20-009-200-600-60-100 | MCKINLEY SCHOOL COURTYARD RENOVATION | Adjustment | .00 | 5,000.00 | 5,000.00 |
| | | | | | | **5,000.00** | |

Attachments are subject to change without notice

**[Adjustment] Tx: 65779 SETUP FUND 30 BUDGET**

| Date | Fund | Act # | Act Desc | Type | Pre | Adjustment | Post |
|---|---|---|---|---|---|---|---|
| 7/1/2026 | 30 | 30-000-401-450-65-R502 | 23-24 ROD HVAC CONRTUCTION PROJ OA | Adjustment | .00 | 62,036.58 | 62,036.58 |
| 7/1/2026 | 30 | 30-000-401-450-70-R502 | 23-24 ROD HVAC CONSTRUCTION PROJ INTERMEDIATE | Adjustment | .00 | 1,173,890.77 | 1,173,890.77 |
| 7/1/2026 | 30 | 30-000-402-450-65-400 | OA GYM FLOOR REPLACEMENT (REALLOCATED ROD GRANT CAP RESERVE HERE) | Adjustment | .00 | 224,494.00 | 224,494.00 |
| 7/1/2026 | 30 | 30-000-410-390-00-001 | REFERENDUM BOND ISSUANCE | Adjustment | .00 | 10,060,238.85 | 10,060,238.85 |
| 7/1/2026 | 30 | 30-000-410-390-00-005 | REFERENDUM ELECTION COSTS | Adjustment | .00 | .72 | .72 |
| 7/1/2026 | 30 | 30-000-410-450-50-001 | REFERENDUM TRAILERS OXY | Adjustment | .00 | 2,335.44 | 2,335.44 |
| 7/1/2026 | 30 | 30-000-410-450-50-002 | REFERENDUM ADDITIONS/ALTERATIONS OXY | Adjustment | .00 | 7,439,220.85 | 7,439,220.85 |
| 7/1/2026 | 30 | 30-000-410-450-50-002-001 | REFERENDUM TECHNOLOGY OXY | Adjustment | .00 | 1,033.39 | 1,033.39 |
| 7/1/2026 | 30 | 30-000-410-450-60-001 | REFERENDUM RENO CABINTRY/SINKS MCK | Adjustment | .00 | 3,011,467.20 | 3,011,467.20 |
| 7/1/2026 | 30 | 30-000-410-450-65-001 | REFERENDUM HVAC OA | Adjustment | .00 | 3,561,396.00 | 3,561,396.00 |
| 7/1/2026 | 30 | 30-000-410-450-70-001 | REFERENDUM RENOVATIONS INTER | Adjustment | .00 | 897,053.20 | 897,053.20 |
| 7/1/2026 | 30 | 30-000-410-450-75-001 | REFERENDUM HVAC PLC | Adjustment | .00 | 2,303,193.50 | 2,303,193.50 |
| 7/1/2026 | 30 | 30-000-410-450-99-001 | REFERENDUM RENOVATIONS STAC | Adjustment | .00 | 1,106,975.00 | 1,106,975.00 |
| 7/1/2026 | 30 | 30-000-410-610-00-001 | REFERENDUM SUPPLIES | Adjustment | .00 | 45.00 | 45.00 |
| 7/1/2026 | 30 | 30-000-410-800-50-001 | REFERENDUM FEES OXY | Adjustment | .00 | 25.00 | 25.00 |
| | | | | | | **29,843,405.50** | |

Attachments are subject to change without notice

**[Adjustment] Tx: 65840 JULY 2026 PAYROLL TRANSFERS**

| Date | Fund | Act # | Act Desc | Type | Pre | Adjustment | Post |
|---|---|---|---|---|---|---|---|
| 7/1/2026 | 11 | 11-000-219-104-00-000 | CHILD STUDY TEAM | Adjustment | 105,000.00 | .16 | 105,000.16 |
| 7/1/2026 | 11 | 11-000-219-104-00-001 | CHILD STUDY TEAM | Adjustment | 725,372.00 | -.16 | 725,371.84 |
| 7/1/2026 | 11 | 11-000-221-102-00-001 | INSTRUCTIONAL SUPERVISOR | Adjustment | 227,913.00 | -.04 | 227,912.96 |
| 7/1/2026 | 11 | 11-000-221-104-00-001 | SAL OF OTHER PROFESSIONA | Adjustment | 104,170.00 | .04 | 104,170.04 |
| 7/1/2026 | 11 | 11-000-240-103-00-001 | PRINCIPALS | Adjustment | 6,000.00 | -.31 | 5,999.69 |
| 7/1/2026 | 11 | 11-000-240-103-65-001 | PRINCIPALS OA | Adjustment | 159,580.00 | .08 | 159,580.08 |
| 7/1/2026 | 11 | 11-000-240-103-70-001 | PRINCIPALS INTER | Adjustment | 127,996.00 | .08 | 127,996.08 |
| 7/1/2026 | 11 | 11-000-240-103-75-001 | PRINCIPALS PLC | Adjustment | 156,666.00 | .15 | 156,666.15 |
| 7/1/2026 | 11 | 11-000-240-105-65-001 | SCHOOL SECRETAR OA | Adjustment | 112,367.00 | .04 | 112,367.04 |
| 7/1/2026 | 11 | 11-000-240-105-75-001 | SCHOOL SECRETARY PLC | Adjustment | 97,571.00 | -.04 | 97,570.96 |
| 7/1/2026 | 11 | 11-000-270-160-00-001-002 | TRANS. COORD. SALARY | Adjustment | 217,233.00 | -.08 | 217,232.92 |
| 7/1/2026 | 11 | 11-000-270-160-00-001-003 | TRANS. MECHANIC SALARY | Adjustment | 153,952.00 | .08 | 153,952.08 |
| 7/1/2026 | 11 | 11-216-100-106-50-002 | PSD SUB AIDE OXY | Adjustment | 15,500.00 | -49.75 | 15,450.25 |
| 7/1/2026 | 11 | 11-216-100-106-75-002 | PSD SUB AIDE PLC | Adjustment | .00 | 49.75 | 49.75 |
| | | | | | | .00 | |
| 7/1/2026 | 61 | 61-990-100-100-00-001-001 | SUMMER CAMP | Adjustment | 97,007.00 | -1,084.54 | 95,922.46 |
| 7/1/2026 | 61 | 61-990-266-100-00-001 | EXTENDED DAY GREETER SAL | Adjustment | .00 | 1,084.50 | 1,084.50 |
| 7/1/2026 | 61 | 61-990-320-100-00-001-002 | EXTEND DAY SECRETARY SAL | Adjustment | 61,871.00 | .04 | 61,871.04 |
| | | | | | | .00 | |

Attachments are subject to change without notice

**[Adjustment] Tx: 63742 SECURITY GUARD INSURANCE**

| Date | Fund | Act # | Act Desc | Type | Pre | Adjustment | Post |
|---|---|---|---|---|---|---|---|
| 7/7/2026 | 11 | 11-000-262-520-00-500 | PLANT & STUDENT ACCIDENT | Adjustment | 266,987.00 | -12,565.00 | 254,422.00 |
| 7/7/2026 | 11 | 11-000-266-300-00-301 | SECURITY GUARD LIABILITY INSURANCE | Adjustment | .00 | 12,565.00 | 12,565.00 |
| | | | | | | | .00 |

**[Adjustment] Tx: 63758 COBRA ESTIMATE THROUGH DECEMBER 2026**

| Date | Fund | Act # | Act Desc | Type | Pre | Adjustment | Post |
|---|---|---|---|---|---|---|---|
| 7/7/2026 | 11 | 11-000-291-270-00-200 | EMPLOYEE HEALTH BENE. | Adjustment | 13,300,630.00 | -32,990.00 | 13,267,640.00 |
| 7/7/2026 | 11 | 11-000-291-270-00-200-001 | HB COBRA/EMPLOYEE CHOICE | Adjustment | 10,000.00 | 32,990.00 | 42,990.00 |
| | | | | | | | .00 |

**[Adjustment] Tx: 63759 POSTED EDS ORDERS**

| Date | Fund | Act # | Act Desc | Type | Pre | Adjustment | Post |
|---|---|---|---|---|---|---|---|
| 7/7/2026 | 11 | 11-000-218-610-00-100 | GUIDANCE SUPPLY | Adjustment | 300.00 | -47.52 | 252.48 |
| 7/7/2026 | 11 | 11-000-218-610-65-100 | GUIDANCE SUPPLIES OA | Adjustment | 100.00 | 47.52 | 147.52 |
| 7/7/2026 | 11 | 11-000-219-600-00-100 | CST SUPP/MAT | Adjustment | 1,000.00 | -148.32 | 851.68 |
| 7/7/2026 | 11 | 11-000-219-600-65-100 | CST SUPPLIES OA | Adjustment | 200.00 | 23.67 | 223.67 |
| 7/7/2026 | 11 | 11-000-219-600-75-100 | CST SUPPLIES PLC | Adjustment | 25.00 | 124.65 | 149.65 |
| 7/7/2026 | 11 | 11-000-240-600-00-100 | SUPPLIES AND MATERIALS | Adjustment | 1,000.00 | -292.08 | 707.92 |
| 7/7/2026 | 11 | 11-000-240-600-65-103 | MAIN OFF SUPPLIES OA | Adjustment | 4,090.00 | 292.08 | 4,382.08 |
| 7/7/2026 | 11 | 11-209-100-610-50-110 | ERI SUPPLY OOY | Adjustment | 200.00 | -74.28 | 125.72 |
| 7/7/2026 | 11 | 11-209-100-610-75-110 | ERI SUPPLY PLC | Adjustment | .00 | 74.28 | 74.28 |
| 7/7/2026 | 11 | 11-212-100-610-00-110 | MD SUPPLIES | Adjustment | 200.00 | -46.49 | 153.51 |
| 7/7/2026 | 11 | 11-212-100-610-75-110 | MD SUPPLIES PLC | Adjustment | 100.00 | 46.49 | 146.49 |
| 7/7/2026 | 11 | 11-230-100-610-65-110 | INTERV SUPPLY OA | Adjustment | 1,860.00 | -107.96 | 1,752.04 |
| 7/7/2026 | 11 | 11-230-100-610-70-110 | INTERV SUPPLY INT | Adjustment | 100.00 | 107.96 | 207.96 |
| | | | | | | | .00 |

Attachments are subject to change without notice

**[Adjustment] Tx: 64078 ROOF LEAK REPAIR-ALL RISK**

| Date | Fund | Act # | Act Desc | Type | Pre | Adjustment | Post |
|---|---|---|---|---|---|---|---|
| 7/9/2026 | 11 | 11-000-261-420-70-400-001 | ROOF LEAK REPAIR-INTERMEDIATE | Adjustment | .00 | 235,925.92 | 235,925.92 |
| 7/9/2026 | 11 | 11-000-291-270-00-200 | EMPLOYEE HEALTH BENE. | Adjustment | 13,267,640.00 | -235,925.92 | 13,031,714.08 |
| | | | | | | .00 | |

**[Adjustment] Tx: 64113 Budget Transfer request from 4103 Dunn, Nancy L**

| Date | Fund | Act # | Act Desc | Type | Pre | Adjustment | Post |
|---|---|---|---|---|---|---|---|
| 7/9/2026 | 11 | 11-000-262-300-00-300 | "PURCH, PROF/TECH SVCS" | Adjustment | 12,250.00 | 449.30 | 12,699.30 |
| 7/9/2026 | 11 | 11-000-262-590-00-500 | TECH. SERVICE CONTRACT | Adjustment | 39,914.00 | -449.30 | 39,464.70 |
| | | | | | | .00 | |

Attachments are subject to change without notice

**[Adjustment] Tx: 65836 ADMIN SALARY TRANSFERS**

| Date | Fund | Act # | Act Desc | Type | Pre | Adjustment | Post |
|---|---|---|---|---|---|---|---|
| 7/13/2026 | 11 | 11-000-219-104-00-000 | CHILD STUDY TEAM | Adjustment | 105,000.16 | 127,996.00 | 232,996.16 |
| 7/13/2026 | 11 | 11-000-219-104-00-000 | CHILD STUDY TEAM | Adjustment | 232,996.16 | -5,000.00 | 227,996.16 |
| 7/13/2026 | 11 | 11-000-219-104-00-001 | CHILD STUDY TEAM | Adjustment | 725,671.84 | -19,830.00 | 705,541.84 |
| 7/13/2026 | 11 | 11-000-219-104-00-001 | CHILD STUDY TEAM | Adjustment | 705,541.84 | -7,913.00 | 697,628.84 |
| 7/13/2026 | 11 | 11-000-219-104-00-001 | CHILD STUDY TEAM | Adjustment | 697,628.84 | -7,913.00 | 689,715.84 |
| 7/13/2026 | 11 | 11-000-219-104-00-001 | CHILD STUDY TEAM | Adjustment | 689,715.84 | -7,557.00 | 682,158.84 |
| 7/13/2026 | 11 | 11-000-221-102-00-001 | INSTRUCTIONAL SUPERVISOR | Adjustment | 227,912.96 | 7,913.00 | 235,825.96 |
| 7/13/2026 | 11 | 11-000-221-102-00-001 | INSTRUCTIONAL SUPERVISOR | Adjustment | 235,825.96 | -53,090.00 | 182,735.96 |
| 7/13/2026 | 11 | 11-000-221-102-00-001 | INSTRUCTIONAL SUPERVISOR | Adjustment | 182,735.96 | 9,184.00 | 191,919.96 |
| 7/13/2026 | 11 | 11-000-221-104-00-001 | SAL OF OTHER PROFESSIONA | Adjustment | 104,170.04 | -104,170.00 | .04 |
| 7/13/2026 | 11 | 11-000-221-104-00-001 | SAL OF OTHER PROFESSIONA | Adjustment | .04 | 108,083.00 | 108,083.04 |
| 7/13/2026 | 11 | 11-000-221-104-00-004 | ESY COORDINATOR | Adjustment | 7,062.00 | -2,184.00 | 4,878.00 |
| 7/13/2026 | 11 | 11-000-221-110-00-001 | TECHNOLOGY SALARIES | Adjustment | 336,774.00 | 7,557.00 | 344,331.00 |
| 7/13/2026 | 11 | 11-000-221-176-00-001 | SUPERVISOR OF ELM SALARY | Adjustment | 296,350.00 | -2,000.00 | 294,350.00 |
| 7/13/2026 | 11 | 11-000-240-103-70-001 | PRINCIPALS INTER | Adjustment | 127,996.08 | -127,996.00 | .08 |
| 7/13/2026 | 11 | 11-000-240-103-70-001 | PRINCIPALS INTER | Adjustment | .08 | 124,000.00 | 124,000.08 |
| 7/13/2026 | 11 | 11-000-240-103-75-001 | PRINCIPALS PLC | Adjustment | 156,666.15 | -47,080.00 | 109,586.15 |
| | | | | | | .00 | |

**[Adjustment] Tx: 64227 Budget Transfer request from 6096 Hufman, Christine**

| Date | Fund | Act # | Act Desc | Type | Pre | Adjustment | Post |
|---|---|---|---|---|---|---|---|
| 7/14/2026 | 11 | 11-000-219-000-60-100 | CST SUPPLIES OXY | Adjustment | 1,100.00 | -186.26 | 913.74 |
| 7/14/2026 | 11 | 11-000-219-000-60-100 | CST SUPPLIES MCK | Adjustment | 450.00 | 186.26 | 636.26 |
| | | | | | | .00 | |

Attachments are subject to change without notice

**[Adjustment] Tx: 64342 Budget Transfer request from 6096 Hufman, Christine**

| Date | Fund | Act # | Act Desc | Type | Pre | Adjustment | Post |
|---|---|---|---|---|---|---|---|
| 7/15/2026 | 11 | 11-000-219-390-50-306 | MISC EVALS & TECH SERVICES OXY | Adjustment | 16,000.00 | -1,500.00 | 14,500.00 |
| 7/15/2026 | 11 | 11-000-219-390-75-306 | MISC EVALS & TECH SERVICES PLC | Adjustment | 400.00 | 1,500.00 | 1,900.00 |
| | | | | | | .00 | |

**[Adjustment] Tx: 64384 SETUP NP TECH**

| Date | Fund | Act # | Act Desc | Type | Pre | Adjustment | Post |
|---|---|---|---|---|---|---|---|
| 7/16/2026 | 20 | 20-510-100-600-00-118 | NON PUBLIC TECH ST. MARY'S | Adjustment | .00 | 5,135.00 | 5,135.00 |
| 7/16/2026 | 20 | 20-510-100-600-00-119 | NON PUBLIC TECH AID LCA | Adjustment | .00 | 1,098.00 | 1,098.00 |
| | | | | | | 6,233.00 | |

**[Adjustment] Tx: 64386 NP SECURITY**

| Date | Fund | Act # | Act Desc | Type | Pre | Adjustment | Post |
|---|---|---|---|---|---|---|---|
| 7/16/2026 | 20 | 20-511-200-600-00-118 | NP SECUR AID SUPPLY SM | Adjustment | .00 | 33,201.00 | 33,201.00 |
| 7/16/2026 | 20 | 20-511-200-600-00-119 | NP SECUR AID SUPPLY LCA | Adjustment | .00 | 7,161.00 | 7,161.00 |
| | | | | | | 40,362.00 | |

**[Adjustment] Tx: 64388 SETUP NP NURSING**

| Date | Fund | Act # | Act Desc | Type | Pre | Adjustment | Post |
|---|---|---|---|---|---|---|---|
| 7/16/2026 | 20 | 20-509-100-390-00-300 | NP NURSES SAL. LCA | Adjustment | .00 | 4,077.00 | 4,077.00 |
| 7/16/2026 | 20 | 20-509-100-390-00-300-001 | NP NURSES SAL. ST. MARY | Adjustment | .00 | 19,074.00 | 19,074.00 |
| | | | | | | 23,151.00 | |

**[Adjustment] Tx: 64390 NP TEXT**

| Date | Fund | Act # | Act Desc | Type | Pre | Adjustment | Post |
|---|---|---|---|---|---|---|---|
| 7/16/2026 | 20 | 20-501-100-640-00-118 | NON PUBLIC TXT ST. MARYS | Adjustment | .00 | 7,278.00 | 7,278.00 |
| 7/16/2026 | 20 | 20-501-100-640-00-119 | NON PUBLIC TEXT LCA | Adjustment | .00 | 1,556.00 | 1,556.00 |
| | | | | | | 8,834.00 | |

Attachments are subject to change without notice

**[Adjustment] Tx: 64603 ANTICIPATED INSURANCE CLAIMS**

| Date | Fund | Act # | Act Desc | Type | Pre | Adjustment | Post |
|---|---|---|---|---|---|---|---|
| 7/20/2026 | 11 | 11-000-230-331-00-323 | LEGAL FEES | Adjustment | 87,400.00 | -20,000.00 | 67,400.00 |
| 7/20/2026 | 11 | 11-000-230-820-00-800 | JUDGMENT LITIGATION | Adjustment | .00 | 20,000.00 | 20,000.00 |
| | | | | | | .00 | |

**[Adjustment] Tx: 64650 DISTRICT PRINTING ORDER**

| Date | Fund | Act # | Act Desc | Type | Pre | Adjustment | Post |
|---|---|---|---|---|---|---|---|
| 7/21/2026 | 11 | 11-000-240-600-65-103 | MAIN OFF SUPPLIES OA | Adjustment | 4,382.08 | 317.00 | 4,699.08 |
| 7/21/2026 | 11 | 11-000-251-500-00-500 | OTHER PURCHASED SERVICES | Adjustment | 5,483.00 | -27.00 | 5,456.00 |
| 7/21/2026 | 11 | 11-000-251-600-00-117 | FREE & REDUCED SUPPLIES | Adjustment | 100.00 | 27.00 | 127.00 |
| 7/21/2026 | 11 | 11-190-100-610-65-100 | TEACHING SUPPLY OA | Adjustment | 40,841.00 | -317.00 | 40,524.00 |
| | | | | | | .00 | |

**[Adjustment] Tx: 64669 ASCD MEMBERSHIP**

| Date | Fund | Act # | Act Desc | Type | Pre | Adjustment | Post |
|---|---|---|---|---|---|---|---|
| 7/22/2026 | 11 | 11-000-240-600-00-100 | SUPPLIES AND MATERIALS | Adjustment | 707.92 | -18.00 | 689.92 |
| 7/22/2026 | 11 | 11-000-240-800-50-800 | MAIN OFF MISC EXP OXY | Adjustment | 1,300.00 | 18.00 | 1,318.00 |
| | | | | | | .00 | |

**[Adjustment] Tx: 64900 NEW HIRE-TEACHER OF THE DEAF**

| Date | Fund | Act # | Act Desc | Type | Pre | Adjustment | Post |
|---|---|---|---|---|---|---|---|
| 7/27/2026 | 11 | 11-000-217-100-75-001-001 | TEACHER OF THE DEAF | Adjustment | .00 | 90,783.00 | 90,783.00 |
| 7/27/2026 | 11 | 11-120-100-101-00-001 | GRADE 1 - 5 TEACHERS | Adjustment | 90,883.00 | -90,783.00 | 100.00 |
| | | | | | | .00 | |

**[Adjustment] Tx: 64922 FUND 20 RECON-INTERMEDIATE FITNESS CENTER**

| Date | Fund | Act # | Act Desc | Type | Pre | Adjustment | Post |
|---|---|---|---|---|---|---|---|
| 7/27/2026 | 20 | 20-001-200-600-70-100 | INTERMEDIATE FITNESS ROOM | Adjustment | .00 | 73.09 | 73.09 |
| | | | | | | 73.09 | |

Attachments are subject to change without notice

**[Adjustment] Tx: 65007 FUND 20 RECON-MINI WELLNESS GRANT**

| Date | Fund | Act # | Act Desc | Type | Pre | Adjustment | Post |
|---|---|---|---|---|---|---|---|
| 7/27/2026 | 20 | 20-003-200-600-65-100 | MINI WELLNESS GRANT SUPPLIES OA | Adjustment | .00 | 326.65 | 326.65 |
| | | | | | | **326.65** | |

**[Adjustment] Tx: 65016 FUND 20 RECON-STEAM TANK AWARD**

| Date | Fund | Act # | Act Desc | Type | Pre | Adjustment | Post |
|---|---|---|---|---|---|---|---|
| 7/27/2026 | 20 | 20-006-100-600-70-100 | STEAM TANK AWARD | Adjustment | .00 | 1,500.00 | 1,500.00 |
| | | | | | | **1,500.00** | |

**[Adjustment] Tx: 65018 Budget Transfer request from 6096 Hufman, Christine**

| Date | Fund | Act # | Act Desc | Type | Pre | Adjustment | Post |
|---|---|---|---|---|---|---|---|
| 7/27/2026 | 11 | 11-000-216-320-60-321 | OT/PT/SPEECH SERVICES MCK | Adjustment | 3,000.00 | -925.00 | 2,075.00 |
| 7/27/2026 | 11 | 11-000-216-610-60-100 | OT/PT/SPEECH SUPPLIES MCK | Adjustment | 500.00 | 925.00 | 1,425.00 |
| | | | | | | **.00** | |

**[Adjustment] Tx: 65028 ALL RISK-SKYLIGHT SUPPLEMENT**

| Date | Fund | Act # | Act Desc | Type | Pre | Adjustment | Post |
|---|---|---|---|---|---|---|---|
| 7/28/2026 | 11 | 11-000-261-420-70-400 | INTER BLDG REPAIRS M1 | Adjustment | 41,150.00 | -2,979.34 | 38,170.66 |
| 7/28/2026 | 11 | 11-000-261-420-70-400-001 | ROOF LEAK REPAIR-INTERMEDIATE | Adjustment | 235,925.92 | 2,979.34 | 238,905.26 |
| | | | | | | **.00** | |

**[Adjustment] Tx: 65076 25-26 FUND 20 RECON-TITLE I-STAFFORD C/O**

| Date | Fund | Act # | Act Desc | Type | Pre | Adjustment | Post |
|---|---|---|---|---|---|---|---|
| 7/28/2026 | 20 | 20-231-100-600-00-SCO | TITLE I SUPPLY SM STAFFORD C/O | Adjustment | .00 | 376.54 | 376.54 |
| 7/28/2026 | 20 | 20-231-100-600-60-SCO | TITLE I INSTR SUPPLY MCK STAFFORD C/O | Adjustment | .00 | .72 | .72 |
| 7/28/2026 | 20 | 20-231-100-600-65-SCO | TITLE I INSTR SUPPLY OA STAFFORD C/O | Adjustment | .00 | 53.48 | 53.48 |
| 7/28/2026 | 20 | 20-231-200-600-00-SCO | TITLE I SUPPLIES SM STAFFORD C/O | Adjustment | .00 | 113.09 | 113.09 |
| | | | | | | **543.83** | |

**[Adjustment] Tx: 65080 25-26 FUND 20 RECON-TITLE IIA-STAFFORD C/O**

| Date | Fund | Act # | Act Desc | Type | Pre | Adjustment | Post |
|---|---|---|---|---|---|---|---|
| 7/28/2026 | 20 | 20-270-200-600-01-SCO | TITLE IIA SUPPLY ST MARYS STAFFORD C/O | Adjustment | .00 | 271.64 | 271.64 |
| | | | | | | **271.64** | |

Attachments are subject to change without notice

**[Adjustment] Tx: 65110 25-26 FUND 20 RECON-TITLE IV-STAFFORD C/O**

| Date | Fund | Act # | Act Desc | Type | Pre | Adjustment | Post |
|---|---|---|---|---|---|---|---|
| 7/28/2026 | 20 | 20-280-100-600-00-SCO | TITLE IV INSTR SUPPLY STAFFORD C/O | Adjustment | .00 | 128.46 | 128.46 |
| | | | | | | **128.46** | |

**[Adjustment] Tx: 65117 25-26 FUND 20 RECON-SDA-STAFFORD C/O**

| Date | Fund | Act # | Act Desc | Type | Pre | Adjustment | Post |
|---|---|---|---|---|---|---|---|
| 7/28/2026 | 20 | 20-492-400-450-00-SCO | SDA EMERGENT CAP MAINT STAFFORD CARRY OVER | Adjustment | .00 | 21,077.47 | 21,077.47 |
| | | | | | | **21,077.47** | |

**[Adjustment] Tx: 65125 25-26 FUND 20 RECON-IDEA BASIC-STAFFORD C/O**

| Date | Fund | Act # | Act Desc | Type | Pre | Adjustment | Post |
|---|---|---|---|---|---|---|---|
| 7/28/2026 | 20 | 20-250-200-300-00-SCO | IDEA BASIC SER NP S/CO | Adjustment | .00 | 2,644.71 | 2,644.71 |
| 7/28/2026 | 20 | 20-250-200-300-01-SCO | IDEA BASIC PROF DEVEL STAFFORD CARRYOVER | Adjustment | .00 | 339.64 | 339.64 |
| 7/28/2026 | 20 | 20-250-200-300-60-SCO | IDEA BASIC PROF DEVEL MCK STAFFORD C/O | Adjustment | .00 | 226.49 | 226.49 |
| 7/28/2026 | 20 | 20-250-200-300-65-SCO | IDEA BASIC PROF DEVEL OA STAFFORD C/O | Adjustment | .00 | 226.49 | 226.49 |
| | | | | | | **3,437.33** | |

**[Adjustment] Tx: 65128 25-26 FUND 20 RECON-IDEA PREK-STAFFORD C/O**

| Date | Fund | Act # | Act Desc | Type | Pre | Adjustment | Post |
|---|---|---|---|---|---|---|---|
| 7/28/2026 | 20 | 20-251-100-300-00-SCO | IDEA PREK INSTR PUR SERVICE STAFFORD C/O | Adjustment | .00 | 3,429.95 | 3,429.95 |
| 7/28/2026 | 20 | 20-251-200-300-00-SCO | IDEA PREK PROF DEVELOPMENT STAFFORD CARRYOVER | Adjustment | .00 | 765.77 | 765.77 |
| 7/28/2026 | 20 | 20-251-200-300-01-SCO | IDEA PREK PURCH PROF SERV NP STAFFORD C/O | Adjustment | .00 | 445.00 | 445.00 |
| | | | | | | **4,640.72** | |

**[Adjustment] Tx: 65841 JULY 2026 PAYROLL TRANSFERS-FUND 20**

| Date | Fund | Act # | Act Desc | Type | Pre | Adjustment | Post |
|---|---|---|---|---|---|---|---|
| 7/31/2026 | 20 | 20-218-200-102-00-001 | PRESCHOOL SUPERVISOR OF INSTRUCTION | Adjustment | 70,911.00 | .12 | 70,911.12 |
| 7/31/2026 | 20 | 20-218-200-103-00-001 | PRESCHOOL DIRECTOR | Adjustment | 136,654.00 | -.12 | 136,653.88 |
| | | | | | | **.00** | |

Attachments are subject to change without notice

Acceptance of Donations/Profits
September 2026

| Donator | Amount | To Be Used For | Deposit in Account |
|---|---|---|---|
| Jetty Rock Foundation | $26,376.,69 | Reimbursement of Class Trips 2025-2026 | Ocean Acres Student Activity $1,040<br>PLC Student Activity $6,180<br>McKinley Student Activity $5,814.50 |
| Reynolds Garden Shop | School Supplies (Estimated Value $300) | Supplies for Classes | N/A |
| Helping Hands | School Supplies (Estimated Value $300) | Supplies for Classes | N/A |
| Beach Haven Moose | School Supplies (Estimated Value $300) | Supplies for Classes | N/A |
| The Residence at Stafford | School Supplies (Estimated Value $300) | Supplies for Classes | N/A |

km/9-8-2026

Attachments are subject to change without notice

Acceptance of Donations/Profits
September 2026

| Donator | Amount | To Be Used For | Deposit in Account |
|---|---|---|---|
| Various Parents/Guardians | $741.90 | Lunch Meal Relief for Students in Need | Food Service Donation Account |

km/9-8-2026

Attachments are subject to change without notice

# AIA® Document G731™ – 2019

## *Change Order,* Construction Manager as Adviser Edition

**PROJECT:** *(name and address)*
24K066 Addition and Alterations

Oxycocus Elementary School
250 North Main Street
Manahawkin, New Jersey 08050

**CONTRACT INFORMATION:**
Contract For:
General Construction
Date:
January 23, 2026

**CHANGE ORDER INFORMATION:**
Change Order Number:
GC-04R-2
Date:
September 01, 2026

**OWNER:** *(name and address)*
Stafford Township Board of Education
250 North Main Street
Manahawkin, NJ 08050

**ARCHITECT:** *(name and address)*
Spiezle Architectural Group, Inc.
1395 Yardville Hamilton Square Road, Suite 2A
Hamilton, NJ 08691

**CONTRACTOR:** *(name and address)*
Benjamin R. Harvey Co., Inc.
9 Cindy Lane
Ocean, NJ 07712

**CONSTRUCTION MANAGER:** *(name and address)*
New Road Construction Management Co., Inc.
1876 Greentree Road
Cherry Hill, NJ 08003

**THE CONTRACT IS CHANGED AS FOLLOWS:**
*(Insert a detailed description of the change and, if applicable, attach or reference specific exhibits. Also include agreed upon adjustments attributable to executed Construction Change Directives.)*

COR#108r1 - UV Control Wiring. ADD: $102,185.00

| | | |
|---|---|---|
| The original Contract Sum was | $ | 33,159,000.00 |
| Net change by previously authorized Change Orders | $ | 110,925.39 |
| The Contract Sum prior to this Change Order was | $ | 33,269,925.39 |
| The Contract Sum will be increased by this Change Order in the amount of | $ | 102,185.00 |
| The new Contract Sum including this Change Order will be | $ | 33,372,110.39 |

The Contract time will be unchanged by (0) days.
The Contractor s Work shall be substantially complete on her contract..

**NOTE:** This Change Order does not include adjustments to the Contract Sum or Guaranteed Maximum Price, or the Contract Time, that have been authorized by Construction Change Directive until the cost and time have been agreed upon by both the Owner and Contractor, in which case a Change Order is executed to supersede the Construction Change Directive.

**NOT VALID UNTIL SIGNED BY THE ARCHITECT, CONSTRUCTION MANAGER, CONTRACTOR, AND OWNER.**

**ARCHITECT** *(Signature)*

BY: Justin Kozik, AIA LEED Green Associate, Associate Principal
*(Printed name, title, and license number if required)*

*Date*

**CONSTRUCTION MANAGER** *(Signature)*

BY: Sherri Cross Murphy, Project Executive
*(Printed name and title)*

*Date*

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**User Notes:** (6a90b2e641059918938d253a)

**CONTRACTOR** *(Signature)*

BY: William Coyne, Project Manager
*(Printed name and title)*

*Date*

**OWNER** *(Signature)*

BY: Lourdes LaGuardia, Business Administrative/Board Secretary
*(Printed name and title)*

*Date*

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**User Notes:** (6a90b2e641059918938d253a)

# AIA® Document G731™ – 2019

## *Change Order,* Construction Manager as Adviser Edition

**PROJECT:** *(name and address)*
24K066 Addition and Alterations

Oxycocus Elementary School
250 North Main Street
Manahawkin, New Jersey 08050

**CONTRACT INFORMATION:**
Contract For:
General Construction
Date:
January 23, 2026

**CHANGE ORDER INFORMATION:**
Change Order Number:
GC-02R
Date:
September 01, 2026

**OWNER:** *(name and address)*
Stafford Township Board of Education
250 North Main Street
Manahawkin, NJ 08050

**ARCHITECT:** *(name and address)*
Spiezle Architectural Group, Inc.
1395 Yardville Hamilton Square Road, Suite 2A
Hamilton, NJ 08691

**CONTRACTOR:** *(name and address)*
Benjamin R. Harvey Co., Inc.
9 Cindy Lane
Ocean, NJ 07712

**CONSTRUCTION MANAGER:** *(name and address)*
New Road Construction Management Co., Inc.
1876 Greentree Road
Cherry Hill, NJ 08003

**THE CONTRACT IS CHANGED AS FOLLOWS:**
*(Insert a detailed description of the change and, if applicable, attach or reference specific exhibits. Also include agreed upon adjustments attributable to executed Construction Change Directives.)*

PCO#2 Dated 5/13/26 - Gas Line Modifications. **$59,580.00**

Total amount of **$59,580.00** to be deducted from the $850,000.00 Allowance, leaving an Allowance Balance of **$790,420.00**.

| | | |
|---|---|---|
| The original Contract Sum was | $ | 33,159,000.00 |
| Net change by previously authorized Change Orders | $ | 110,925.39 |
| The Contract Sum prior to this Change Order was | $ | 33,269,925.39 |
| The Contract Sum will be unchanged by this Change Order in the amount of | $ | 0.00 |
| The new Contract Sum including this Change Order will be | $ | 33,269,925.39 |

The Contract time will be unchanged by (0) days.
The Contractor s Work shall be substantially complete on .

**NOTE:** This Change Order does not include adjustments to the Contract Sum or Guaranteed Maximum Price, or the Contract Time, that have been authorized by Construction Change Directive until the cost and time have been agreed upon by both the Owner and Contractor, in which case a Change Order is executed to supersede the Construction Change Directive.

**NOT VALID UNTIL SIGNED BY THE ARCHITECT, CONSTRUCTION MANAGER, CONTRACTOR, AND OWNER.**

**ARCHITECT** *(Signature)*

BY: Justin Kozik, AIA, LEED Green Associate, Associate Principal
*(Printed name, title, and license number if required)*

*Date*

**CONSTRUCTION MANAGER** *(Signature)*

BY: Sherri Cross Murphy, Project Executive
*(Printed name and title)*

*Date*

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**User Notes:** (6a469a4b842e1eaf949e4ecb)

**CONTRACTOR** *(Signature)*

BY: Benjamin Harvey, President
*(Printed name and title)*

*Date*

**OWNER** *(Signature)*

BY: Lourdes LaGuardia, Business Administrator/Board Secretary
*(Printed name and title)*

*Date*

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**User Notes:** (6a469a4b842e1eaf949e4ecb)

# AIA® Document G731™ – 2019

## *Change Order,* Construction Manager as Adviser Edition

**PROJECT:** *(name and address)*
24K066 Addition and Alterations

Oxycocus Elementary School
250 North Main Street
Manahawkin, New Jersey 08050

**CONTRACT INFORMATION:**
Contract For:
General Construction
Date:
January 23, 2026

**CHANGE ORDER INFORMATION:**
Change Order Number:
GC-03R-2
Date:
September 01, 2026

**OWNER:** *(name and address)*
Stafford Township Board of Education
250 North Main Street
Manahawkin, NJ 08050

**ARCHITECT:** *(name and address)*
Spiezle Architectural Group, Inc.
1395 Yardville Hamilton Square Road Suite 2A
Hamilton, NJ 08691

**CONTRACTOR:** *(name and address)*
Benjamin R. Harvey Co., Inc.
9 Cindy Lane
Ocean, NJ 07712

**CONSTRUCTION MANAGER:** *(name and address)*
New Road Construction Management Co., Inc.
1876 Greentree Road
Cherry Hill, NJ 08003

**THE CONTRACT IS CHANGED AS FOLLOWS:**
*(Insert a detailed description of the change and, if applicable, attach or reference specific exhibits. Also include agreed upon adjustments attributable to executed Construction Change Directives.)*

PCO#4 Dated 7/1/26 - Casework and Interior Lighting. $6,622.00
PCO#5 Dated 7/1/26 - Doors and Hardware Revised. $17,320.00
PCO#6 Dated 7/1/26 - Credit for Masonry Control Joint Reduction. ($1,705.00)
COR#7r1 - MUA Civil Updates. $40,321.00
COR#103 - Septic Tank Removal. $33,751.00
COR#107 - Electric Line Alterations Rear Parking Lot. $2,053.00
COR#109 - UV Opening Masonry Preparation. $7,102.00
COR#012r1 - Steel Beam in Library. $14,275.00

Total amount of **$119,739.00** to be deducted from the **$790,420.00** Allowance Balance, leaving an Allowance Balance of **$670,681.00.**

| | | |
|---|---|---|
| The original Contract Sum was | $ | 33,159,000.00 |
| Net change by previously authorized Change Orders | $ | 110,925.39 |
| The Contract Sum prior to this Change Order was | $ | 33,269,925.39 |
| The Contract Sum will be unchanged by this Change Order in the amount of | $ | 0.00 |
| The new Contract Sum including this Change Order will be | $ | 33,269,925.39 |

The Contract time will be unchanged by (0) days.
The Contractor s Work shall be substantially complete on .

**NOTE:** This Change Order does not include adjustments to the Contract Sum or Guaranteed Maximum Price, or the Contract Time, that have been authorized by Construction Change Directive until the cost and time have been agreed upon by both the Owner and Contractor, in which case a Change Order is executed to supersede the Construction Change Directive.

**NOT VALID UNTIL SIGNED BY THE ARCHITECT, CONSTRUCTION MANAGER, CONTRACTOR, AND OWNER.**

Attachments are subject to change without notice

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**User Notes:** (6a68cc30e70d4895db03bdd7)

**ARCHITECT** *(Signature)*

BY: Justin Kozik, AIA, LEED Green Associate, Associate Principal

*(Printed name, title, and license number if required)*

*Date*

**CONSTRUCTION MANAGER** *(Signature)*

BY: Sherri Cross Murphy, Project Executive

*(Printed name and title)*

*Date*

**CONTRACTOR** *(Signature)*

BY: William Coyne, Project Manager

*(Printed name and title)*

*Date*

**OWNER** *(Signature)*

BY: Lourdes LaGuardia, Business Administrator/Board Secretary

*(Printed name and title)*

*Date*

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**User Notes:** (6a68cc30e70d4895db03bdd7)

***Stafford Township School District***
***Office of Instructional Services***
***Manahawkin, NJ 08050***
***Professional Development Requests***
***For Approval at:9/17/2026 Board of Education Meeting***

| *Date of Workshop* | *Provider, Location (Description/"Title")* | *Attendance is Mandatory (M), Optional (O), ETTC Hours (E)* | *Attendee* | *If Annual Event: total Attendance and Cost for Previous Year* | *Total Cost for Each Date, Each Attendee* |
|---|---|---|---|---|---|
| 9/25, 10/23, 11/20, 12/18, 1/29/27, 2/19/27, 3/19/27, 4/23/27 June, July & Aug dates TBD | Ocean County Assoc of School Business Officials, Monthly county Meetings | M | Lourdes LaGuardia | | $70.00 (travel fee) |
| 11/10/26 | Strauss Esmay Assoc., LLC Harassment, Intimidation or Bullying (HIB) Training Program, OCC Conference Center, Toms River | M | Hope Zaun<br>Lily Sherbet | | $145.00 + 35.56 (travel)= $175.56 |
| 10/6/2026 | Strauss Esmay Assoc., LLC, NJ FMLA and Federal Family and Medical Leave Training Training | O | Stephanie Bush | | $145.00 + 35.56 (travel)=175.56 |
| 9/18, 10/9, 11/20, 12/8, 1/8/27, 2/19, 3/19, 4/16, 6/4 | Ocean County Curriculum Consortium (OC3) Monthly county meetings | M | Megan Banach | | $489.60 (travel) |
| 9/14/26 | NJASA Convocation with NJDOE Commissioner Dr. Lily Laux- East Brunswick Magnet HS, East Brunswick | O | George Chidiac<br>Stephanie Bush | | 69.08 x 2= $138.16 (travel) |
| 9/17/26, 10/27, 11/17, 12/10, 2/16/27, 3/23, 4/20 | NJASBO- Various subjects, HR & the BA, BA as Chief Risk Mgr, Payroll & the BA, Office Automation for the BA: Policy : Audi Prep | O | Lourdes LaGuardia | | $1,194+ 263.80 (travel)= $1457.80 |
| 10/16/2026 | NJ-International Dyslexia Assoc. The 41st Annual Fall conference- Framing the Future from Data to Dynamic Literacy Instruction, Hilton East Brunswick, NJ | O | Elizabeth Bradley | | $270.00= $125 (ESSA) + 145 (local) |
| 11/17/26 | NJASBO Payroll and the BA, Westin, Mt. Laurel | O | Caroyln Timpanaro<br>Jeanette Lockwood | | $218 + $47.30 (travel)= $265.30 x 2= $530.60 |
| 3/23/2027, 5/18/2027 | NJASBO Accounts Payable & Purchasing Updates, Westin, Mt. Laurel | O | Jeanette Lockwood<br>Skylar Amoroso | | $218 + $47.30 (travel)= $265.30 x4= $1,061.20 |
| 10/26, 10/27/2027 | AENJ 2026 Conference, Princeton | O | Suzy Willadesen<br>Jennifer LaRussa | | $165.00 x 2= $330.00 ($250 ESSA, $80 local) |

The Superintendent has reviewed all documentation for compliance with NJAC 6A:23A-7.5 and said documentation is available upon request. *bp*

Attachments are subject to change without notice

**Stafford Township School DIstrict Curriculum Guide**

| Grade: 1 | Content Area: Science |
|---|---|

**Original Adoption:** 2020 NJSLS Science, Social Studies, Career Readiness, Life Literacies & Key Skills, Computer Design & Thinking, Visual & Performing Arts, World Language, Comprehensive Health and Physical Education (9-12-22); 2023 NJSLS English Language Arts (9-23-24); Math NJSLS Mathematics (9-23-24)

**Created By: Julie Seegers**

**Updated Date: September 17, 2026**

**Updated By: Megan Banach**

Intent and Spirit

The New Jersey Student Learning Standards for Science (NJSLS-S) describe the expectations for what students should know and be able to do as well as promote three-dimensional science instruction across the three science domains (i.e., physical sciences, life science, Earth and space sciences). From the earliest grades, the expectation is that students will engage in learning experiences that enable them to investigate phenomena, design solutions to problems, make sense of evidence to construct arguments, and critique and discuss those arguments (in appropriate ways relative to their grade level).

The foundation of the NJSLS-S reflects three dimensions — science and engineering practices, disciplinary core ideas, and crosscutting concepts. The performance expectations are derived from the interplay of these three dimensions. It is essential that these three components are integrated into all learning experiences. Within each standard document, the three dimensions are intentionally presented as integrated components to foster sensemaking and designing solutions to problems. Because the NJSLS-S is built on the notions of coherence and contextuality, each of the science and engineering practices and crosscutting concepts appear multiple times across topics and at every grade level. Additionally, the three dimensions should be an integral part of every curriculum unit and should not be taught in isolation.

Mission

All students will develop an understanding of scientific concepts and processes essential for informed decision-making, meaningful participation in civic life, and readiness for postsecondary opportunities, including careers in STEM fields.

Vision

Prepare students to become scientifically literate individuals who can effectively:

- Apply scientific thinking, skills, and understanding to real-world phenomena and problems;
- Engage in systems thinking and modeling to explain phenomena and to give a context for the ideas to be learned;
- Conduct investigations, solve problems, and engage in discussions;
- Discuss open-ended questions that focus on the strength of the evidence used to generate claims;
- Read and evaluate multiple sources, including science-related magazine and journal articles and web-based resources to gain knowledge about current and past science problems and solutions and develop well-reasoned claims; and
- Communicate ideas through journal articles, reports, posters, and media presentations that explain and argue.

Attachments are subject to change without notice

**Stafford Township School DIstrict Curriculum Guide**

| Grade: 1 | Content Area: Science |
|---|---|

| Recommended Pacing Guide | |
|---|---|
| **Unit 1** | **35 Days** |
| **Unit 2** | **31 Days** |
| **Unit 3** | **25 Days** |
| **Unit 4** | **20 Days** |

**Alignment with State Mandates**

The following colors are used throughout this document to indicate areas in which the curriculum is aligned with the following NJSA requirements:

- Holocaust and genocides (N.J.S.A. 18A:35-28)
- History and contributions of African-Americans (Amistad Law) (N.J.S.A. 18A:35-4.43)
- Highlight and promote diversity and inclusion (Diversity & Inclusion Law) (N.J.S.A. 18A:35-4.36a)
- History of disabled and LGBT persons included in middle and high school curriculum (Section 18A:35-4.35 )
- Asian Americans and Pacific Islanders (N.J.S.A18A:35-4.44)
- Climate Change - to prepare students to understand how and why climate change happens, the impact it has on our local and global communities and to act in informed and sustainable ways. Please click here for specific examples (by subject).

Students are expected to develop understanding of the relationship between sound and vibrating materials as well as between the availability of light and ability to see objects. The idea that light travels from place to place can be understood by students at this level through determining the effect of placing objects made with different materials in the path of a beam of light. Students are also expected to develop understanding of how plants and animals use their external parts to help them survive, grow, and meet their needs as well as how behaviors of parents and offspring help the offspring survive. The understanding is developed that young plants and animals are like, but not exactly the same as, their parents. Students are able to observe, describe, and predict some patterns of the movement of objects in the sky.

Attachments are subject to change without notice

**Stafford Township School DIstrict Curriculum Guide**

| Grade: 1 | Content Area: Science |
|---|---|

| Unit: 1 Waves: Applications in Technologies for Information and Their Transfer | Duration: 35 days (September – December) |
|---|---|

## Suggested Accommodations

**English Language Learners:**
- Provide extra time
- Preview lessons
- Graphic organizers
- Build background knowledge
- Review vocabulary words
- Provide manipulatives or the opportunity to draw solution strategies
- Provide differentiated instruction as needed

**Special Education/Students with Disabilities:**
- provide extra time
- Follow all IEP modifications
- Provide manipulatives or the opportunity to draw solution strategies
- Provide differentiated instruction as needed

**504 Plans:**
- Provide extra time
- Follow all 504 plan modifications
- Provide manipulatives or the opportunity to draw solution strategies
- Provide differentiated instruction as needed

**Gifted and Talented:**
- Higher level questioning
- Student design questions
- Expose to sophisticated vocabulary

**Students at Risk of Failure:**
- Small group instruction
- Frequent breaks
- Model how assignments should look
- Incorporate social/emotional discussions
- Encourage and monitor positive peer collaboration
- Provide academic resources for both home and school use
- Provide incentives to increase motivation and collaboration

**Economically Disadvantaged:**
- Extra Materials
- Books for Home
- Study Guides
- “Take Home” Kit

**Culturally Diverse:**
- Small group instruction
- Frequent breaks
- Model how assignments should look
- Incorporate social/emotional discussions
- Encourage and monitor positive peer collaboration
- Provide academic resources for both home and school use
- Provide incentives to increase motivation and collaboration

Attachments are subject to change without notice

**Stafford Township School DIstrict Curriculum Guide**

| Grade: 1 | Content Area: Science |
|---|---|

| New Jersey Student Learning Standards | |
|---|---|
| 1-PS4-1 | Plan and conduct investigations to provide evidence that vibrating materials can make sound and that sound can make materials vibrate. |
| 1-PS4-2 | Make observations to construct an evidence-based account that objects in darkness can be seen only when illuminated. |
| 1-PS4-3 | Plan and conduct investigations to determine the effect of placing objects made with different materials in the path of a beam of light. |
| 1-PS4-4 | Use tools and materials to design and build a device that uses light or sound to solve the problem of communicating over a distance. |

| | |
|---|---|
| Science and Engineering Practices Learning Progressions | **Planning and Carrying Out Investigations**<br>Planning and carrying out investigations to answer questions or test solutions to problems in K–2 builds on prior experiences and progresses to simple investigations, based on fair tests, which provide data to support explanations or design solutions.<br>Plan and conduct investigations collaboratively to produce data to serve as the basis for evidence to answer a question. (1-PS4-1), (1- PS4-3)<br>**Constructing Explanations and Designing Solutions**<br>Constructing explanations and designing solutions in K–2 builds on prior experiences and progresses to the use of evidence and ideas in constructing evidence-based accounts of natural phenomena and designing solutions.<br><br>Make observations (firsthand or from media) to construct an evidence-based account for natural phenomena. (1-PS4-2)<br><br>Use tools and materials provided to design a device that solves a specific problem. (1-PS4-4) |
| **Discipline Core Ideas**<br><br>Physical Science Learning Progressions<br><br>Earth & Space Science Learning Progressions<br><br>Life Science Learning Progressions | **PS4.A: Wave Properties**<br>Sound can make matter vibrate, and vibrating matter can make sound. (1-PS4-1)<br>**PS4.B: Electromagnetic Radiation**<br>Objects can be seen if light is available to illuminate them or if they give off their own light. (1- PS4-2)<br><br>Some materials allow light to pass through them, others allow only some light through and others block all the light and create a dark shadow on any surface beyond them, where the light cannot reach. Mirrors can be used to redirect a light beam. (1-PS4-3)<br><br>**PS4.C: Information Technologies and Instrumentation**<br>People also use a variety of devices to communicate (send and receive information) over long distances. (1-PS4-4) |
| Crosscutting Concepts | **Cause and Effect**<br>Simple tests can be designed to gather evidence to support or refute student ideas about causes. (1-PS4-1), (1-PS4-2), (1-PS4-3**)** |

Attachments are subject to change without notice

**Stafford Township School DIstrict Curriculum Guide**

| Grade: 1 | Content Area: Science |
|---|---|

| | |
|---|---|
| | ***Connections to Engineering, Technology, and Applications of Science***<br><br>**Influence of Engineering, Technology, and Science, on Society and the Natural World**<br>People depend on various technologies in their lives; human life would be very different without technology. (1-PS4-4)<br>***Connections to Nature of Science***<br>**Scientific Investigations Use a Variety of Methods**<br>Science investigations begin with a question. (1-PS4-1)<br>Scientists use different ways to study the world. (1-PS4-1) |
| Engineering, Technology and the Application of Science Learning Progressions | |

**Interdisciplinary Connections**

| ELA Standards | |
|---|---|
| W.1.2 | Write informative/explanatory texts in which they name a topic, supply some facts about the topic, and provide some sense of closure. |
| W.1.7 | Participate in shared research and writing projects (e.g., explore a number of “how-to” books on a given topic and use them to write a sequence of instructions). |
| W.1.8 | With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question. |
| SL.1.1 | Participate in collaborative conversations with diverse partners about grade 1 topics and texts with peers and adults in small and larger groups. |
| **Math Standards** | |
| MP.5 | Use appropriate tools strategically. |
| 1.MD.A.1 | Order three objects by length; compare the lengths of two objects indirectly by using a third object. |
| 1.MD.A.2 | Express the length of an object as a whole number of length units, by layering multiple copies of a shorter object (the length unit) end to end; understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps. |
| **Social Studies Standards** | |
| 6.1.2.CivicsCM.3 | Explain how diversity, tolerance, fairness, and respect for others can contribute to individuals feeling accepted. |
| 6.1.12.CivicsDP.5.a | Analyze the effectiveness of governmental policies and of actions by groups and individuals to address discrimination against new immigrants, Native Americans, and African American |

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**Stafford Township School DIstrict Curriculum Guide**

| Grade: 1 | Content Area: Science |
|---|---|

| Computer Science & Design Thinking |
|---|
| • 8.1.2.CS.1: Select and operate computing devices that perform a variety of tasks accurately and quickly based on user needs and preferences.<br>• 8.1.2.CS.2: Explain functions of common software and hardware components of computing systems.<br>• 8.1.2.IC.1: Compare how individuals live and work before and after the implementation of new computing technology.<br>• 8.1.2.DA.4: Make predictions based on data using charts or graphs.<br>• 8.2.2.ITH.3: Identify how technology impacts or improves life<br>• 8.2.2.EC.1: Identify and compare technology used in different schools, communities, regions, and parts of the world. |

| Career Readiness, Life Literacies & Key Skills |
|---|
| • 9.1.2.CR.1: Recognize ways to volunteer in the classroom, school and community.<br>• 9.1.2.RM.1: Describe how valuable items might be damaged or lost and ways to protect them<br>• 9.2.2.CAP.1: Make a list of different types of jobs and describe the skills associated with each job<br>• 9.4.2.CI.1: Demonstrate openness to new ideas and perspectives (e.g., 1.1.2.CR1a, 2.1.2.EH.1, 6.1.2.CivicsCM.2).<br>• 9.4.2.DC.7: Describe actions peers can take to positively impact climate change.<br>• 9.4.2.DC.6: Identify respectful and responsible ways to communicate in digital environments.<br>• 9.4.2.CT.3: Use a variety of types of thinking to solve problems (e.g., inductive, deductive) |

| | |
|---|---|
| Act as a responsible and contributing community member and employee. | Students understand the obligations and responsibilities of being a member of a community, and they demonstrate this understanding every day through their interactions with others. They are conscientious of the impacts of their decisions on others and the environment around them. They think about the near-term and long-term consequences of their actions and seek to act in ways that contribute to the betterment of their teams, families, community and workplace. They are reliable and consistent in going beyond the minimum expectation and in participating in activities that serve the greater good. |
| Attend to financial well-being. | Students take regular action to contribute to their personal financial well-being, understanding that personal financial security provides the peace of mind required to contribute more fully to their own career success. |
| Consider the environmental, social and economic impacts of decisions. | Students understand the interrelated nature of their actions and regularly make decisions that positively impact and/or mitigate negative impact on other people, organization, and the environment. They are aware of and utilize new technologies, understandings, procedures, materials, and regulations affecting the nature of their work as it relates to the impact on the social condition, the environment and the profitability of the organization. |

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| Grade: 1 | Content Area: Science |
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| Demonstrate creativity and innovation. | Students regularly think of ideas that solve problems in new and different ways, and they contribute those ideas in a useful and productive manner to improve their organization. They can consider unconventional ideas and suggestions as solutions to issues, tasks or problems, and they discern which ideas and suggestions will add greatest value. They seek new methods, practices, and ideas from a variety of sources and seek to apply those ideas to their own workplace. They take action on their ideas and understand how to bring innovation to an organization. |
| Utilize critical thinking to make sense of problems and persevere in solving them. | Students readily recognize problems in the workplace, understand the nature of the problem, and devise effective plans to solve the problem. They are aware of problems when they occur and take action quickly to address the problem; they thoughtfully investigate the root cause of the problem prior to introducing solutions. They carefully consider the options to solve the problem. Once a solution is agreed upon, they follow through to ensure the problem is solved, whether through their own actions or the actions of others. |
| Model integrity, ethical leadership and effective management. | Students consistently act in ways that align personal and community-held ideals and principles while employing strategies to positively influence others in the workplace. They have a clear understanding of integrity and act on this understanding in every decision. They use a variety of means to positively impact the directions and actions of a team or organization, and they apply insights into human behavior to change others' actions, attitudes and/or beliefs. They recognize the near-term and long-term effects that management's actions and attitudes can have on productivity, morals and organizational culture. |
| Plan education and career paths aligned to personal goals. | Students take personal ownership of their own education and career goals, and they regularly act on a plan to attain these goals. They understand their own career interests, preferences, goals, and requirements. They have perspective regarding the pathways available to them and the time, effort, experience and other requirements to pursue each, including a path of entrepreneurship. They recognize the value of each step in the education and experiential process, and they recognize that nearly all career paths require ongoing education and experience. They seek counselors, mentors, and other experts to assist in the planning and execution of career and personal goals. |
| Use technology to enhance productivity, increase collaboration and communicate effectively. | Students find and maximize the productive value of existing and new technology to accomplish workplace tasks and solve workplace problems. They are flexible and adaptive in acquiring new technology. They are proficient with ubiquitous technology applications. They understand the inherent risks-personal and organizational-of technology applications, and they take actions to prevent or mitigate these risks. |
| Work productively in teams while using cultural/global competence. | Students positively contribute to every team, whether formal or informal. They apply an awareness of cultural differences to avoid barriers to productive and positive interaction. They find ways to increase the engagement and contribution of all team members. They plan and facilitate effective team meetings. |

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| Essential Understandings | Essential Questions |
|---|---|
| *Students will understand that...* | • How and why do materials create sound through vibration? |

| Grade: 1 | Content Area: Science |
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|---|---|
| • Simple tests can be designed to gather evidence to support or refute student ideas about causes.<br>• People depend on various technologies in their lives; human life would be very different without technology. | • How and why does sound cause materials to vibrate?<br>• How does light and where it is located affect our ability to see objects?<br>• What are different ways you can communicate over a distance using light and/or sound? |

**Evidence of Student Learning**

| **Performance Tasks:** *Activities to provide evidence for student learning of content and cognitive skills.* | **Other Assessments** |
|---|---|
| Students will make shadow puppet theater.<br>Students will make shadow puppet characters using black construction paper and sticks. They will construct a "theater" using a box and white paper. Students will shine a light behind the box to present a story.<br>http://www.firstgradeadventure.com/tag/light/ | **Formative Assessments**<br>• Cooperative Group Learning<br>• Teacher Observations<br>• Turn and Talk<br>**Summative Assessments**<br>• Lab / Recording sheet<br>• Unit Assessment<br>**Benchmark Assessment**<br>• Exit Ticket with Rubric<br>**Alternative Assessments**<br>• Mystery Science Activities |

**Knowledge and Skills**

| **Content** | **Skills** |
|---|---|
| *Students will know…*<br>• sound can make matter vibrate<br>• vibrating matter can make sound<br>• objects can be seen if light is available to illuminate them or if they give off their own light<br>• some materials allow light to pass through them, others allow only some light through and others block all the light and create a dark shadow on any surface beyond them, where the light cannot reach<br>• mirrors can be used to redirect a light beam<br>• people also use a variety of devices to communicate (send and receive information) over long distances | *Students will be able to…*<br>• Plan and conduct investigations collaboratively to produce evidence to answer a question.<br>• Make observations (firsthand or from media) to construct an evidence-based account for natural phenomena.<br>• Use tools and materials provided to design a device that solves a specific problem.<br>• Plan and conduct investigations with questions using different materials.<br>• Study the world using different ways. |

**Instructional Plan**

| **Suggested Activities** | **Resources** |
|---|---|
| **How do they make silly sounds in cartoons?**<br>Students investigate vibrations as a source of sound effects for movies. | https://mysteryscience.com/light/properties-of-light-sound?r=6359979#light-1.0 |

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| Grade: 1 | Content Area: Science |
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|---|---|
| **Where do sounds come from?**<br>Students explore the sounds made by different kinds of instruments, and discover what happens when vibrations start—and when they stop. | https://mysteryscience.com/light/mystery-2/sounds-vibrations/144?r=6359979 |
| **Can you see in the dark?**<br>Students visit a cave and discover that when it's dark (really dark!) he can't see anything. | https://mysteryscience.com/light/mystery-4/illumination/137?r=6359979 |

| | |
|---|---|
| **How could you send a secret message to someone far away?**<br>Students practice using light to communicate information. Students send secret messages to one another using patterns of light and color. | https://mysteryscience.com/light/mystery-5/engineering-communication/151?r=6359979 |
| **How do boats find their way in the fog?**<br>Students discover how the sights and sounds on the bay can help boats find their way. | https://mysteryscience.com/light/mystery-6/lights-sounds-communication/155?r=6359979 |

**Literature**

- *The Listening Walk* by Paul Showers
- *All About Sound* by Lisa Trumbauer
- *All About Light* by Lisa Trumbauer
- *Fireflies* by Julie Brinckloe
- *Nothing Sticks Like a Shadow* by Ann Tompert
- *Shadows* by Carolyn B. Otto

**Websites**

| | |
|---|---|
| ww.teachertube.com/video/sound-for-first-grade-209689http://w | Video: Sound and Vibrations |
| http://www.alvordschools.org/cms/lib8/CA01900929/Centricity/Domain/2616/1st%20Grade%20Teachers%20Guide%20Complete.pdf | Waves: Light and Sound unit of study |
| www.google.com/search?q=scishowkids.sound&rlz=1CAASUD_enUS743&oq=scishowkids.sound&aqs=chrome..69i57.12454j0j7&sourceid=chrome&ie=UTF-8&safe=active&ssui=on | Video: What is sound? |

| | |
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| **Unit: 2 Waves: Applications in Technologies for Information and Their Transfer** | **Duration: 35 days (September – December)** |

**Suggested Accommodations**

**English Language Learners:**

- Provide extra time
- Preview lessons

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| Grade: 1 | Content Area: Science |
|---|---|

- Graphic organizers
- Build background knowledge
- Review vocabulary words
- Provide manipulatives or the opportunity to draw solution strategies
- Provide differentiated instruction as needed

**Special Education/Students with Disabilities:**

- provide extra time
- Follow all IEP modifications
- Provide manipulatives or the opportunity to draw solution strategies
- Provide differentiated instruction as needed

**504 Plans:**

- Provide extra time
- Follow all 504 plan modifications
- Provide manipulatives or the opportunity to draw solution strategies
- Provide differentiated instruction as needed

**Gifted and Talented:**

- Higher level questioning
- Student design questions
- Expose to sophisticated vocabulary

**Students at Risk of Failure:**

- Small group instruction
- Frequent breaks
- Model how assignments should look
- Incorporate social/emotional discussions
- Encourage and monitor positive peer collaboration
- Provide academic resources for both home and school use
- Provide incentives to increase motivation and collaboration

**Economically Disadvantaged:**

- Extra Materials
- Books for Home
- Study Guides
- “Take Home” Kit

**Culturally Diverse:**

- Small group instruction
- Frequent breaks
- Model how assignments should look
- Incorporate social/emotional discussions
- Encourage and monitor positive peer collaboration
- Provide academic resources for both home and school use
- Provide incentives to increase motivation and collaboration

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| New Jersey Student Learning Standards | |
|---|---|
| 1-ESS1-1 | Use observations of the sun, moon, and stars to describe patterns that can be predicted. |
| 1-ESS1-2 | Make observations at different times of year to relate the amount of daylight to the time of year. |

**Stafford Township School DIstrict Curriculum Guide**

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|---|---|
| Science and Engineering Practices Learning Progressions | **Planning and Carrying out Investigations**<br>Planning and carrying out investigations to answer questions or test solutions to problems in K–2 builds on prior experiences and progresses to simple investigations, based on fair tests, which provide data to support explanations or design solutions. Make observations (firsthand or from media) to collect data that can be used to make comparisons. (1-ESS1-2)<br>**Analyzing and Interpreting Data**<br>Analyzing data in K–2 builds on prior experiences and progresses to collecting, recording, and sharing observations. Use observations (firsthand or from media) to describe patterns in the natural world in order to answer scientific questions. (1- ESS1-1) |
| **Discipline Core Ideas**<br><br>Physical Science Learning Progressions<br><br>Earth & Space Science Learning Progressions<br><br>Life Science Learning Progressions | **ESS1.A: The Universe and its Stars**<br>Patterns of the motion of the sun, moon, and stars in the sky can be observed, described, and predicted. (1-ESS1-1)<br><br>**ESS1.B: Earth and the Solar System**<br><br>Seasonal patterns of sunrise and sunset can be observed, described, and predicted. (1-ESS1-2) |
| Crosscutting Concepts | **Patterns**<br>Patterns in the natural world can be observed, used to describe phenomena, and used as evidence. (1-ESS1-1), (1-ESS1-2)<br>**Connections to Nature of Science**<br>Scientific Knowledge Assumes an Order and Consistency in Natural Systems Science assumes natural events happen today as they happened in the past. (1-ESS1-1) Many events are repeated. (1- ESS1-1) |
| Engineering, Technology and the Application of Science Learning Progressions | |

| Interdisciplinary Connections | |
|---|---|
| | **ELA Standards** |
| W.1.7 | Participate in shared research and writing projects (e.g., explore a number of “how-to” books on a given topic and use them to write a sequence of instructions). |
| W.1.8 | With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question. |
| SL.1.1 | Participate in collaborative conversations with diverse partners about grade 1 topics and texts with peers and adults in small and larger groups. |

| | **Math Standards** |
|---|---|
| MP.2 | Reason abstractly and quantitatively. |
| MP.4 | Model with mathematics. |

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| Grade: 1 | Content Area: Science |
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| MP.5 | Use appropriate tools strategically. |
| 1.OA.A.1 | Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations to represent the problem. |
| 1.MD.C.4 | Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another. |
| **Social Studies Standards** | |
| 6.1.2.CivicsCM.3 | Explain how diversity, tolerance, fairness, and respect for others can contribute to individuals feeling accepted. |
| 6.1.12.CivicsDP.5.a | Analyze the effectiveness of governmental policies and of actions by groups and individuals to address discrimination against new immigrants, Native Americans, and African American |

**Computer Science & Design Thinking**

- 8.1.2.CS.1: Select and operate computing devices that perform a variety of tasks accurately and quickly based on user needs and preferences.
- 8.1.2.CS.2: Explain functions of common software and hardware components of computing systems.
- 8.1.2.IC.1: Compare how individuals live and work before and after the implementation of new computing technology.
- 8.1.2.DA.4: Make predictions based on data using charts or graphs.
- 8.2.2.ITH.3: Identify how technology impacts or improves life
- 8.2.2.EC.1: Identify and compare technology used in different schools, communities, regions, and parts of the world.

**Career Readiness, Life Literacies & Key Skills**

- 9.1.2.CR.1: Recognize ways to volunteer in the classroom, school and community.
- 9.1.2.RM.2: Describe how valuable items might be damaged or lost and ways to protect them
- 9.2.2.CAP.1: Make a list of different types of jobs and describe the skills associated with each job
- 9.4.2.CI.1: Demonstrate openness to new ideas and perspectives (e.g., 1.1.2.CR1a, 2.1.2.EH.1, 6.1.2.CivicsCM.2).
- 9.4.2.DC.7: Describe actions peers can take to positively impact climate change.
- 9.4.2.DC.6: Identify respectful and responsible ways to communicate in digital environments.
- 9.4.2.CT.3: Use a variety of types of thinking to solve problems (e.g., inductive, deductive)

| | |
|---|---|
| Act as a responsible and contributing | Students understand the obligations and responsibilities of being a member of a community, and they demonstrate this understanding every day through their interactions with others. They are conscientious of the impacts of their decisions on |

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| Grade: 1 | Content Area: Science |
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| community member and employee. | others and the environment around them. They think about the near-term and long-term consequences of their actions and seek to act in ways that contribute to the betterment of their teams, families, community and workplace. They are reliable and consistent in going beyond the minimum expectation and in participating in activities that serve the greater good. |
| Attend to financial well-being. | Students take regular action to contribute to their personal financial well-being, understanding that personal financial security provides the peace of mind required to contribute more fully to their own career success. |
| Consider the environmental, social and economic impacts of decisions. | Students understand the interrelated nature of their actions and regularly make decisions that positively impact and/or mitigate negative impact on other people, organization, and the environment. They are aware of and utilize new technologies, understandings, procedures, materials, and regulations affecting the nature of their work as it relates to the impact on the social condition, the environment and the profitability of the organization. |
| Demonstrate creativity and innovation. | Students regularly think of ideas that solve problems in new and different ways, and they contribute those ideas in a useful and productive manner to improve their organization. They can consider unconventional ideas and suggestions as solutions to issues, tasks or problems, and they discern which ideas and suggestions will add greatest value. They seek new methods, practices, and ideas from a variety of sources and seek to apply those ideas to their own workplace. They take action on their ideas and understand how to bring innovation to an organization. |
| Utilize critical thinking to make sense of problems and persevere in solving them. | Students readily recognize problems in the workplace, understand the nature of the problem, and devise effective plans to solve the problem. They are aware of problems when they occur and take action quickly to address the problem; they thoughtfully investigate the root cause of the problem prior to introducing solutions. They carefully consider the options to solve the problem. Once a solution is agreed upon, they follow through to ensure the problem is solved, whether through their own actions or the actions of others. |
| Model integrity, ethical leadership and effective management. | Students consistently act in ways that align personal and community-held ideals and principles while employing strategies to positively influence others in the workplace. They have a clear understanding of integrity and act on this understanding in every decision. They use a variety of means to positively impact the directions and actions of a team or organization, and they apply insights into human behavior to change others' actions, attitudes and/or beliefs. They recognize the near-term and long-term effects that management's actions and attitudes can have on productivity, morals and organizational culture. |
| Plan education and career paths aligned to personal goals. | Students take personal ownership of their own education and career goals, and they regularly act on a plan to attain these goals. They understand their own career interests, preferences, goals, and requirements. They have perspective regarding the pathways available to them and the time, effort, experience and other requirements to pursue each, including a path of entrepreneurship. They recognize the value of each step in the education and experiential process, and they recognize that nearly all career paths require ongoing education and experience. They seek counselors, mentors, and other experts to assist in the planning and execution of career and personal goals. |
| Use technology to enhance | Students find and maximize the productive value of existing and new technology to accomplish workplace tasks and solve workplace problems. They are flexible and |

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| Grade: 1 | Content Area: Science |
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| | |
|---|---|
| productivity, increase collaboration and communicate effectively. | adaptive in acquiring new technology. They are proficient with ubiquitous technology applications. They understand the inherent risks-personal and organizational-of technology applications, and they take actions to prevent or mitigate these risks. |
| Work productively in teams while using cultural/global competence. | Students positively contribute to every team, whether formal or informal. They apply an awareness of cultural differences to avoid barriers to productive and positive interaction. They find ways to increase the engagement and contribution of all team members. They plan and facilitate effective team meetings. |

| **Essential Understandings** | **Essential Questions** |
|---|---|
| *Students will understand that...*<br>● *Students will understand that…*<br>● Patterns in the natural world can be observed, used to describe phenomena, and used as evidence.<br>● Science assumes natural events happen today as they happened in the past.<br>● Many events are repeated. | ● What predictable, observable patterns occur due to the motion of the sun, moon, and stars?<br>● How is the amount of daylight related to the time of year? |

| **Evidence of Student Learning** | |
|---|---|
| **Performance Tasks:** *Activities to provide evidence for student learning of content and cognitive skills.* | **Other Assessments** |
| Students will create and display a graph of the day length throughout the year, by plotting the time of sunrise and sunset for each month. Students will notice the really long days of summer, the short days of winter and also how quickly the day length changes in the Spring and Fall. | **Formative Assessments**<br>● Teacher Observations<br>● Anecdotal Notes<br>**Summative Assessments**<br>● Unit Assessment<br>**Benchmark Assessment**<br>● Exit Ticket with Rubric<br>**Alternative Assessments**<br>● Mystery Science Activities |

| **Knowledge and Skills** | |
|---|---|
| **Content** | **Skills** |
| *Students will know…*<br>● patterns of the motion of the sun, moon, and stars in the sky can be observed, described, and predicted<br>● seasonal patterns of sunrise and sunset can be observed, described, and predicted | *Students will be able to…*<br>● Make observations (firsthand or from media) to collect data that can be used to make comparisons.<br>● Use observations (firsthand or from media) to describe patterns in the natural world in order to answer scientific questions. |

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| Instructional Plan | |
|---|---|
| **Suggested Activities** | **Resources** |
| **Could a statue's shadow move?**<br>Students investigate what it takes to make a stationary object's shadow move, and reflect on what this means about the sun's place in the sky. | https://mysteryscience.com/sk<br>shadows-daily-patterns/82?r= |
| **What does your shadow do when you are not looking?**<br>Students explore how (and why) her shadow changes over the course of a day at the beach. | https://mysteryscience.com/sk<br>shadows-daily-patterns/138?r |
| **How can the sun help you if you're lost?**<br>Students develop a model of the sun's daily path across the sky, then use this model to help someone who's lost. | https://mysteryscience.com/sk<br>patterns/81?r=6359979 |
| **Why do you have to go to bed early in the summer?**<br>Students will learn that the sun stays up longer on some days than others. | https://mysteryscience.com/sk<br>seasonal-patterns/143?r=635 |
| **Why do the stars come out at night?**<br>Students use a model to investigate why the stars are visible at night but disappear when the sun comes out during the day. | https://mysteryscience.com/sk<br>daily-patterns/128?r=6359979 |
| **How can stars help you if you get lost?**<br>Students will stargaze. | https://mysteryscience.com/sk<br>seasonal-patterns/156?r=635 |

| Literature |
|---|
| • *Stargazers* by Gail Gibbons<br>• *Reasons for Seasons* by Gail Gibbons<br>• *The Moon Seems to Change* by Bramley Franklyn<br>• *Sun, Moon and Stars* by Stephanie Turnbill |

| Websites | |
|---|---|
| https://betterlesson.com/lesson/613470/observing-the-sun | Observe and describe patterns in the sun's movement |
| http://www.brighthubeducation.com/lesson-plans-grades-1-2/96253-the-four-seasons-first-grade-lesson/ | Lesson plan on The Four Seasons |
| http://spaceracers.org/pdf/moon-phases-lesson-plan.pdf | Lesson plan on Moon phases |
| http://betterlesson.com | Patterns of Day and Night |

| **Unit 3: Heredity: Inheritance and Variation of Traits** | **Duration:** 25 days (April – June) |
|---|---|

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| Grade: 1 | Content Area: Science |
|---|---|

## Suggested Accommodations

**English Language Learners:**
- Provide extra time
- Preview lessons
- Graphic organizers
- Build background knowledge
- Review vocabulary words
- Provide manipulatives or the opportunity to draw solution strategies
- Provide differentiated instruction as needed

**Special Education/Students with Disabilities:**
- provide extra time
- Follow all IEP modifications
- Provide manipulatives or the opportunity to draw solution strategies
- Provide differentiated instruction as needed

**504 Plans:**
- Provide extra time
- Follow all 504 plan modifications
- Provide manipulatives or the opportunity to draw solution strategies
- Provide differentiated instruction as needed

**Gifted and Talented:**
- Higher level questioning
- Student design questions
- Expose to sophisticated vocabulary

**Students at Risk of Failure:**
- Small group instruction
- Frequent breaks
- Model how assignments should look
- Incorporate social/emotional discussions
- Encourage and monitor positive peer collaboration
- Provide academic resources for both home and school use
- Provide incentives to increase motivation and collaboration

**Economically Disadvantaged:**
- Extra Materials
- Books for Home
- Study Guides
- “Take Home” Kit

**Culturally Diverse:**
- Small group instruction
- Frequent breaks
- Model how assignments should look
- Incorporate social/emotional discussions
- Encourage and monitor positive peer collaboration
- Provide academic resources for both home and school use
- Provide incentives to increase motivation and collaboration

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New Jersey Student Learning Standards

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1-LS3-1 Make observations to construct an evidence-based account that young plants and animals are like, but not exactly like, their parents.

| | |
|---|---|
| Science and Engineering Practices Learning Progressions | **Constructing Explanations and Designing Solutions**<br>Constructing explanations and designing solutions in K–2 builds on prior experiences and progresses to the use of evidence and ideas in constructing evidence-based accounts of natural phenomena and designing solutions.<br>Make observations (firsthand or from media) to construct an evidence-based account for natural phenomena. (1- LS3-1) |
| **Discipline Core Ideas**<br>Physical Science Learning Progressions<br>Earth & Space Science Learning Progressions<br>Life Science Learning Progressions | **LS3.A: Inheritance of Traits**<br>Young animals are very much, but not exactly like, their parents. Plants also are very much, but not exactly, like their parents. (1- LS3-1)<br>**LS3.B: Variation of Traits**<br>Individuals of the same kind of plant or animal are recognizable as similar but can also vary in many ways. (1-LS3-1) |
| Crosscutting Concepts | **Patterns**<br>Patterns in the natural world can be observed, used to describe phenomena, and used as evidence. (1-LS3-1)<br><br>***Connections to Nature of Science***<br>**Scientific Knowledge is Based on Empirical Evidence**<br>Scientists look for patterns and order when making observations about the world. (1-LS1-2) |
| Engineering, Technology and the Application of Science Learning Progressions | |

**Interdisciplinary Connections**

**ELA Standards**

| | |
|---|---|
| RI-1-1 | Ask and answer questions about key details in text. |
| W.1.7 | Participate in shared research and writing projects (e.g., explore a number of “how-to” books on a given topic and use them to write a sequence of instructions). |
| W.1.8 | With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question. |
| SL.1.1 | Participate in collaborative conversations with diverse partners about grade 1 topics and texts with peers and adults in small and larger groups. |

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**Stafford Township School DIstrict Curriculum Guide**

| **Grade: 1** | **Content Area: Science** |
|---|---|

| **Math Standards** | |
|---|---|
| MP.2 | Reason abstractly and quantitatively. |
| MP.5 | Use appropriate tools strategically. |
| 1.MD.A.1 | Order three objects by length; compare the lengths of two objects indirectly by using a third object. |
| **Social Studies Standards** | |
| 6.1.2.CivicsCM.3 | Explain how diversity, tolerance, fairness, and respect for others can contribute to individuals feeling accepted. |
| 6.1.12.CivicsDP.5.a | Analyze the effectiveness of governmental policies and of actions by groups and individuals to address discrimination against new immigrants, Native Americans, and African American |

| **Essential Understandings** | **Essential Question** |
|---|---|
| *Students will understand that…*<br>● Patterns in the natural and human designed world can be observed, used to describe phenomena, and used as evidence.<br>● The shape and stability of structures of natural and designed objects are related to their function(s).<br>● Every human-made product is designed by applying some knowledge of the natural world and is built using materials derived from the natural world | ● How do plants and animals use their external parts to help them survive, grow, and meet their needs?<br>● What patterns of behavior of parent and offspring help offspring survive?<br>● How are offspring in both plants and animals alike but not exactly alike their parents? |

| **Evidence of Student Learning** | |
|---|---|
| **Performance Tasks:** *Activities to provide evidence for student learning of content and cognitive skills.* | **Other Assessments** |
| Students will construct a greenhouse to grow and observe the parts of plant.<br>Students will be collecting data by observing the growth of their plants, creating a picture, and labeling the parts of the plant. Students will use this information to explain how a seed grows into a plant.<br>Use website below:<br>https://www.education.com/lesson-plan/build-a-green-house/ | **Formative Assessments**<br>● Cooperative Group Learning<br>● Teacher Observations<br>● Anecdotal Notes<br>**Summative Assessments**<br>● Lab / Recording sheet<br>● Unit Assessment<br>**Benchmark Assessment**<br>● Exit Ticket with Rubric<br>**Alternative Assessments**<br>● Mystery Science Activities |

| **Knowledge and Skills** | |
|---|---|
| **Content** | **Skills** |
| *Students will know…* | *Students will be able to…* |

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| | |
|---|---|
| • all organisms have external parts<br>• different animals use their body parts in different ways to see, hear, grasp objects, protect themselves, move from place to place, and seek, find, and take in food, water and air<br>• plants have different parts (roots, stems, leaves, flowers, fruits) that help them survive and grow<br>• adult plants and animals can have young<br>• parents and the offspring themselves engage in behaviors that help the offspring to survive<br>• animals have body parts that capture and convey different kinds of information needed for growth and survival<br>• animals respond to these inputs with behaviors that help them survive<br>• plants respond to some external inputs<br>• individuals of the same kind of plant or animal are recognizable as similar but can also vary in many ways | • Make observations (firsthand or from media) to construct an evidence-based account for natural phenomena.<br>• Use materials to design a device that solves a specific problem or a solution to a specific problem.<br>• Read grade-appropriate texts and use media to obtain scientific information to determine patterns in the natural world.<br>• Scientists look for patterns and order when making observations about the world. |

**Instructional Plan**

| Suggested Activities | Resources |
|---|---|
| **Why do birds have beaks?**<br>Students carry out an investigation to determine the relationship between the shape of different bird beaks and the food each bird eats. | https://mysteryscience.com/powers/mystery-1/structure-survival/117?r=6359979 |
| **Why do baby ducks follow their mother?**<br>Students will explore instincts. | https://mysteryscience.com/powers/mystery-2/parenting-offspring-survival/139?r=6359979 |
| **Why are polar bears white?**<br>Students make observations to construct an explanation of why camouflage is helpful to animals. | https://mysteryscience.com/powers/mystery-3/structure-survival/118?r=6359979 |
| **Why do family members look similar to one another?**<br>Students will notice that baby animals look a lot like the adults in their families—and then discover that they do, too! | https://mysteryscience.com/powers/mystery-4/inheritance-variation-of-traits/145?r=6359979 |
| **Why don't trees blow down in the wind?**<br>Students examine structures like roots, branches, and leaves that keep trees from blowing down. They use their observations to create their own tree-inspired umbrellas that stay up in the wind. | https://mysteryscience.com/powers/mystery-5/plants-engineering/133?r=6359979 |

**Literature**

- *The Tiny Seed* by Eric Carle
- *Move* by Steve Jenkins
- *Stellaluna* by Janell Cannon
- *Jack and the Beanstalk by Steven Kellogg*

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- *Nana, Nenek & Nina by Liza Ferneyhough*

| Websites | |
|---|---|
| https://jr.brainpop.com | Plant Life Cycle |
| https://betterlesson.com/lesson/639920/how-do-animals-move | How do animals move? |
| https://www.youtube.com/results?search_query=lima+bean+dissection | Dissection of a bean seed. |
| https://betterlesson.com/lesson/626223/external-parts | External parts of an animal. |
| https://www.youtube.com/watch?v=ZanHgPprl-0 | Head, Shoulder, Knees and Toes song |
| https://education.com | Make Like a Bird and Nest activity |

| Unit: 4 Engineering Design | Duration: Ongoing |
|---|---|

**Suggested Accommodations**

**English Language Learners:**
- Provide extra time
- Preview lessons
- Graphic organizers
- Build background knowledge
- Review vocabulary words
- Provide manipulatives or the opportunity to draw solution strategies
- Provide differentiated instruction as needed

**Special Education/Students with Disabilities:**
- provide extra time
- Follow all IEP modifications
- Provide manipulatives or the opportunity to draw solution strategies
- Provide differentiated instruction as needed

**504 Plans:**
- Provide extra time
- Follow all 504 plan modifications
- Provide manipulatives or the opportunity to draw solution strategies
- Provide differentiated instruction as needed

**Gifted and Talented:**
- Higher level questioning
- Student design questions
- Expose to sophisticated vocabulary

**Students at Risk of Failure:**
- Small group instruction
- Frequent breaks
- Model how assignments should look

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- Incorporate social/emotional discussions
- Encourage and monitor positive peer collaboration
- Provide academic resources for both home and school use
- Provide incentives to increase motivation and collaboration

**Economically Disadvantaged:**

- Extra Materials
- Books for Home
- Study Guides
- "Take Home" Kit

**Culturally Diverse:**

- Small group instruction
- Frequent breaks
- Model how assignments should look
- Incorporate social/emotional discussions
- Encourage and monitor positive peer collaboration
- Provide academic resources for both home and school use
- Provide incentives to increase motivation and collaboration

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| New Jersey Student Learning Standards | |
|---|---|
| K-2-ETS1-1 | Ask questions, make observations, and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool. |
| K-2-ETS1-2- | Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem. |
| K-2-ETS1-3 | Analyze data from tests of two objects designed to solve the same problem to compare the strengths and weaknesses of how each performs. |

| Science and Engineering Practices Learning Progressions | |
|---|---|
| | **Asking Questions and Defining Problems**<br>Asking questions and defining problems in K–2 builds on prior experiences and progresses to simple descriptive questions.<br>• Ask questions based on observations to find more information about the natural and/or designed world(s). (K-2-ETS1-1)<br>Define a simple problem that can be solved through the development of a new or improved object or tool. (K-2-ETS1-1)<br>**Developing and Using Models**<br>Modeling in K–2 builds on prior experiences and progresses to include using and developing models (i.e., diagram, drawing, physical replica, diorama, dramatization, or storyboard) that represent concrete events or design solutions.<br>Develop a simple model based on evidence to represent a proposed object or tool. (K-2-ETS1-2)<br>**Analyzing and Interpreting Data**<br>Analyzing data in K–2 builds on prior experiences and progresses to collecting, recording, and sharing observations.<br>Analyze data from tests of an object or tool to determine if it works as intended. (K-2-ETS1-3) |

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|---|---|
| **Discipline Core Ideas**<br><br>**Physical Science Learning Progressions**<br><br>**Earth & Space Science Learning Progressions**<br><br>**Life Science Learning Progressions** | **ETS1.A: Defining and Delimiting Engineering Problems**<br>• A situation that people want to change or create can be approached as a problem to be solved through engineering. (K-2-ETS1-1)<br>• Asking questions, making observations, and gathering information are helpful in thinking about problems. (K-2-ETS1-1)<br>Before beginning to design a solution, it is important to clearly understand the problem. (K-2-ETS1-1)<br>• The shape and stability of structures of natural and designed objects are related to their function(s). (K-2-ETS1-2)<br>**ETS1.B: Developing Possible Solutions**<br>• Designs can be conveyed through sketches, drawings, or physical models. These representations are useful in communicating ideas for a problem's solutions to other people. (K-2-ETS1-2)<br>**ETS1.C: Optimizing the Design Solution**<br>Because there is always more than one possible solution to a problem, it is useful to compare and test designs. (K-2-ETS1-3 |
| **Crosscutting Concepts** | **Structure and Function-**<br>• The shape and stability of structures of natural and designed objects are related to their function(s). |
| Engineering, Technology and the Application of Science Learning Progressions | |

| **Interdisciplinary Connections** | |
|---|---|
| **ELA Standards** | |
| RI.2.1 | Ask and answer questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text. |
| W.2.6 | With guidance and support from adults, use a variety of digital tools to produce and publish writing, including collaboration with peers. |
| W.2.8 | Recall information from experiences or gather information from provided sources to answer a question. |
| SL.1.1 | Participate in collaborative conversations with diverse partners about grade 1 topics and texts with peers and adults in small and larger groups. |
| SL.2.5 | Create audio recordings of stories or poems; add drawings or other visual displays to stories or recounts of experiences when appropriate to clarify ideas, thoughts, and feelings. |
| **Math Standards** | |
| MP.2 | Reason abstractly and quantitatively. |
| MP.4 | Model with mathematics. |

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| MP.5 | Use appropriate tools strategically. |
| 2.MD.D.10 | Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems using information presented in a bar graph. |
| **Social Studies Standards** | |
| 6.1.2.CivicsCM.3 | Explain how diversity, tolerance, fairness, and respect for others can contribute to individuals feeling accepted. |
| 6.1.12.CivicsDP.5.a | Analyze the effectiveness of governmental policies and of actions by groups and individuals to address discrimination against new immigrants, Native Americans, and African American |

| **Essential Understanding:** | **Essential Questions:** |
|---|---|
| *Students will understand that…*<br>• *The shape and stability of structures of natural and designed objects are related to their function(s).* | • How does sketching or creating a model to illustrate its shape help solve a given problem?<br>• How does testing a model determine its strengths and weaknesses in solving a given problem?<br>• How are asking questions, gathering information, and making observation helpful when thinking about problems? |
| **Evidence of Student Learning** | |
| **Performance Tasks:** *Activities to provide evidence for student learning of content and cognitive skills.* | **Other Assessments** |
| Students will ask questions, make observations, and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new object. Students will use research, observations and data from reading to create a model of a playground for an area that does not have a place for children to play. They will then create a diagram of the playground on a poster. | **Formative Assessments**<br>• Cooperative Group Learning<br>• Teacher Observations<br>• Turn and Talk<br>**Summative Assessments**<br>• Lab / Recording Sheets<br>• Unit Assessments<br>**Benchmark Assessment**<br>• Exit Ticket with Rubric<br>**Alternative Assessments**<br>• Mystery Science Activities |
| **Knowledge and Skills** | |
| **Content** | **Skills** |
| *Students will know…*<br>• How to solve a problem through engineering | *Students will be able to …*<br>• Ask questions based on observations to find more information about the natural and / or designed world(s). |

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|---|---|
| • To use questioning, observing and gathering information to help solve problems.<br>• A clear understanding of the problem is the first step<br>• Designs can be conveyed through sketches, drawings or physical models and will aid in communicating with others<br>• Comparing and testing designs is a useful way to determine the best solution to a problem. | • Define a simple problem that can be solved through the development of a new or improved object or tool.<br>• Develop a simple model based on evidence to represent a proposed object or tool.<br>• Analyze data from tests of an object or tool to determine if it works as intended. |

**Instructional Plan**

| Suggested Activities | Resources |
|---|---|
| Students will research how light energy can help us communicate with others. Students will design and build something that will allow them to communicate with other first grade classrooms. The students will move through the Engineering Design Process to solve the problem. | "STEM and light"<br>See betterlesson.com<br>STEM and Light - Day 1 |
| Students will construct their own miniature greenhouses and explore how their designs can grow many different types of plants. | http://www.cbc.ca/parents/play/view/plastic-cup-mini-greenhouses |
| Students will be able to design their own constellations. Students will view Bill Nye video on constellations. Students will use toothpicks and mini marshmallows to design their own constellations and tell their stories. | Constellations<br>http://www.kcedventures.com/blog/astronomy-activities-for-kids-books-about-the-stars |
| Students will identify how geometry affects bridge design and function and apply that knowledge to a physical model and construction of a bridge. | Engineering a Bridge<br>http://www.scholastic.com/browse/lessonplan.jsp?id=1509<br>What Makes Bridges So Strong<br>https://www.youtube.com/watch?v=oVOnRPefcno |
| Students will demonstrate knowledge of the engineering and design process by creating a structure that provides shade. Students will create a structure to protect an ice cube that is out in the sun from melting. Students will use various materials to create their structure. | A Place in the Shade<br>Betterlesson.com: A Place in the Shade - An Engineering Challenge |

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| Literature | |
|---|---|
| • *The Shape of Things* by Dayle Ann Dodd's<br>• *Engineering the ABC's* by Patty O'Brien Novak<br>• *Build It! Structures, Systems and You* by Adrienne Mason<br>• *Rosie Revere Engineer* by Andrea Beaty | |
| **Websites** | |
| https://www.youtube.com/results?search_query=engineering+scishowkids | Videos: "Engineers" and "What is Engineering" |
| http://www.kcedventures.com/blog/astronomy-activities-for-kids-books-about-the-stars | Designing Constellations |
| http://mysteryScience.com | "Waves of Sound" and "Lights and Sound" |

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| **Original Adoption:** 2020 NJSLS Science, Social Studies, Career Readiness, Life Literacies & Key Skills, Computer Design & Thinking, Visual & Performing Arts, World Language, Comprehensive Health and Physical Education (9-12-22); 2023 NJSLS English Language Arts (9-23-24); Math NJSLS Mathematics (9-23-24) |
| **Created By: Shannon Pandolfo & Jessica DiFillippo** |
| **Updated Date: September 17, 2026** |
| **Updated By: Megan Banach** |

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Intent and Spirit

The New Jersey Student Learning Standards for Science (NJSLS-S) describe the expectations for what students should know and be able to do as well as promote three-dimensional science instruction across the three science domains (i.e., physical sciences, life science, Earth and space sciences). From the earliest grades, the expectation is that students will engage in learning experiences that enable them to investigate phenomena, design solutions to problems, make sense of evidence to construct arguments, and critique and discuss those arguments (in appropriate ways relative to their grade level).

The foundation of the NJSLS-S reflects three dimensions — science and engineering practices, disciplinary core ideas, and crosscutting concepts. The performance expectations are derived from the interplay of these three dimensions. It is essential that these three components are integrated into all learning experiences. Within each standard document, the three dimensions are intentionally presented as integrated components to foster sensemaking and designing solutions to problems. Because the NJSLS-S is built on the notions of coherence and contextuality, each of the science and engineering practices and crosscutting concepts appear multiple times across topics and at every grade level. Additionally, the three dimensions should be an integral part of every curriculum unit and should not be taught in isolation.

Mission

All students will develop an understanding of scientific concepts and processes essential for informed decision-making, meaningful participation in civic life, and readiness for postsecondary opportunities, including careers in STEM fields.

Vision

Prepare students to become scientifically literate individuals who can effectively:

- Apply scientific thinking, skills, and understanding to real-world phenomena and problems;
- Engage in systems thinking and modeling to explain phenomena and to give a context for the ideas to be learned;
- Conduct investigations, solve problems, and engage in discussions;
- Discuss open-ended questions that focus on the strength of the evidence used to generate claims;
- Read and evaluate multiple sources, including science-related magazine and journal articles and web-based resources to gain knowledge about current and past science problems and solutions and develop well-reasoned claims; and
- Communicate ideas through journal articles, reports, posters, and media presentations that explain and argue.

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| Recommended Pacing Guide | |
|---|---|
| Unit 1: Matter and Its Interactions | 5 weeks/ 25 days |
| Unit 2: Ecosystems: Interactions, Energy, & Dynamics | 14 weeks/ 70 days |
| Unit 3: Earth's Place in the Universe/Earth Systems | 5 weeks/ 10 days |
| Unit 4: Engineering Design | 12 weeks/ 70 days |

**Alignment with State Mandates**

The following colors are used throughout this document to indicate areas in which the curriculum is aligned with the following NJSA requirements:

- Holocaust and genocides (N.J.S.A. 18A:35-28)
- History and contributions of African-Americans (Amistad Law) (N.J.S.A. 18A:35-4.43)
- Highlight and promote diversity and inclusion (Diversity & Inclusion Law) (N.J.S.A. 18A:35-4.36a)
- History of disabled and LGBT persons included in middle and high school curriculum (Section 18A:35-4.35 )
- Asian Americans and Pacific Islanders (N.J.S.A18A:35-4.44)
- Climate Change - to prepare students to understand how and why climate change happens, the impact it has on our local and global communities and to act in informed and sustainable ways. Please click here for specific examples (by subject).

Students are expected to develop an understanding of what plants need to grow and how plants depend on animals for seed dispersal and pollination. Students are also expected to compare the diversity of life in different habitats. Students develop an understanding of observable properties of materials at this level through analysis and classification of different materials. Students are able to apply their understanding of the idea that wind and water can change the shape of the land to compare design solutions to slow or prevent such change. Students are able to use information and models to identify and represent the shapes and kinds of land and bodies of water in an area and where water is found on Earth.

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| **Unit 1:** Matter and Its Interactions | **Duration: 5 weeks** |
|---|---|

**Knowledge & Skills**

**Essential Understandings:**
*Students will understand that…*

- Matter exists as different substances that have various observable properties.
- Properties such as strength, flexibility, hardness, texture, and absorbency determine the purpose of matter.
- Objects may break into smaller pieces and be put together into larger pieces, or change shapes.
- Some materials experience permanent changes when heated or cooled, while others have changes that are reversible.

**Essential Questions:**

- How can you describe and classify different kinds of materials?
- Which properties of different materials make them suitable for select functions?
- How can an object made of a small set of pieces be disassembled and made into a new object?
- How does heating and cooling change matter?

| **Content** | **Skills** |
|---|---|
| *Students will know…*<br>• different kinds of matter exist and many of them can be either solid or liquid, depending on temperature.<br>• matter can be described and classified by its observable properties<br>• different properties are suited to different purposes<br>• a great variety of objects can be built up from a small set of pieces<br>• heating or cooling a substance may cause changes that can be observed (sometimes these changes are reversible, and sometimes they are not) | *Students will be able to …*<br>• Plan and conduct an investigation collaboratively to produce, describe and classify different kinds of materials by their observed properties.<br>• Analyze data from tests of an object or tool to determine if it works as intended.<br>• Make observations (firsthand or from media) to construct an evidence-based account of how an object made of a small set of pieces can be assembled.<br>• Construct an argument with evidence that some change caused by heating or cooling can be reversed and some cannot.<br>• Search for cause and effect relationships to explain natural events. |

**Vocabulary**

solid, matter, States of matter, plasma, gas, liquid, temperature, heat, energy, condensation, melting, freezing, chemical symbol, kinetic energy, vaporization, physical change, chemical change, sublimation, melting point, chemical property, element, boiling point, physical properties, atom, mass, mixture, nucleus, property, molecule, solution, volume, freezing point and vapor

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| Core Instructional & Supplemental Materials | |
|---|---|
| **Suggested Lessons:** | **Resources:** |
| **Mystery Science: Material Magic Unit, Lesson 1**<br>**Material Properties & Engineering**<br>**Why do we wear clothes?**<br>Students explore the different properties of materials used for clothing. In the activity, students select materials they need to construct a hat that protects them from the sun. | https://mysteryscience.com/materials/mystery-1/material-properties-engineering/64?r=6359979 |
| **Mystery Science: Material Magic Unit, Lesson 2**<br>**Classify Materials: Insulators**<br>**Can you really fry an egg on a hot sidewalk?**<br>Students consider the insulating and conducting properties of different materials. In the activity, students test different materials to determine which material is best for making oven mitts. | https://mysteryscience.com/materials/mystery-2/material-properties-classifying-materials/65?r=6359979 |
| **Mystery Science: Material Magic Unit, Lesson 3**<br>**Heating, Cooling, & States of Matter**<br>**Why are so many toys made out of plastic?**<br>Students learn about melting and the solid & liquid states of matter, then discover why plastic was invented. In the activity, students test the "moldable" property of candy. | https://mysteryscience.com/materials/mystery-3/material-changes-phases-of-matter/66?r=6359979 |
| **Mystery Science: Material Magic Unit, Lesson 5**<br>**Materials, Properties, & Engineering**<br>**Could you build a house out of paper?**<br>Students examine how large structures like houses are built from smaller pieces. In the activity, Paper Towers, they design their own structures using an unconventional building material: paper! Students build towers using 3" x 5" index cards and paper clips. First, they build tall towers, then they are challenged to build towers strong enough to support a hardcover book. | https://mysteryscience.com/materials/mystery-5/materials-properties-engineering/262 |
| **Mystery Science: Material Magic Unit, Lesson 6**<br>**Solid Properties**<br>**How do you build a city out of mud?**<br>Students learn about a unique building material: mud! The properties of mud depend on the properties of the soil it's made from. In the activity, Mystery Mud, students use models of sand and clay soils to investigate how the properties of soils can differ. They use their observations as evidence to classify each soil model based on whether or not it would make mud that's good for building. | https://mysteryscience.com/materials/mystery-6/soil-properties/805 |

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| Suggested Mini-Lessons: | Resources: |
|---|---|
| How are diamonds made? | https://mysteryscience.com/mini-lessons/diamonds#slide-id-6206 |
| Can you make lava? | https://mysteryscience.com/mini-lessons/lava#slide-id-14405 |
| How does hand sanitizer kill germs? | https://mysteryscience.com/mini-lessons/germs-sanitizer |
| How is plastic made? | https://mysteryscience.com/mini-lessons/plastic#slide-id-5817 |
| How is glass made? | https://mysteryscience.com/mini-lessons/glass#slide-id-5489 |
| How is ice cream made? | https://mysteryscience.com/mini-lessons/ice-cream#slide-id-13825 |
| How does composting work? | https://mysteryscience.com/mini-lessons/composting |
| How do they turn wood into paper? | https://mysteryscience.com/mini-lessons/wood-paper#slide-id-14406 |
| Could you build a real house out of cookies and candy? | https://mysteryscience.com/mini-lessons/candy-house#slide-id-17410 |
| Why can we see our breath in the cold? | https://mysteryscience.com/mini-lessons/breath-in-the-cold#slide-id-17512 |
| Does trash last forever? | https://mysteryscience.com/mini-lessons/trash-last-forever#slide-id-17877 |

| Evidence of Student Learning | |
|---|---|
| **Formative/Performance Tasks:**<br>• *Activities to provide evidence for student learning of content and cognitive skills.*<br>• Cooperative Group Learning<br>• Teacher Observation | **Alternative Assessments:**<br>• Mystery Science Activities |
| **Summative Assessments:**<br>• RST- Research Simulation Task<br>• Associated Unit tests, quizzes<br>• Labs and engineering based projects | **Benchmark Assessments:**<br>• Mystery Science Unit Assessment<br>• Lesson Quiz |

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| New Jersey Student Learning Standards | |
|---|---|
| **2-PS1-1** | Plan and conduct an investigation to describe and classify different kinds of materials by their observable properties. |
| **2-PS1-2** | Analyze data obtained from testing different materials to determine which materials have the properties that are best suited for an intended purpose. |
| **2-PS1-3** | Make observations to construct an evidence-based account of how an object made of a small set of pieces can be disassembled and made into a new object. |
| **2-PS1-4** | Construct an argument with evidence that some changes caused by heating or cooling can be reversed and some cannot. |

| Science and Engineering Practices Learning Progressions | |
|---|---|
| | **Planning and Carrying Out Investigations**<br>Planning and carrying out investigations to answer questions or test solutions to problems in K–2 builds on prior experiences and progresses to simple investigations based on fair tests, which provide data to support explanations or design solutions.<br>Plan and conduct an investigation collaboratively to produce data to serve as the basis for evidence to answer a question (2-PS1-1)<br>**Analyzing and Interpreting Data**<br>Analyzing data in K–2 builds on prior experiences and progresses to collecting, recording, and sharing observations.<br>Analyze data from tests of an object or tool to determine if it works as intended. (2-PS1-2)<br>**Constructing Explanations and Designing Solutions**<br>Constructing explanations and designing solutions in K–2 builds on prior experiences and progresses to the use of evidence and ideas in constructing evidence-based accounts of natural phenomena and designing solutions.<br>Make observations (firsthand or from media) to construct an evidence-based account for natural phenomena. (2-PS1-3)<br>**Engaging in Argument from Evidence**<br>Engaging in argument from evidence in K–2 builds on prior experiences and progresses to comparing ideas and representations about the natural and designed world(s). Construct an argument with evidence to support a claim. (2-PS1-4) |

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|---|---|
| **Discipline Core Ideas**<br><br>Physical Science Learning Progressions<br><br>Earth & Space Science Learning Progressions<br><br>Life Science Learning Progressions | **PS1.A: Structure and Properties of Matter**<br>Different kinds of matter exist and many of them can be either solid or liquid, depending on temperature. Matter can be described and classified by its observable properties. (2-PS1-1)<br>Different properties are suited to different purposes. (2-PS1-2),(2-PS1-3)<br>A great variety of objects can be built up from a small set of pieces. (2-PS1-3)<br>**PS1.B: Chemical Reactions**<br>Heating or cooling a substance may cause changes that can be observed. Sometimes these changes are reversible, and sometimes they are not. (2-PS1-4) |
| Crosscutting Concepts | **Patterns**<br>Patterns in the natural and human designed world can be observed. (2-PS1-1)<br>**Cause and Effect**<br>Events have causes that generate observable patterns. (2-PS1-4)<br><br>Simple tests can be designed to gather evidence to support or refute student ideas about causes. (2-PS1-2)<br>**Energy and Matter**<br>Objects may break into smaller pieces and be put together into larger pieces, or change shapes. (2-PS1-3)<br>***Connections to Engineering, Technology, and Applications of Science***<br>Influence of Engineering, Technology, andScience, on Society and the Natural World<br><br>Every human-made product is designed by applying some knowledge of the natural world and is built using materials derived from the natural world. (2-PS1-2)<br>***Connections to Nature of Science***<br>Science Models, Laws, Mechanisms, and Theories Explain Natural Phenomena<br><br>Scientists search for cause and effect relationships to explain natural events. (2-PS1-4) |
| Engineering, Technology and the Application of Science Learning Progressions | |

| Interdisciplinary Connections |
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| **Language Arts Standards** |

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| Grade: 2 | Content Area: Science |
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| **RI.2.1** | Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text (2-PS1-4). |
| **RI.2.3** | Describe the connection between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text. (2-PS1-4) |
| **RI.2.8** | Describe how reasons support specific points the author makes in a text. (2-PS1-2), (2-PS1-4) |
| **W.2.1** | Write opinion pieces in which they introduce the topic or book they are writing about, state and opinion, supply reasons that support the opinion, use linking words (e.g., because, and, also) to connect opinion and reasons, and provide a concluding statement or section. (2-PS1-4) |
| **W.2.7** | Participate in shared research and writing projects (e.g., read a number of books on a single topic to produce a report; record science observations). (2-PS1-1), (2-PS1-2), (2-PS1-3) |
| **W.2.8** | Recall information from experiences or gather information from provided sources to answer a question. (2-PS1-1), (2-PS1-2), (2-PS1-3) |
| • **SL.PE.2.1.** Participate in collaborative conversations with diverse partners about grade 2 topics and texts with peers and adults in small and larger groups. | |
| **Math Standards** | |
| **MP.2** | Reason abstractly and quantitatively. (2-PS1-2) |
| **MP.4** | Model with mathematics. (2-PS1-1), (2-PS1-2) |
| **MP.5** | Use appropriate tools strategically. (2-PS1-2) |
| **2.MD.D.10** | Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems using information presented in a bar graph. (2-PS1-1), (2-PS1-2) |
| **Social Studies Standards** | |
| 6.1.2.CivicsCM.3 | Explain how diversity, tolerance, fairness, and respect for others can contribute to individuals feeling accepted. |
| 6.1.12.CivicsDP.5.a | Analyze the effectiveness of governmental policies and of actions by groups and individuals to address discrimination against new immigrants, Native Americans, and African American |

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## Computer Science & Design Thinking

- 8.1.2.CS.1: Select and operate computing devices that perform a variety of tasks accurately and quickly based on user needs and preferences.
- 8.1.2.CS.2: Explain functions of common software and hardware components of computing systems.
- 8.1.2.IC.1: Compare how individuals live and work before and after the implementation of new computing technology.
- 8.1.2.DA.4: Make predictions based on data using charts or graphs.
- 8.2.2.ITH.3: Identify how technology impacts or improves life
- 8.2.2.EC.1: Identify and compare technology used in different schools, communities, regions, and parts of the world.

## Career Readiness, Life Literacies & Key Skills

- 9.1.2.CR.1: Recognize ways to volunteer in the classroom, school and community.
- 9.1.2.RM.1: Describe how valuable items might be damaged or lost and ways to protect them
- 9.2.2.CAP.1: Make a list of different types of jobs and describe the skills associated with each job
- 9.4.2.CI.1: Demonstrate openness to new ideas and perspectives (e.g., 1.1.2.CR1a, 2.1.2.EH.1, 6.1.2.CivicsCM.2).
- 9.4.2.DC.7: Describe actions peers can take to positively impact climate change.
- 9.4.2.DC.6: Identify respectful and responsible ways to communicate in digital environments.
- 9.4.2.CT.3: Use a variety of types of thinking to solve problems (e.g., inductive, deductive)

| Career Readiness, Life Literacies, and Key Skills Practices | |
|---|---|
| Act as a responsible and contributing community member and employee. | Students understand the obligations and responsibilities of being a member of a community, and they demonstrate this understanding every day through their interactions with others. They are conscientious of the impacts of their decisions on others and the environment around them. They think about the near-term and long-term consequences of their actions and seek to act in ways that contribute to the betterment of their teams, families, community and workplace. They are reliable and consistent in going beyond the minimum expectation and in participating in activities that serve the greater good. |
| Attend to financial well-being. | Students take regular action to contribute to their personal financial well-being, understanding that personal financial security provides the peace of mind required to contribute more fully to their own career success. |
| Consider the environmental, social and economic impacts of decisions. | Students understand the interrelated nature of their actions and regularly make decisions that positively impact and/or mitigate negative impact on other people, organization, and the environment. They are aware of and utilize new technologies, understandings, procedures, materials, and regulations affecting the nature of their work as it relates to the impact on the social condition, the environment and the profitability of the organization. |

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| Demonstrate creativity and innovation. | Students regularly think of ideas that solve problems in new and different ways, and they contribute those ideas in a useful and productive manner to improve their organization. They can consider unconventional ideas and suggestions as solutions to issues, tasks or problems, and they discern which ideas and suggestions will add greatest value. They seek new methods, practices, and ideas from a variety of sources and seek to apply those ideas to their own workplace. They take action on their ideas and understand how to bring innovation to an organization. |
| Utilize critical thinking to make sense of problems and persevere in solving them. | Students readily recognize problems in the workplace, understand the nature of the problem, and devise effective plans to solve the problem. They are aware of problems when they occur and take action quickly to address the problem; they thoughtfully investigate the root cause of the problem prior to introducing solutions. They carefully consider the options to solve the problem. Once a solution is agreed upon, they follow through to ensure the problem is solved, whether through their own actions or the actions of others. |
| Model integrity, ethical leadership and effective management. | Students consistently act in ways that align personal and community-held ideals and principles while employing strategies to positively influence others in the workplace. They have a clear understanding of integrity and act on this understanding in every decision. They use a variety of means to positively impact the directions and actions of a team or organization, and they apply insights into human behavior to change others' actions, attitudes and/or beliefs. They recognize the near-term and long-term effects that management's actions and attitudes can have on productivity, morals and organizational culture. |
| Plan education and career paths aligned to personal goals. | Students take personal ownership of their own education and career goals, and they regularly act on a plan to attain these goals. They understand their own career interests, preferences, goals, and requirements. They have perspective regarding the pathways available to them and the time, effort, experience and other requirements to pursue each, including a path of entrepreneurship. They recognize the value of each step in the education and experiential process, and they recognize that nearly all career paths require ongoing education and experience. They seek counselors, mentors, and other experts to assist in the planning and execution of career and personal goals. |
| Use technology to enhance productivity, increase collaboration and communicate effectively. | Students find and maximize the productive value of existing and new technology to accomplish workplace tasks and solve workplace problems. They are flexible and adaptive in acquiring new technology. They are proficient with ubiquitous technology applications. They understand the inherent risks-personal and organizational-of technology applications, and they take actions to prevent or mitigate these risks. |
| Work productively in teams while using cultural/global competence. | Students positively contribute to every team, whether formal or informal. They apply an awareness of cultural differences to avoid barriers to productive and positive interaction. They find ways to increase the engagement and contribution of all team members. They plan and facilitate effective team meetings. |

| Suggested Accommodations |
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| **English Language Learners:**<br>• Provide ELL students with multiple literacy strategies |

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- Structure lessons around questions that are authentic, relate to students' interests, social/family background and knowledge of their community
- Provide extra time
- Pre-teach vocabulary using visuals and gestures
- Chunk texts
- Summarize as you go
- Preview lessons
- Graphic Organizers
- Highlight key words
- Sentence starters
- Prompting and cueing
- Activate schema
- Build background knowledge

**Special Education/Students with Disabilities:**

- Pre-teach vocabulary using visuals and gestures
- Chunk texts
- Summarize as you go
- Preview lessons
- Graphic organizers
- Highlight keywords
- Sentence Starters
- Prompting and cueing
- Activate schema
- Build background knowledge
- Follow all IEP modifications
- Teacher tutoring
- Peer tutoring
- Cooperative learning groups
- Modified assignments
- Differentiated instruction
- Listen to audio recordings instead of reading text
- Learn content from audio books, movies, videos and digital media instead of reading print versions
- Work with fewer items per page or line and/or materials in a larger print size
- Have a designated reader
- Hear instructions orally
- Record a lesson, instead of taking note
- Have another student share class notes with him
- Be given an outline of a lesson
- Use visual presentations of verbal material, such as word webs and visual organizers
- Be given a written list of instruction

**504 Plans:**

- Follow all 504 plan modifications
- Teacher tutoring
- Peer tutoring
- Cooperative learning groups
- Modified assignments
- Differentiated instruction
- Listen to audio recordings instead of reading text
- Learn content from audio books, movies, videos and digital media instead of reading print versions
- Work with fewer items per page or line and/or materials in a larger print size
- Have a designated reader
- Hear instructions orally
- Record a lesson, instead of taking note

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- Have another student share class notes with him
- Be given an outline of a lesson
- Use visual presentations of verbal material, such as word webs and visual organizers
- Be given a written list of instruction

**Gifted and Talented:**

- Higher level questioning
- Students design questions
- Choice board to extend learning
- Expose to sophisticated vocabulary
- Extend reading response to further enrich understanding (see extension activities in unit binder)
- Discuss how readers and writers connect
- Create comic strip showing connections to reading lives: illustrate and caption
- Create poem using rich adjectives and detailed illustrations
- Write paragraph in notebook about things they are passionate about
- Have students choose someone in their family they would write a biography about and why
- Collect artifacts to decorate notebook at home-discuss with class
- Have students create a poster showing their favorite reading spot
- Have students create anchor charts to explain strategy taught to hang around the room
- Students can expand on discussions with family members in their notebooks
- Expand reading genre while independent reading to reflect a well-rounded book bag

**Students at Risk of Failure:**

- Work toward longer passages as skills in English increase
- Use visuals
- Introduce key vocabulary before lesson
- Teacher reads aloud daily
- Provide peer tutoring
- Use a strong student as a "buddy" (does not necessarily have to speak the primary language)
- Choral reading
- Chants, songs
- Preferential seating

**Economically Disadvantaged:**

- Extra Materials for Home
- Books for Home
- Study Guides
- "Take Home" Kit

**Culturally Diverse:**

- Provide ELL students with multiple literacy strategies
- Structure lessons around questions that are authentic, relate to students' interests, social/family background and knowledge of their community
- Provide extra time
- Pre-teach vocabulary using visuals and gestures
- Chunk texts
- Summarize as you go
- Preview lessons
- Graphic Organizers
- Highlight key words
- Sentence starters
- Prompting and cueing
- Activate schema
- Build background knowledge

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**Stafford Township School DIstrict Curriculum Guide**

| Grade: 2 | Content Area: Science |
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| Unit 2: Ecosystems: Interactions, Energy, & Dynamics | Duration:15 weeks<br>Wonders Alignment: U2W1, U2W2, U2W5 |
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**Knowledge & Skills**

**Essential Understandings:**
*Students will understand that…*
- Plants need water and light.
- Seed dispersal and pollination of plants occur when animals eat and travel to various areas.
- Diversity is dependent on availability of life sustaining resources.

**Essential Questions:**
- Do plants and animals need sunlight and water to grow?
- What are the steps that occur when animals help disperse seeds or aid in pollinating plants?
- What are observations that can be made about the diversity of living things in different habitats?

| Content | Skills |
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| *Students will know…*<br>• Plants depend on water and light to grow.<br>• Plants depend on animals for pollination or to move their seeds around<br>• There are many different kinds of living things in any area, and they exist in different places on land and in water | *Students will be able to …*<br>• Make observations to compare the diversity of plants and animals in different habitats.<br>• Develop a simple model that mimics the function of an animal dispersing seeds or pollinating plants.<br>• Plan and conduct an investigation to determine if plants need sunlight and water to grow. |

**Vocabulary**

Ecosystems, habitat, producer, consumer, climate, food chain, environment, organism, prey, predator, scavenger, pollutant, seed dispersal, pollination, primary consumer, secondary consumer

**Core Instructional & Supplemental Materials**

| Suggested Activities: | Resources: |
|---|---|
| **Mystery Science: Animal Adventures Unit, Lesson 1: Biodiversity & Classification**<br>**How many different kinds of animals are there?**<br>Students examine how scientists organize animals into groups based on their characteristics. In the activity, Animals Sorting Game, students study animal traits and use these traits to sort animal cards into | https://mysteryscience.com/biodiversity/mystery-1/biodiversity-classification/174 |

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| mammals, birds, reptiles, and invertebrates. Students are then challenged to make decisions about animals that don't fall neatly into any of those categories. | |
| **Mystery Science: Animal Adventures Unit, Lesson 2: Habitat Diversity**<br>**Why would a wild animal visit a playground?**<br>Students solve the mystery of why a group of wild bighorn sheep would leave their usual desert habitat to visit a second, very different habitat: a local playground. In the activity, Habitat Scavenger Hunt, students record observations of the diversity of life found in the desert and the playground, as well as the physical characteristics of each location. Students combine these observations to create an understanding of how the living and nonliving parts of a habitat support the animals that live there. | https://mysteryscience.com/biodiversity/mystery-2/habitat-diversity/758 |
| **Mystery Science: Animal Adventures Unit, Lesson 3: Biodiversity, Habitats, & Species**<br>**Why do frogs say "ribbit"?**<br>Students learn to identify frogs by their unique calls and investigate which of two locations has a greater variety of frogs. After listening to recordings of frog calls, students create words that will remind them of the sounds, and then use those words to identify frog sounds in different environments. | https://mysteryscience.com/biodiversity/mystery-3/biodiversity-habitats-species/175 |
| **Mystery Science: Plant Adventures Unit, Lesson 1 Seed Dispersal**<br>**How did a tree travel halfway around the world?**<br>Students investigate the mystery of the koa tree, a type of tree that grows in only two places—islands halfway across the world from one another. In the activity, students develop three different physical models of seed structures. They observe how structure affects the seed's function in dispersing away from the tree. Then, they use these observations to evaluate whether koa seeds are likely dispersed by wind, water, or animals. | https://mysteryscience.com/plants/mystery-1/seed-dispersal/912 |
| **Mystery Science: Plant Adventures Unit, Lesson 2 Animal Seed Dispersal**<br>**Why do seeds have so many different shapes?**<br>Students explore how the structures of seeds enable them to disperse, with a focus on seeds that utilize animal structures to aid in their dispersal. In the activity, Seed Travelers, students develop a model of a furry animal ("fluffadoo") and then use it to test how far seed models with different structures can travel. | https://mysteryscience.com/plants/mystery-2/animal-seed-dispersal/1003 |

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| **Mystery Science: Plant Adventures Unit, Lesson 3**<br>**Water, Sunlight, & Plant Growth**<br>**Could a plant survive without light?**<br>Students investigate how plants need water and sunlight to grow. In the two-part activity, Seeds- Light and Dark, students experiment with growing radish seeds in light and dark conditions. They plant them in cups, place half of the cups in sunlight, and put the other half in a dark container. Three to seven days later, students compare the seedlings and then watch what happens when all are placed in sunlight. | https://mysteryscience.com/plants/mystery-3/water-sunlight-plant-growth/571 |
| **Mystery Science: Plant Adventures Unit, Lesson 4**<br>**Plant Needs & Habitats**<br>**How much water should you give a plant?**<br>Students investigate how different plants grow best under very different conditions, ranging from deserts to tropical rainforests. In the activity, Puzzling Plants, students plan and conduct virtual experiments in order to determine how much water and sunlight a set of mystery plants need to grow and stay healthy. | https://mysteryscience.com/plants/mystery-4/plant-needs-habitats/1004 |
| **Suggested Mystery Science Mini-Lessons:** | **Resources:** |
| Could a turtle live outside its shell? | https://mysteryscience.com/mini-lessons/turtles-outside-shell |
| Why do zebras have stripes? | https://mysteryscience.com/mini-lessons/striped-zebras |
| Do bats really drink blood? | https://mysteryscience.com/mini-lessons/bats-blood#slide-id-14398 |
| Why do penguins have wings if they can't fly? | https://mysteryscience.com/mini-lessons/penguin-wings#slide-id-14403 |
| What is the most dangerous animal in the world? | https://mysteryscience.com/mini-lessons/dangerous-animal |
| What's the biggest apple in the world? | https://mysteryscience.com/mini-lessons/biggest-apple |
| Can sharks and dolphins have babies? | https://mysteryscience.com/mini-lessons/dolphin-shark#slide-id-6842 |
| What's the biggest tree in the world? | https://mysteryscience.com/mini-lessons/biggest-tree#slide-id-7405 |
| Why do bears hibernate? | https://mysteryscience.com/mini-lessons/bears#slide-id-7497 |

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| Why are flamingoes pink? | https://mysteryscience.com/mini-lessons/flamingos#slide-id-8094 |
| Why do owls say "hoo"? | https://mysteryscience.com/mini-lessons/owls-hoo |
| Do fish sleep? | https://mysteryscience.com/mini-lessons/fish-sleep#slide-id-5977 |
| Why don't all trees lose their leaves in the fall? | https://mysteryscience.com/mini-lessons/trees-leaves#slide-id-12455 |
| What's the coldest temperature any animal could survive? | https://mysteryscience.com/mini-lessons/coldest-temp-animal-survive |
| Where do bugs go in winter? | https://mysteryscience.com/mini-lessons/winter-bugs#slide-id-5445 |
| What's the fastest ocean animal? | https://mysteryscience.com/mini-lessons/fastest-ocean-animal#slide-id-13023 |
| Why are coral reefs so colorful? | https://mysteryscience.com/mini-lessons/coral-reefs#slide-id-13323 |
| How can you tell if a mushroom is poisonous? | https://mysteryscience.com/mini-lessons/poisonous-mushrooms#slide-id-6572 |
| Why do snakes shed their skin? | https://mysteryscience.com/mini-lessons/snake-skin#slide-id-7824 |
| Why are butterflies so colorful? | https://mysteryscience.com/mini-lessons/butterflies |
| Are killer whales really dangerous? | https://mysteryscience.com/mini-lessons/killer-whales#slide-id-13342 |
| Can animals be friends with other kinds of animals? | https://mysteryscience.com/mini-lessons/animal-friends#slide-id-13410 |
| How do bees make honey? | https://mysteryscience.com/mini-lessons/honey-bees#slide-id-6490 |
| Do any plants eat animals? | https://mysteryscience.com/mini-lessons/plants-eat-animals#slide-id-13872 |
| Why do whales sing? | https://mysteryscience.com/mini-lessons/whales-sing#slide-id-13933 |
| What's the biggest spider in the world? | https://mysteryscience.com/mini-lessons/biggest-spider |
| Why do flies just appear in the trash? | https://mysteryscience.com/mini-lessons/flies-trash#slide-id-14458 |

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| Could a kid win a race against a penguin? | https://mysteryscience.com/mini-lessons/penguin-race#slide-id-14548 |
| How do polar animals survive the cold? | https://mysteryscience.com/mini-lessons/polar-animals |
| Why do cats purr? | https://mysteryscience.com/mini-lessons/cats-purr#slide-id-5724 |
| Why do fireflies glow? | https://mysteryscience.com/mini-lessons/fireflies-glow#slide-id-14696 |
| Can any animal outrun a cheetah? | https://mysteryscience.com/mini-lessons/cheetah#slide-id-14529 |
| Do dogs sweat? | https://mysteryscience.com/mini-lessons/dogs-sweat#slide-id-14835 |
| Why do animals come back after going to warm places in winter? | https://mysteryscience.com/mini-lessons/animal-migration#slide-id-14402 |
| How can you tell if a plant is poisonous? | https://mysteryscience.com/mini-lessons/plant-poisonous#slide-id-9404 |
| Why do beavers build dams? | https://mysteryscience.com/mini-lessons/beavers-dams#slide-id-10965 |
| Is a tomato a fruit or a vegetable? | https://mysteryscience.com/mini-lessons/tomato-fruit-or-vegetable#slide-id-15892 |
| Are dolphins really one of the smartest animals in the world? | https://mysteryscience.com/mini-lessons/dolphins-smartest-animals#slide-id-15948 |
| What's the most dangerous animal in the ocean? | https://mysteryscience.com/mini-lessons/dangerous-ocean-animal#slide-id-16727 |
| How do polar bears walk on ice and snow? | https://mysteryscience.com/mini-lessons/polar-bears#slide-id-17081 |
| What's the smallest animal on earth? | https://mysteryscience.com/mini-lessons/smallest-animal#slide-id-17746 |
| Why are four leaf clovers so rare? | https://mysteryscience.com/mini-lessons/four-leaf-clovers#slide-id-17796 |
| How many kinds of cacti are there? | https://mysteryscience.com/mini-lessons/cacti#slide-id-17802 |
| How high can birds fly? | https://mysteryscience.com/mini-lessons/how-high-birds-fly#slide-id-17889 |
| How do flowers bloom in the spring? | https://mysteryscience.com/mini-lessons/spring-flowers#slide-id-8722 |

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| How do cicadas make so much noise? | https://mysteryscience.com/mini-lessons/cicadas-make-noise#slide-id-18071 |
| Can animals get a sunburn? | https://mysteryscience.com/mini-lessons/animal-sunburn#slide-id-18313 |

| Literature: |
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| **Wonders Unit 2, Week 1 and Week 2:**<br>Eagles and Eaglets<br>Baby Bears<br>From Caterpillar to Butterfly<br>OpossumsWild Animal Families |
| **Wonders Unit 2, Week 5:**<br>Cats and Kittens<br>Desert Animals<br>A Bat is Not a Bird |

| Evidence of Student Learning | |
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| **Formative/Performance Tasks:**<br>• *Activities to provide evidence for student learning of content and cognitive skills.*<br>• Cooperative Group Learning<br>• Teacher Observation | **Alternative Assessments:**<br>• Mystery Science Activities |
| **Summative Assessments:**<br>• RST- Research Simulation Task<br>• Associated Unit tests, quizzes<br>• Labs and engineering based projects | **Benchmark Assessments:**<br>• Mystery Science Unit Assessment<br>• Lesson Quiz |

| New Jersey Student Learning Standards | |
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| **2-LS2-1** | Plan and conduct an investigation to determine if plants need sunlight and water to grow. |
| **2-LS2-2** | Develop a simple model that mimics the function of an animal in dispersing seeds or pollinating plants. |
| **2-LS4-1** | Make observations of plants and animals to compare the diversity of life in different habitats. |

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| Science and Engineering Practices Learning Progressions | **Developing and Using Models**<br>Modeling in K–2 builds on prior experiences and progresses to include using and developing models (i.e., diagram, drawing, physical replica, diorama, dramatization, or storyboard) that represent concrete events or design solutions. Develop a simple model based<br>on evidence to represent a proposed object or tool. (2-LS2-2)<br>**Planning and Carrying Out Investigations**<br>Planning and carrying out investigations to answer questions or test solutions to problems in K–2 builds on prior experiences and progresses to simple investigations, based on fair tests, which provide data to support explanations or design solutions.<br><br>Plan and conduct an investigation collaboratively to produce data to serve as the basis for evidence to answer a question. (2-LS2-1) |
| **Discipline Core Ideas**<br><br>Physical Science Learning Progressions<br><br>Earth & Space Science Learning Progressions<br><br>Life Science Learning Progressions | **LS2.A: Interdependent Relationships in Ecosystems**<br>Plants depend on water and light to grow. (2-LS2-1)<br>Plants depend on animals for pollination or to move their seeds around. (2-LS2-2)<br>**ETS1.B: Developing Possible Solutions**<br>Designs can be conveyed through sketches, drawings, or physical models. These representations are useful in communicating ideas for a problem's solutions to other YNIqs/,.<br>people. (secondary to 2-LS2-2)<br>**LS4.D: Biodiversity and Humans**<br>There are many different kinds of living things in any area, and they exist in different places on land and in water. (2-LS4-1) |
| Crosscutting Concepts | **Cause and Effect**<br>Events have causes that generate observable patterns. (2-LS2-1)<br>**Structure and Function**<br>The shape and stability of structures of natural and designed objects are related to their function(s). (2-LS2-2)<br>**Connections to Nature of Science Scientific**<br>Knowledge is Based on Empirical Evidence Scientists look for patterns and order when making observations about the world. (2-LS4-1) |
| Engineering, Technology and the Application of Science Learning Progressions | |

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| Interdisciplinary Connections |

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**Stafford Township School DIstrict Curriculum Guide**

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| Language Arts Standards | |
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| **W.2.7** | Participate in shared research and writing projects (e.g., read a number of books on a single topic to produce a report; record science observations). (2-LS2-1) |
| **W.2.8** | Recall information from experiences or gather information from provided sources to answer a question. (2-LS2-1) |
| • **SL.PE.2.1.** | Participate in collaborative conversations with diverse partners about grade 2 topics and texts with peers and adults in small and larger groups. |
| **Math Standards** | |
| **MP.2** | Reason abstractly and quantitatively. (2-LS2-1) |
| **MP.4** | Model with mathematics. (2-LS2-1), (2-LS2-2) |
| **2.MD.D.10** | Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, a compare problems using information presented in a bar graph. (2-LS2-2) |
| **Social Studies Standards** | |
| 6.1.2.CivicsCM.3 | Explain how diversity, tolerance, fairness, and respect for others can contribute to individuals feeling accepted. |
| 6.1.12.CivicsDP.5.a | Analyze the effectiveness of governmental policies and of actions by groups and individuals to address discrimination against new immigrants, Native Americans, and African American |

| Computer Science & Design Thinking |
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| • 8.1.2.CS.1: Select and operate computing devices that perform a variety of tasks accurately and quickly based on user needs and preferences.<br>• 8.1.2.CS.2: Explain functions of common software and hardware components of computing systems.<br>• 8.1.2.IC.1: Compare how individuals live and work before and after the implementation of new computing technology.<br>8.1.2.DA.4: Make predictions based on data using charts or graphs.<br>• 8.2.2.ITH.3: Identify how technology impacts or improves life<br>• 8.2.2.EC.1: Identify and compare technology used in different schools, communities, regions, and parts of the world. |

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| Career Readiness, Life Literacies & Key Skills |
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| • 9.1.2.CR.1: Recognize ways to volunteer in the classroom, school and community.<br>• 9.1.2.RM.1: Describe how valuable items might be damaged or lost and ways to protect them<br>• 9.2.2.CAP.1: Make a list of different types of jobs and describe the skills associated with each job.<br>• 9.4.2.CI.1: Demonstrate openness to new ideas and perspectives (e.g., 1.1.2.CR1a, 2.1.2.EH.1, 6.1.2.CivicsCM.2).<br>• 9.4.2.DC.7: Describe actions peers can take to positively impact climate change.<br>• 9.4.2.DC.6: Identify respectful and responsible ways to communicate in digital environments.<br>• 9.4.2.CT.3: Use a variety of types of thinking to solve problems (e.g., inductive, deductive) |

| Career Readiness, Life Literacies, and Key Skills Practices | |
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| Act as a responsible and contributing community member and employee. | Students understand the obligations and responsibilities of being a member of a community, and they demonstrate this understanding every day through their interactions with others. They are conscientious of the impacts of their decisions on others and the environment around them. They think about the near-term and long-term consequences of their actions and seek to act in ways that contribute to the betterment of their teams, families, community and workplace. They are reliable and consistent in going beyond the minimum expectation and in participating in activities that serve the greater good. |
| Attend to financial well-being. | Students take regular action to contribute to their personal financial well-being, understanding that personal financial security provides the peace of mind required to contribute more fully to their own career success. |
| Consider the environmental, social and economic impacts of decisions. | Students understand the interrelated nature of their actions and regularly make decisions that positively impact and/or mitigate negative impact on other people, organization, and the environment. They are aware of and utilize new technologies, understandings, procedures, materials, and regulations affecting the nature of their work as it relates to the impact on the social condition, the environment and the profitability of the organization. |
| Demonstrate creativity and innovation. | Students regularly think of ideas that solve problems in new and different ways, and they contribute those ideas in a useful and productive manner to improve their organization. They can consider unconventional ideas and suggestions as solutions to issues, tasks or problems, and they discern which ideas and suggestions will add greatest value. They seek new methods, practices, and ideas from a variety of sources and seek to apply those ideas to their own workplace. They take action on their ideas and understand how to bring innovation to an organization. |
| Utilize critical thinking to make sense of problems and persevere in solving them. | Students readily recognize problems in the workplace, understand the nature of the problem, and devise effective plans to solve the problem. They are aware of problems when they occur and take action quickly to address the problem; they thoughtfully investigate the root cause of the problem prior to introducing solutions. They carefully consider the options to solve the problem. Once a solution is agreed upon, they follow through to ensure the problem is solved, whether through their own actions or the actions of others. |

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| Model integrity, ethical leadership and effective management. | Students consistently act in ways that align personal and community-held ideals and principles while employing strategies to positively influence others in the workplace. They have a clear understanding of integrity and act on this understanding in every decision. They use a variety of means to positively impact the directions and actions of a team or organization, and they apply insights into human behavior to change others' actions, attitudes and/or beliefs. They recognize the near-term and long-term effects that management's actions and attitudes can have on productivity, morals and organizational culture. |
| Plan education and career paths aligned to personal goals. | Students take personal ownership of their own education and career goals, and they regularly act on a plan to attain these goals. They understand their own career interests, preferences, goals, and requirements. They have perspective regarding the pathways available to them and the time, effort, experience and other requirements to pursue each, including a path of entrepreneurship. They recognize the value of each step in the education and experiential process, and they recognize that nearly all career paths require ongoing education and experience. They seek counselors, mentors, and other experts to assist in the planning and execution of career and personal goals. |
| Use technology to enhance productivity, increase collaboration and communicate effectively. | Students find and maximize the productive value of existing and new technology to accomplish workplace tasks and solve workplace problems. They are flexible and adaptive in acquiring new technology. They are proficient with ubiquitous technology applications. They understand the inherent risks-personal and organizational-of technology applications, and they take actions to prevent or mitigate these risks. |
| Work productively in teams while using cultural/global competence. | Students positively contribute to every team, whether formal or informal. They apply an awareness of cultural differences to avoid barriers to productive and positive interaction. They find ways to increase the engagement and contribution of all team members. They plan and facilitate effective team meetings. |

**Suggested Accommodations**

**English Language Learners:**

- Provide ELL students with multiple literacy strategies
- Structure lessons around questions that are authentic, relate to students' interests, social/family background and knowledge of their community
- Provide extra time
- Pre-teach vocabulary using visuals and gestures
- Chunk texts
- Summarize as you go
- Preview lessons
- Graphic Organizers
- Highlight key words
- Sentence starters
- Prompting and cueing
- Activate schema
- Build background knowledge

**Special Education/Students with Disabilities:**

- Pre-teach vocabulary using visuals and gestures
- Chunk texts
- Summarize as you go

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- Preview lessons
- Graphic organizers
- Highlight keywords
- Sentence Starters
- Prompting and cuing
- Activate schema
- Build background knowledge
- Follow all IEP modifications
- Teacher tutoring
- Peer tutoring
- Cooperative learning groups
- Modified assignments
- Differentiated instruction
- Listen to audio recordings instead of reading text
- Learn content from audio books, movies, videos and digital media instead of reading print versions
- Work with fewer items per page or line and/or materials in a larger print size
- Have a designated reader
- Hear instructions orally
- Record a lesson, instead of taking note
- Have another student share class notes with him
- Be given an outline of a lesson
- Use visual presentations of verbal material, such as word webs and visual organizers
- Be given a written list of instruction

**504 Plans:**

- Follow all 504 plan modifications
- Teacher tutoring
- Peer tutoring
- Cooperative learning groups
- Modified assignments
- Differentiated instruction
- Listen to audio recordings instead of reading text
- Learn content from audio books, movies, videos and digital media instead of reading print versions
- Work with fewer items per page or line and/or materials in a larger print size
- Have a designated reader
- Hear instructions orally
- Record a lesson, instead of taking note
- Have another student share class notes with him
- Be given an outline of a lesson
- Use visual presentations of verbal material, such as word webs and visual organizers
- Be given a written list of instruction

**Gifted and Talented:**

- Higher level questioning
- Students design questions
- Choice board to extend learning
- Expose to sophisticated vocabulary
- Extend reading response to further enrich understanding (see extension activities in unit binder)
- Discuss how readers and writers connect
- Create comic strip showing connections to reading lives: illustrate and caption
- Create poem using rich adjectives and detailed illustrations
- Write paragraph in notebook about things they are passionate about
- Have students choose someone in their family they would write a biography about and why
- Collect artifacts to decorate notebook at home-discuss with class
- Have students create a poster showing their favorite reading spot

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- Have students create anchor charts to explain strategy taught to hand around the room
- Students can expand on discussions with family members in their notebooks
- Expand reading genre while independent reading to reflect a well-rounded book bag

**Students at Risk of Failure:**

- Work toward longer passages as skills in English increase
- Use visuals
- Introduce key vocabulary before lesson
- Teacher reads aloud daily
- Provide peer tutoring
- Use a strong student as a "buddy" (does not necessarily have to speak the primary language)
- Choral reading
- Chants, songs
- Preferential seating

**Economically Disadvantaged:**

- Extra Materials for Home
- Books for Home
- Study Guides
- "Take Home" Kit

**Culturally Diverse:**

- Provide ELL students with multiple literacy strategies
- Structure lessons around questions that are authentic, relate to students' interests, social/family background and knowledge of their community
- Provide extra time
- Pre-teach vocabulary using visuals and gestures
- Chunk texts
- Summarize as you go
- Preview lessons
- Graphic Organizers
- Highlight key words
- Sentence starters
- Prompting and cueing
- Activate schema
- Build background knowledge

| Unit 3: Earth's Place in the Universe/Earth Systems | Duration: 5 weeks<br>Wonders Alignment: U4W3, U4W4 |
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**Knowledge & Skills**

**Essential Understandings:**

*Students will understand that…*

- Patterns in the natural world can be observed.
- Things may change slowly or rapidly such as erosion of rocks, glaciers melting, volcanic explosions, and earthquakes.
- Developing and using technology has impacts on the natural world.
- Humans have designed multiple solutions to slow or prevent wind or water from changing the shape of the land, such as windbreaks, shrubs, grass and trees.

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**Essential Questions:**

- Why do some Earth events happen very slowly or quickly?
- What are different solutions designed to prevent wind or water changing the shape of land?
- How can a map represent the shape and kind of water in a specified area?
- Where and why is water on Earth found in both solid and liquid form?

| Content | Skills |
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| *Students will know…*<br>• Some events happen very quickly, others occur very slowly, over a time period much longer than one can observe<br>• Wind and water can change the shape of the land<br>• Maps show where things are located<br>• One can map the shapes and kinds of land and water in any area<br>• Water is found in the ocean, rivers, lakes, and ponds<br>• Water exists as solid ice and in liquid form<br>• It is useful to compare and test designs when there is more than one solution to a problem | *Students will be able to …*<br>• Investigate the properties of water.<br>• Develop a model to represent patterns in the natural world.<br>• Make observations from several sources to construct an evidence based account for natural phenomena.<br>• Compare multiple solutions to a problem.<br>• Obtain information using various texts, text features (e.g., headings, tables of contents, glossaries, electronic menus, icons), and other media that will be useful in answering a scientific question. |

**Vocabulary**

Geology, water erosion, weathering, rock erosion, weathering, wind vane, barometer, thermometer, rain gauge, rock, minerals, volcano, topographic maps, plate tectonics, rock cycle, Earth's layers

**Core Instructional & Supplemental Materials**

| Suggested Activities: | Resources: |
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| **Mystery Science: Work of Water Unit, Lesson 1**<br>**Mapping & Earth's Surface Features**<br>**If you floated down a river, where would you end up?**<br>Students develop a model of the earth's surface and use it to discover an important principle about how rivers work. In the activity, Paper Mountains, students take turns using a spray bottle to make rain fall on paper models of mountains to observe patterns of how water and rivers flow. | https://mysteryscience.com/water/mystery-1/mapping-earth-s-surface-features/112 |
| **Mystery Science: Work of Water Unit, Lesson 2**<br>**Rocks, Sand, & Erosion**<br>**Why is there sand at the beach?**<br>Students investigate the effects of rocks tumbling in a river. Based on their observations, they construct an | https://mysteryscience.com/water/mystery-2/rocks-sand-erosion/113 |

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| explanation for why there is sand at a beach. In the activity, Rocking the River, students pretend to be a river and tear up pieces of construction paper to model what happens to rocks as they travel along the river. | |
| **Mystery Science: Work of Water Unit, Lesson 3**<br>**Mapping & Severe Weather**<br>**Where do flash floods happen?**<br>Students explore the phenomenon of flash floods and create an explanation of why these severe weather events are more or less likely in different regions. They specifically attempt to locate and explain a unique region in Texas known as Flash Flood Alley. In the activity, Find Flash Flood Alley, students develop a map to document how land and water interact across the state. Students then use that map to explain how different shapes and kinds of land increase or decrease the chances of rainfall causing a flash flood. | https://mysteryscience.com/water/mystery-3/mapping-severe-weather/802 |
| **Mystery Science: Work of Water Unit, Lesson 4**<br>**Erosion, Earth's Surface, & Landforms**<br>**What's strong enough to make a canyon?**<br>Students make hypotheses and investigate the causes of canyons. In the activity, Cornmeal Canyons, students create a model landform using cornmeal. Then they drip water over this "land" to observe how water can change its shape and to understand how, over long periods of time, canyons can be formed through a similar process. | https://mysteryscience.com/water/mystery-4/erosion-earth-s-surface-landforms/114 |
| **Mystery Science: Work of Water Unit, Lesson 4**<br>**Erosion & Engineering**<br>**How can you stop a landslide?**<br>Students compare multiple solutions for preventing erosion. In the activity, they design and test ways to keep water from washing away a hill modeled out of cornmeal. | https://mysteryscience.com/water/mystery-5/erosion-engineering/152 |
| **Suggested Mini-Lessons:** | **Resources:** |
| What makes hurricanes so dangerous? | https://mysteryscience.com/mini-lessons/dangerous-hurricanes#slide-id-14157 |
| How deep does the ocean go? | https://mysteryscience.com/mini-lessons/deep-ocean#slide-id-14409 |
| What's worse: a hurricane or a tornado? | https://mysteryscience.com/mini-lessons/hurricane-or-tornado#slide-id-14400 |
| Why are tornadoes so hard to predict? | https://mysteryscience.com/mini-lessons/predict-tornadoes#slide-id-14401 |

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| What's the coldest place on earth? | https://mysteryscience.com/mini-lessons/coldest-place#slide-id-5422 |
| Why is it so hard for firefighters to put out wildfires? | https://mysteryscience.com/mini-lessons/wildfires#slide-id-9955 |
| Could a mountain turn into a volcano? | https://mysteryscience.com/mini-lessons/mountain-volcano#slide-id-7051 |
| Why don't islands float away? | https://mysteryscience.com/mini-lessons/islands#slide-id-12413 |
| How are waves made in the ocean? | https://mysteryscience.com/mini-lessons/ocean-waves#slide-id-12701 |
| How do earthquakes happen? | https://mysteryscience.com/mini-lessons/earthquakes#slide-id-5912 |
| Why do beavers build dams? | https://mysteryscience.com/mini-lessons/beavers-dams#slide-id-10965 |
| What's the hottest place on earth? | https://mysteryscience.com/mini-lessons/hottest-place-on-earth#slide-id-15721 |

| Literature: |
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| **Wonders Unit 4, Week 3 and Week 4:**<br>Into the Sea<br>Volcanoes<br>To the Rescue<br>Tsunamis<br>Earth Changes<br>**Discover Hawai'i's Volcanoes: Birth by Fire** by Katherine Orr. |

| Evidence of Student Learning | |
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| **Formative/Performance Tasks:**<br>• *Activities to provide evidence for student learning of content and cognitive skills.*<br>• Cooperative Group Learning<br>• Teacher Observation | **Alternative Assessments:**<br>• Mystery Science Activities |
| **Summative Assessments:**<br>• RST- Research Simulation Task<br>• Associated Unit tests, quizzes<br>• Labs and engineering based projects | **Benchmark Assessments:**<br>• Mystery Science Unit Assessment<br>• Lesson Quiz |

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| New Jersey Student Learning Standards | |
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| **2-ESS1-1** | Use information from several sources to provide evidence that Earth events can occur quickly or slowly. |
| **2-ESS2-1** | Compare multiple solutions designed to slow or prevent wind or water from changing the shape of the land. |
| **2-ESS2-2** | Develop a model to represent the shapes and kinds of land and bodies of water in an area. |
| **2-ESS2-3** | Obtain information to identify where water is found on Earth and that it can be solid or liquid. |

| Science and Engineering Practices Learning Progressions | |
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| | **Constructing Explanations and Designing Solutions**<br>Constructing explanations and designing solutions in K–2 builds on prior experiences and progresses to the use of evidence and ideas in constructing evidence-based accounts of natural phenomena and designing solutions.<br><br>Make observations from several sources to construct an evidence based account for natural phenomena. (2-ESS1-1)<br><br>Compare multiple solutions to a problem. (2-ESS2-1)<br>**Developing and Using Models**<br>Modeling in K–2 builds on prior experiences and progresses to include using and developing models (i.e., diagram, drawing, physical replica, diorama, dramatization, or storyboard) that represent concrete events or design solutions.<br><br>Develop a model to represent patterns in the natural world. (2- ESS2-2)<br>Develop a model to represent patterns in the natural world. (2- ESS2-2)<br>**Obtaining, Evaluating, and Communicating Information**<br>Obtaining, evaluating, and communicating information in K-2 builds on prior experiences and uses observations and texts to communicate new information.<br><br>Obtain information using various texts, text features (e.g., headings, tables of contents, glossaries, electronic menus, icons), and other media that will be useful in answering a scientific question. (2-ESS2-3) |

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| **Discipline Core Ideas**<br><br>Physical Science Learning Progressions<br><br>Earth & Space Science Learning Progressions<br><br>Life Science Learning Progressions | **ESS1.C: The History of Planet Earth**<br>Some events happen very quickly; others occur very slowly, over a time period much longer than one can observe. (2-ESS1-1)<br>**ESS2.A: Earth Materials and Systems**<br>Wind and water can change the shape of the land. (2-ESS2-1)<br>**ESS2.A: Earth Materials and Systems**<br>Wind and water can change the shape of the land. (2-ESS2-1)<br>**ETS1.C: Optimizing the Design Solution**<br>Because there is always more than one possible solution to a problem, it is useful to compare and test designs. (secondary to 2-ESS2-1)<br>**ESS2.C: The Roles of Water in Earth's Surface Processes**<br>Water is found in the ocean, rivers, lakes, and ponds. Water exists as solid ice and in liquid form. (2- ESS2-3)<br>**ETS1.C: Optimizing the Design Solution**<br>Because there is always more than one possible solution to a problem, it is useful to compare and test designs. (secondary to 2-ESS2-1) |
| Crosscutting Concepts | **Stability and Change**<br>Things may change slowly or rapidly. (2-ESS1-1)<br>**Patterns**<br>Patterns in the natural world can be observed. (2-ESS2-2), (2-ESS2-3)<br>**Connections to Engineering, Technology, and Applications of Science**<br>Influence of Engineering, Technology, and Science on Society and the Natural World<br><br>Developing and using technology has impacts on the natural world. (2-ESS2-1)<br>**Connections to Nature of Science**<br>**Science Addresses Questions About the Natural and Material World**<br>Scientists study the natural and material world. (2-ESS2-1) |
| Engineering, Technology and the Application of Science Learning Progressions | |

| Interdisciplinary Connections |
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| **Language Arts Standards** |

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| **RI.2.1** | Ask and answer such questions as who, what, where, when, why, and how, and how to demonstrate understanding of key details in text. (2-ESS1-1) |
| **RI.2.3** | Describe the connection between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text. (2-ESS1-1) |
| **RI.2.9** | Compare and contrast the most important points presented by two texts on the same topic. (2-ESS2-1) |
| **W.2.6** | With guidance and support from adults, use a variety of digital tools to produce and publish writing, including in collaboration with peers. (2-ESS1-1) |
| **W.2.7** | Participate in shared research and writing projects (e.g., read a number of books on a single topic to produce a report; record science observations). (2-ESS1-1) |
| **W.2.8** | Recall information from experiences or gather information from provided sources to answer a question. (2-ESS1-1) |
| • **SL.PE.2.1.** | Participate in collaborative conversations with diverse partners about grade 2 topics and texts with peers and adults in small and larger groups. |
| **SL.2.2** | Recount or describe key ideas or details from a text read aloud or information presented orally or through other media. (2-ESS1-1) |
| **SL.2.5** | Create audio recordings of stories or poems; add drawings or other visual displays to stories or recounts of experiences when appropriate to clarify ideas, thoughts, and feelings. (2-ESS2-2) |
| **Math Standards** | |
| **MP.2** | Reason abstractly and quantitatively. (2-ESS1-1) |
| **MP.4** | Model with mathematics. (2-ESS1-1) |
| **MP.5** | Use appropriate tools strategically. (2-ESS2-1) |
| **2.NBT.A** | Understand place value. (2-ESS1-1) |
| **2.NBT.A.3** | Read and write numbers to 1,000 using base-ten numerals, number names, and expanded form. (2-ESS2-2) |
| **2.MD.B.5** | Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units, e.g., by using drawings (such as drawings of rulers) and equations with a symbol for the unknown number to represent the problem. (2-ESS2-1) |
| **Social Studies Standards** | |

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| 6.1.2.CivicsCM.3 | Explain how diversity, tolerance, fairness, and respect for others can contribute to individuals feeling accepted. |
| 6.1.12.CivicsDP.5.a | Analyze the effectiveness of governmental policies and of actions by groups and individuals to address discrimination against new immigrants, Native Americans, and African American |

## Computer Science & Design Thinking

- 8.1.2.CS.1: Select and operate computing devices that perform a variety of tasks accurately and quickly based on user needs and preferences.
- 8.1.2.CS.2: Explain functions of common software and hardware components of computing systems.
- 8.1.2.IC.1: Compare how individuals live and work before and after the implementation of new computing technology.
- 8.1.2.DA.4: Make predictions based on data using charts or graphs.
- 8.2.2.ITH.3: Identify how technology impacts or improves life.
- 8.2.2.EC.1: Identify and compare technology used in different schools, communities, regions, and parts of the world.

## Career Readiness, Life Literacies & Key Skills

- 9.1.2.CR.1: Recognize ways to volunteer in the classroom, school and community.
- 9.1.2.RM.1: Describe how valuable items might be damaged or lost and ways to protect them
- 9.2.2.CAP.1: Make a list of different types of jobs and describe the skills associated with each job
- 9.4.2.CI.1: Demonstrate openness to new ideas and perspectives (e.g., 1.1.2.CR1a, 2.1.2.EH.1, 6.1.2.CivicsCM.2).
- 9.4.2.DC.7: Describe actions peers can take to positively impact climate change.
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- 9.4.2.CT.3: Use a variety of types of thinking to solve problems (e.g., inductive, deductive)

| Career Readiness, Life Literacies, and Key Skills Practices | |
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| Act as a responsible and contributing community member and employee. | Students understand the obligations and responsibilities of being a member of a community, and they demonstrate this understanding every day through their interactions with others. They are conscientious of the impacts of their decisions on others and the environment around them. They think about the near-term and long-term consequences of their actions and seek to act in ways that contribute to the betterment of their teams, families, community and workplace. They are reliable and consistent in going beyond the minimum expectation and in participating in activities that serve the greater good. |

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| Attend to financial well-being. | Students take regular action to contribute to their personal financial well-being, understanding that personal financial security provides the peace of mind required to contribute more fully to their own career success. |
| Consider the environmental, social and economic impacts of decisions. | Students understand the interrelated nature of their actions and regularly make decisions that positively impact and/or mitigate negative impact on other people, organization, and the environment. They are aware of and utilize new technologies, understandings, procedures, materials, and regulations affecting the nature of their work as it relates to the impact on the social condition, the environment and the profitability of the organization. |
| Demonstrate creativity and innovation. | Students regularly think of ideas that solve problems in new and different ways, and they contribute those ideas in a useful and productive manner to improve their organization. They can consider unconventional ideas and suggestions as solutions to issues, tasks or problems, and they discern which ideas and suggestions will add greatest value. They seek new methods, practices, and ideas from a variety of sources and seek to apply those ideas to their own workplace. They take action on their ideas and understand how to bring innovation to an organization. |
| Utilize critical thinking to make sense of problems and persevere in solving them. | Students readily recognize problems in the workplace, understand the nature of the problem, and devise effective plans to solve the problem. They are aware of problems when they occur and take action quickly to address the problem; they thoughtfully investigate the root cause of the problem prior to introducing solutions. They carefully consider the options to solve the problem. Once a solution is agreed upon, they follow through to ensure the problem is solved, whether through their own actions or the actions of others. |
| Model integrity, ethical leadership and effective management. | Students consistently act in ways that align personal and community-held ideals and principles while employing strategies to positively influence others in the workplace. They have a clear understanding of integrity and act on this understanding in every decision. They use a variety of means to positively impact the directions and actions of a team or organization, and they apply insights into human behavior to change others' actions, attitudes and/or beliefs. They recognize the near-term and long-term effects that management's actions and attitudes can have on productivity, morals and organizational culture. |
| Plan education and career paths aligned to personal goals. | Students take personal ownership of their own education and career goals, and they regularly act on a plan to attain these goals. They understand their own career interests, preferences, goals, and requirements. They have perspective regarding the pathways available to them and the time, effort, experience and other requirements to pursue each, including a path of entrepreneurship. They recognize the value of each step in the education and experiential process, and they recognize that nearly all career paths require ongoing education and experience. They seek counselors, mentors, and other experts to assist in the planning and execution of career and personal goals. |
| Use technology to enhance productivity, increase collaboration and communicate effectively. | Students find and maximize the productive value of existing and new technology to accomplish workplace tasks and solve workplace problems. They are flexible and adaptive in acquiring new technology. They are proficient with ubiquitous technology applications. They understand the inherent risks-personal and organizational-of technology applications, and they take actions to prevent or mitigate these risks. |

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| Work productively in teams while using cultural/global competence. | Students positively contribute to every team, whether formal or informal. They apply an awareness of cultural differences to avoid barriers to productive and positive interaction. They find ways to increase the engagement and contribution of all team members. They plan and facilitate effective team meetings. |

**Suggested Accommodations**

**English Language Learners:**
- Provide ELL students with multiple literacy strategies
- Structure lessons around questions that are authentic, relate to students' interests, social/family background and knowledge of their community
- Provide extra time
- Pre-teach vocabulary using visuals and gestures
- Chunk texts
- Summarize as you go
- Preview lessons
- Graphic Organizers
- Highlight key words
- Sentence starters
- Prompting and cueing
- Activate schema
- Build background knowledge

**Special Education/Students with Disabilities:**
- Pre-teach vocabulary using visuals and gestures
- Chunk texts
- Summarize as you go
- Preview lessons
- Graphic organizers
- Highlight keywords
- Sentence Starters
- Prompting and cuing
- Activate schema
- Build background knowledge
- Follow all IEP modifications
- Teacher tutoring
- Peer tutoring
- Cooperative learning groups
- Modified assignments
- Differentiated instruction
- Listen to audio recordings instead of reading text
- Learn content from audio books, movies, videos and digital media instead of reading print versions
- Work with fewer items per page or line and/or materials in a larger print size
- Have a designated reader
- Hear instructions orally
- Record a lesson, instead of taking note
- Have another student share class notes with him
- Be given an outline of a lesson
- Use visual presentations of verbal material, such as word webs and visual organizers
- Be given a written list of instruction

**504 Plans:**
- Follow all 504 plan modifications
- Teacher tutoring

Attachments are subject to change without notice

- Peer tutoring
- Cooperative learning groups
- Modified assignments
- Differentiated instruction
- Listen to audio recordings instead of reading text
- Learn content from audio books, movies, videos and digital media instead of reading print versions
- Work with fewer items per page or line and/or materials in a larger print size
- Have a designated reader
- Hear instructions orally
- Record a lesson, instead of taking note
- Have another student share class notes with him
- Be given an outline of a lesson
- Use visual presentations of verbal material, such as word webs and visual organizers
- Be given a written list of instruction

**Gifted and Talented:**

- Higher level questioning
- Students design questions
- Choice board to extend learning
- Expose to sophisticated vocabulary
- Extend reading response to further enrich understanding (see extension activities in unit binder)
- Discuss how readers and writers connect
- Create comic strip showing connections to reading lives; illustrate and caption
- Create poem using rich adjectives and detailed illustrations
- Write paragraph in notebook about things they are passionate about
- Have students choose someone in their family they would write a biography about and why
- Collect artifacts to decorate notebook at home discuss with class
- Have students create a poster showing their favorite reading spot
- Have students create anchor charts to explain strategy taught to hand around the room
- Students can expand on discussions with family members in their notebooks
- Expand reading genre while independent reading to reflect a well-rounded book bag

**Students at Risk of Failure:**

- Work toward longer passages as skills in English increase
- Use visuals
- Introduce key vocabulary before lesson
- Teacher reads aloud daily
- Provide peer tutoring
- Use a strong student as a "buddy" (does not necessarily have to speak the primary language)
- Choral reading
- Chants, songs
- Preferential seating

**Economically Disadvantaged:**

- Extra Materials for Home
- Books for Home
- Study Guides
- "Take Home" Kit

**Culturally Diverse:**

- Provide ELL students with multiple literacy strategies
- Structure lessons around questions that are authentic, relate to students' interests, social/family background and knowledge of their community
- Provide extra time
- Pre-teach vocabulary using visuals and gestures
- Chunk texts
- Summarize as you go

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| Grade: 2 | Content Area: Science |
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- Preview lessons
- Graphic Organizers
- Highlight key words
- Sentence starters
- Prompting and cueing
- Activate schema
- Build background knowledge

| Unit 4: Engineering Design | Duration: 12 weeks |
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**Knowledge & Skills**

**Essential Understandings:**
*Students will understand that…*

- The shape and stability of structures of natural and designed objects are related to their function(s).
- A situation that people want to change or create can be approached as a problem to be solved through engineering.
- Asking questions, making observations, and gathering information are helpful in thinking about problems.
- Before beginning to design a solution, it is important to clearly understand the problem.
- Designs can be conveyed through sketches, drawings, or physical models. These representations are useful in communicating ideas for a problem's solutions to other people.
- Because there is always more than one possible solution to a problem, it is useful to compare and test designs.

**Essential Questions:**

- How are asking questions, gathering information, and making observation helpful when thinking about problems?
- How does sketching or creating a model to illustrate its shape help solve a given problem?
- How does testing a model determine its strengths and weaknesses in solving a given problem?

| Content | Skills |
|---|---|
| *Students will know…*<br>• A situation that people want to change or create can be approached as a problem to be solved through engineering<br>• Asking questions, making observations, and gathering information are helpful in thinking about problems<br>• Before beginning to design a solution, it is important to clearly understand the problem<br>• Designs can be conveyed through sketches, drawings, or physical models. These representations are useful in communicating | *Students will be able to …*<br>• Ask questions based on observations to find more information about the natural and/or designed world(s).<br>• Define a simple problem that can be solved through the development of a new or improved object or tool.<br>• Develop a simple model based on evidence to represent a proposed object or tool.<br>• Analyze data from tests of an object or tool to determine if it works as intended. |

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| Grade: 2 | Content Area: Science |
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| ideas for a problem's solutions to other people<br>• Because there is always more than one possible solution to a problem, it is useful to compare and test designs | |

| Vocabulary |
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| Technology, engineering, technological design |

| Core Instructional & Supplemental Materials | |
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| **Suggested Activities:** | **Resources:** |
| **Mystery Science: Material Magic Unit, Lesson 1**<br>**Material Properties & Engineering**<br>**Why do we wear clothes?**<br>Students explore the different properties of materials used for clothing. In the activity, students select materials they need to construct a hat that protects them from the sun. | https://mysteryscience.com/materials/mystery-1/material-properties-engineering/64?r=6359979 |
| **Mystery Science: Material Magic Unit, Lesson 4**<br>**Classify Materials: Insulators**<br>**What materials might be invented in the future?**<br>Students learn how new materials are invented. In the activity, they create a design for an invention that uses a futuristic material. | https://mysteryscience.com/materials/mystery-4/material-inventions-engineering/67?r=6359979 |
| **Mystery Science: Material Magic Unit, Lesson 5**<br>**Materials, Properties, & Engineering**<br>**Could you build a house out of paper?**<br>Students examine how large structures like houses are built from smaller pieces. In the activity, Paper Towers, they design their own structures using an unconventional building material: paper! Students build towers using 3" x 5" index cards and paper clips. First, they build tall towers, then they are challenged to build towers strong enough to support a hardcover book. | https://mysteryscience.com/materials/mystery-5/materials-properties-engineering/262 |
| **Mystery Science: Animal Adventures Unit, Lesson 4:**<br>**Biodiversity & Engineering**<br>**How could you get more birds to visit a bird feeder?**<br>Students investigate which kinds of birds are likely to visit a bird feeder based on what they eat. In the activity, Design a Bird Feeder, students first draw their own bird feeder design to attract a specific type of | https://mysteryscience.com/biodiversity/mystery-4/biodiversity-engineering/176 |

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| bird. Then they build a prototype of their bird feeder using available materials. | |
| **Mystery Science: Plant Adventures Unit, Lesson 1 Seed Dispersal**<br>**How did a tree travel halfway around the world?**<br>Students investigate the mystery of the koa tree, a type of tree that grows in only two places—islands halfway across the world from one another. In the activity, students develop three different physical models of seed structures. They observe how structure affects the seed's function in dispersing away from the tree. Then, they use these observations to evaluate whether koa seeds are likely dispersed by wind, water, or animals. | https://mysteryscience.com/plants/mystery-1/seed-dispersal/912 |
| **Mystery Science: Plant Adventures Unit, Lesson 2 Animal Seed Dispersal**<br>**Why do seeds have so many different shapes?**<br>Students explore how the structures of seeds enable them to disperse, with a focus on seeds that utilize animal structures to aid in their dispersal. In the activity, Seed Travelers, students develop a model of a furry animal ("fluffadoo") and then use it to test how far seed models with different structures can travel. | https://mysteryscience.com/plants/mystery-2/animal-seed-dispersal/1003 |
| **Mystery Science: Work of Water Unit, Lesson 4 Erosion & Engineering**<br>**How can you stop a landslide?**<br>Students compare multiple solutions for preventing erosion. In the activity, they design and test ways to keep water from washing away a hill modeled out of cornmeal. | https://mysteryscience.com/water/mystery-5/erosion-engineering/152 |
| **Suggested Mini-Lessons:** | **Resources:** |
| WHat would happen if football players didn't wear helmets? | https://mysteryscience.com/mini-lessons/football-helmets |
| How are pencils made? | https://mysteryscience.com/mini-lessons/pencils#slide-id-11116 |
| What would it be like to live on the moon? | https://mysteryscience.com/mini-lessons/moon-travel#slide-id-14410 |
| How is money made? | https://mysteryscience.com/mini-lessons/money#slide-id-5391 |
| How do batteries work? | https://mysteryscience.com/mini-lessons/batteries#slide-id-5924 |

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| Who invented the alphabet? | https://mysteryscience.com/mini-lessons/alphabet#slide-id-6909 |
| How are toys invented? | https://mysteryscience.com/mini-lessons/toys#slide-id-7715 |
| How do phones work? | https://mysteryscience.com/mini-lessons/phones#slide-id-9376 |
| How were emojis created? | https://mysteryscience.com/mini-lessons/emojis-creation |
| What do garbage trucks do with garbage? | https://mysteryscience.com/mini-lessons/garbage#slide-id-10283 |
| How are video games made? | https://mysteryscience.com/mini-lessons/video-games#slide-id-10590 |
| What were the first computers like? | https://mysteryscience.com/mini-lessons/first-computers |
| What was the first cartoon? | https://mysteryscience.com/mini-lessons/cartoon |
| What's the tallest skyscraper anyone can build? | https://mysteryscience.com/mini-lessons/tallest-skyscraper#slide-id-10691 |
| How are books made? | https://mysteryscience.com/mini-lessons/books#slide-id-11094 |
| Do people really use robots? | https://mysteryscience.com/mini-lessons/robots#slide-id-11469 |
| How did people clean their teeth before toothpaste was invented? | https://mysteryscience.com/mini-lessons/toothpaste#slide-id-12169 |
| Why don't people fall out of roller coaster when they go upside down? | https://mysteryscience.com/mini-lessons/roller-coasters#slide-id-12268 |
| How was basketball invented? | https://mysteryscience.com/mini-lessons/basketball#slide-id-12387 |
| Could you make a real lightsaber? | https://mysteryscience.com/mini-lessons/lightsabers#slide-id-12743 |
| Why were traffic lights invented? | https://mysteryscience.com/mini-lessons/traffic-lights#slide-id-12955 |
| How is plastic made? | https://mysteryscience.com/mini-lessons/plastic#slide-id-5817 |
| How do scientists learn about wild animals? | https://mysteryscience.com/mini-lessons/scientists-wild-animals#slide-id-13106 |

Attachments are subject to change without notice

| Grade: 2 | Content Area: Science |
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| How were bicycles invented? | https://mysteryscience.com/mini-lessons/bicycles#slide-id-13214 |
| How do you build a bridge that lasts for 100 years? | https://mysteryscience.com/mini-lessons/build-a-bridge |
| How is glass made? | https://mysteryscience.com/mini-lessons/glass#slide-id-5489 |
| How do scientists know so much? | https://mysteryscience.com/mini-lessons/observe-and-question#slide-id-9680 |
| What does a scientist do? | https://mysteryscience.com/mini-lessons/what-scientists-do |
| How do they make imaginary movie characters look so real? | https://mysteryscience.com/mini-lessons/imaginary-movie-characters |
| How do braces work? | https://mysteryscience.com/mini-lessons/braces#slide-id-14552 |
| Who invented ice skates? | https://mysteryscience.com/mini-lessons/ice-skates#slide-id-14590 |
| How do you fix a broken heart? | https://mysteryscience.com/mini-lessons/broken-heart |
| How do astronauts get ready for space? | https://mysteryscience.com/mini-lessons/astronauts-space#slide-id-14876 |
| How were skateboards invented? | https://mysteryscience.com/mini-lessons/skateboards#slide-id-15247 |
| How do you become a great inventor? | https://mysteryscience.com/mini-lessons/inventions#slide-id-9535 |
| Who invented school? | https://mysteryscience.com/mini-lessons/who-invented-school#slide-id-15782 |
| Who invented the high five? | https://mysteryscience.com/mini-lessons/high-five#slide-id-16445 |
| Who invented candy? | https://mysteryscience.com/mini-lessons/candy#slide-id-10095 |
| How do erasers erase? | https://mysteryscience.com/mini-lessons/erasers#slide-id-17333 |
| Who invented football? | https://mysteryscience.com/mini-lessons/football-history#slide-id-5593 |
| Could you build a real house out of cookies and candy? | https://mysteryscience.com/mini-lessons/candy-house#slide-id-17410 |

Attachments are subject to change without notice

| Grade: 2 | Content Area: Science |
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| How does mail get delivered? | https://mysteryscience.com/mini-lessons/mail#slide-id-17706 |
| Why do we have leap years? | https://mysteryscience.com/mini-lessons/leap-year#slide-id-7959 |
| Why do we have daylight savings time? | https://mysteryscience.com/mini-lessons/daylight-saving-time#slide-id-17772 |
| Does trash last forever? | https://mysteryscience.com/mini-lessons/trash-last-forever#slide-id-17877 |

| Evidence of Student Learning | |
|---|---|
| **Formative/Performance Tasks:**<br>• *Activities to provide evidence for student learning of content and cognitive skills.*<br>• Cooperative Group Learning<br>• Teacher Observation | **Alternative Assessments:**<br>• Mystery Science Activities |
| **Summative Assessments:**<br>• RST- Research Simulation Task<br>• Associated Unit tests, quizzes<br>• Labs and engineering based projects | **Benchmark Assessments:**<br>• Mystery Science Unit Assessment<br>• Lesson Quiz |

| New Jersey Student Learning Standards | |
|---|---|
| **K-2-ETS-1-1** | Ask questions, make observations, and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool. |
| **K-2-ETS-1-2** | Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem. |
| **K-2-ETS-1-3** | Analyze data from tests of two objects designed to solve the same problem to compare the strengths and weaknesses of how each performs. |

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| **Science and Engineering Practices Learning Progressions** | **Asking Questions and Defining Problems**<br>Asking questions and defining problems in K–2 builds on prior experiences and progresses to simple descriptive questions.<br>Ask questions based on observations to find more information about the natural and/or designed world(s). (K-2- ETS1-1) |

Attachments are subject to change without notice

| Grade: 2 | Content Area: Science |
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| | Define a simple problem that can be solved through the development of a new or improved object or tool. (K-2-ETS1-1)<br>**Developing and Using Models**<br>Modeling in K–2 builds on prior experiences and progresses to include using and developing models (i.e., diagram, drawing, physical replica, diorama, dramatization, or storyboard) that represent concrete events or design solutions.<br>Develop a simple model based on evidence to represent a proposed object or tool. (K-2-ETS1-2)<br>**Analyzing and Interpreting Data**<br>Analyzing data in K–2 builds on prior experiences and progresses to collecting, recording, and sharing observations. Analyze data from tests of an object or tool to determine if it works as intended. (K-2-ETS1-3) |
| **Discipline Core Ideas**<br><br>Physical Science Learning Progressions<br><br>Earth & Space Science Learning Progressions<br><br>Life Science Learning Progressions | **ETS1.A: Defining and Delimiting Engineering Problems**<br>A situation that people want to change or create can be approached as a problem to be solved through engineering. (K-2- ETS1-1)<br>Ask questions, make observations, and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool. (K-2- ETS1-1)<br>Before beginning to design a solution, it is important to clearly understand the problem. (K-2- ETS1-1)<br>**ETS1.B: Developing Possible Solutions**<br>Designs can be conveyed through sketches, drawings, or physical models. These representations are useful in communicating ideas for a problem's solutions to other people. (K-2-ETS1-2)<br>**ETS1.C: Optimizing the Design Solution**<br>Because there is always more than one possible solution to a problem, it is useful to compare and test designs. (K-2-ETS1-3) |
| Crosscutting Concepts | **Structure and Function**<br>The shape and stability of structures of natural and designed objects are related to their function(s). (K-2-ETS1-2) |
| Engineering, Technology and the Application of Science Learning Progressions | |

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| Interdisciplinary Connections | |
| **Language Arts Standards** | |

Attachments are subject to change without notice

| Grade: 2 | Content Area: Science |
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| **RI.2.1** | Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text. (K-2-ETS1-1) | |
| **W.2.6** | With guidance and support from adults, use a variety of digital tools to produce and publish writing, including collaboration with peers. (K-2-ETS1-1), (K-2-ETS1-3) | |
| **W.2.8** | Recall information from experiences or gather information from provided sources to answer a question. (K-2-ETS1-1), (K-2-ETS1-3) | |
| • **SL.PE.2.1.** | Participate in collaborative conversations with diverse partners about grade 2 topics and texts with peers and adults in small and larger groups. | |
| **SL.2.5** | Create audio recordings of stories or poems; add drawings or other visual displays to stories or recounts of experiences when appropriate to clarify ideas, thoughts, and feelings. (K-2-ETS1-2) | |
| **Math Standards** | | |
| **MP.5** | Use appropriate tools strategically. (1-PS4-4) | |
| **MP.2** | Reason abstractly and quantitatively. (K-2-ETS1-1), (K-2-ETS1-3) | |
| **MP.4** | Model with mathematics. (K-2-ETS1-1), (K-2-ETS1-3) | |
| **2.MD.D.10** | Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems using information presented in a bar graph. (K-2-ETS1-1), (K-2-ETS1-3) | |
| **Social Studies Standards** | | |
| 6.1.2.CivicsCM.3 | Explain how diversity, tolerance, fairness, and respect for others can contribute to individuals feeling accepted. | |
| 6.1.12.CivicsDP.5.a | Analyze the effectiveness of governmental policies and of actions by groups and individuals to address discrimination against new immigrants, Native Americans, and African American | |

| Computer Science & Design Thinking |
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| • 8.1.2.CS.1: Select and operate computing devices that perform a variety of tasks accurately and quickly based on user needs and preferences. |

Attachments are subject to change without notice

| Grade: 2 | Content Area: Science |
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- 8.1.2.CS.2: Explain functions of common software and hardware components of computing systems.
- 8.1.2.IC.1: Compare how individuals live and work before and after the implementation of new computing technology.
- 8.1.2.DA.4: Make predictions based on data using charts or graphs.
- 8.2.2.ITH.3: Identify how technology impacts or improves life
- 8.2.2.EC.1: Identify and compare technology used in different schools, communities, regions, and parts of the world.

## Career Readiness, Life Literacies & Key Skills

- 9.1.2.CR.1: Recognize ways to volunteer in the classroom, school and community.
- 9.1.2.RM.1: Describe how valuable items might be damaged or lost and ways to protect them
- 9.2.2.CAP.1: Make a list of different types of jobs and describe the skills associated with each job
- 9.4.2.CI.1: Demonstrate openness to new ideas and perspectives (e.g., 1.1.2.CR1a, 2.1.2.EH.1, 6.1.2.CivicsCM.2).
- 9.4.2.DC.7: Describe actions peers can take to positively impact climate change.
- 9.4.2.DC.6: Identify respectful and responsible ways to communicate in digital environments.
- 9.4.2.CT.3: Use a variety of types of thinking to solve problems (e.g., inductive, deductive)

| Career Readiness, Life Literacies, and Key Skills Practices | |
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| Act as a responsible and contributing community member and employee. | Students understand the obligations and responsibilities of being a member of a community, and they demonstrate this understanding every day through their interactions with others. They are conscientious of the impacts of their decisions on others and the environment around them. They think about the near-term and long-term consequences of their actions and seek to act in ways that contribute to the betterment of their teams, families, community and workplace. They are reliable and consistent in doing beyond the minimum expectation and in participating in activities that serve the greater good. |
| Attend to financial well-being. | Students take regular action to contribute to their personal financial well-being, understanding that personal financial security provides the peace of mind required to contribute more fully to their own career success. |
| Consider the environmental, social and economic impacts of decisions. | Students understand the interrelated nature of their actions and regularly make decisions that positively impact and/or mitigate negative impact on other people, organization, and the environment. They are aware of and utilize new technologies, understandings, procedures, materials, and regulations affecting the nature of their work as it relates to the impact on the social condition, the environment and the profitability of the organization. |
| Demonstrate creativity and innovation. | Students regularly think of ideas that solve problems in new and different ways, and they contribute those ideas in a useful and productive manner to improve their organization. They can consider unconventional ideas and suggestions as solutions to issues, tasks or problems, and they discern which ideas and suggestions will add greatest value. They seek new methods, practices, and ideas from a variety of sources |

Attachments are subject to change without notice

| Grade: 2 | Content Area: Science |
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| | and seek to apply those ideas to their own workplace. They take action on their ideas and understand how to bring innovation to an organization. |
| Utilize critical thinking to make sense of problems and persevere in solving them. | Students readily recognize problems in the workplace, understand the nature of the problem, and devise effective plans to solve the problem. They are aware of problems when they occur and take action quickly to address the problem; they thoughtfully investigate the root cause of the problem prior to introducing solutions. They carefully consider the options to solve the problem. Once a solution is agreed upon, they follow through to ensure the problem is solved, whether through their own actions or the actions of others. |
| Model integrity, ethical leadership and effective management. | Students consistently act in ways that align personal and community-held ideals and principles while employing strategies to positively influence others in the workplace. They have a clear understanding of integrity and act on this understanding in every decision. They use a variety of means to positively impact the directions and actions of a team or organization, and they apply insights into human behavior to change others' actions, attitudes and/or beliefs. They recognize the near-term and long-term effects that management's actions and attitudes can have on productivity, morals and organizational culture. |
| Plan education and career paths aligned to personal goals. | Students take personal ownership of their own education and career goals, and they regularly act on a plan to attain these goals. They understand their own career interests, preferences, goals, and requirements. They have perspective regarding the pathways available to them and the time, effort, experience and other requirements to pursue each, including a path of entrepreneurship. They recognize the value of each step in the education and experiential process, and they recognize that nearly all career paths require ongoing education and experience. They seek counselors, mentors, and other experts to assist in the planning and execution of career and personal goals. |
| Use technology to enhance productivity, increase collaboration and communicate effectively. | Students find and maximize the productive value of existing and new technology to accomplish workplace tasks and solve workplace problems. They are flexible and adaptive in acquiring new technology. They are proficient with ubiquitous technology applications. They understand the inherent risks-personal and organizational-of technology applications, and they take actions to prevent or mitigate these risks. |
| Work productively in teams while using cultural/global competence. | Students positively contribute to every team, whether formal or informal. They apply an awareness of cultural differences to avoid barriers to productive and positive interaction. They find ways to increase the engagement and contribution of all team members. They plan and facilitate effective team meetings. |

| Suggested Accommodations |
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| **English Language Learners:**<br>Provide ELL students with multiple literacy strategies<br>• Structure lessons around questions that are authentic, relate to students' interests, social/family background and knowledge of their community<br>• Provide extra time<br>• Pre-teach vocabulary using visuals and gestures<br>• Chunk texts<br>• Summarize as you go |

Attachments are subject to change without notice

- Preview lessons
- Graphic Organizers
- Highlight key words
- Sentence starters
- Prompting and cueing
- Activate schema
- Build background knowledge

**Special Education/Students with Disabilities:**

- Pre-teach vocabulary using visuals and gestures
- Chunk texts
- Summarize as you go
- Preview lessons
- Graphic organizers
- Highlight keywords
- Sentence Starters
- Prompting and cuing
- Activate schema
- Build background knowledge
- Follow all IEP modifications
- Teacher tutoring
- Peer tutoring
- Cooperative learning groups
- Modified assignments
- Differentiated instruction
- Listen to audio recordings instead of reading text
- Learn content from audio books, movies, videos and digital media instead of reading print versions
- Work with fewer items per page or line and/or materials in a larger print size
- Have a designated reader
- Hear instructions orally
- Record a lesson, instead of taking note
- Have another student share class notes with him
- Be given an outline of a lesson
- Use visual presentations of verbal material, such as word webs and visual organizers
- Be given a written list of instruction

**504 Plans:**

- Follow all 504 plan modifications
- Teacher tutoring
- Peer tutoring
- Cooperative learning groups
- Modified assignments
- Differentiated instruction
- Listen to audio recordings instead of reading text
- Learn content from audio books, movies, videos and digital media instead of reading print versions
- Work with fewer items per page or line and/or materials in a larger print size
- Have a designated reader
- Hear instructions orally
- Record a lesson, instead of taking note
- Have another student share class notes with him
- Be given an outline of a lesson
- Use visual presentations of verbal material, such as word webs and visual organizers
- Be given a written list of instruction

**Gifted and Talented:**

- Higher level questioning

Attachments are subject to change without notice

| Grade: 2 | Content Area: Science |
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- Students design questions
- Choice board to extend learning
- Expose to sophisticated vocabulary
- Extend reading response to further enrich understanding (see extension activities in unit binder)
- Discuss how readers and writers connect
- Create comic strip showing connections to reading lives: illustrate and caption
- Create poem using rich adjectives and detailed illustrations
- Write paragraph in notebook about things they are passionate about
- Have students choose someone in their family they would write a biography about and why
- Collect artifacts to decorate notebook at home-discuss with class
- Have students create a poster showing their favorite reading spot
- Have students create anchor charts to explain strategy taught to hand around the room
- Students can expand on discussions with family members in their notebooks
- Expand reading genre while independent reading to reflect a well-rounded book bag

**Students at Risk of Failure:**

- Work toward longer passages as skills in English increase
- Use visuals
- Introduce key vocabulary before lesson
- Teacher reads aloud daily
- Provide peer tutoring
- Use a strong student as a "buddy" (does not necessarily have to speak the primary language)
- Choral reading
- Chants, songs
- Preferential seating

**Economically Disadvantaged:**

- Extra Materials for Home
- Books for Home
- Study Guides
- "Take Home" Kit

**Culturally Diverse:**

- Provide ELL students with multiple literacy strategies
- Structure lessons around questions that are authentic, relate to students' interests, social/family background and knowledge of their community
- Provide extra time
- Pre-teach vocabulary using visuals and gestures
- Chunk texts
- Summarize as you go
- Preview lessons
- Graphic Organizers
- Highlight key words
- Sentence starters
- Prompting and cueing
- Activate schema
- Build background knowledge

Attachments are subject to change without notice

| Grade: 2 | Content Area: Science |
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**Stafford Township School DIstrict Curriculum Guide**

| Grade: 3 | Content Area: Science |
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| **Original Adoption:** 2020 NJSLS Science, Social Studies, Career Readiness, Life Literacies & Key Skills, Computer Design & Thinking, Visual & Performing Arts, World Language, Comprehensive Health and Physical Education (9-12-22); 2023 NJSLS English Language Arts (9-23-24); Math NJSLS Mathematics (9-23-24) |
| **Created By: Brooke Reeves & Sarah Brady** |
| **Updated Date: September 17, 2026** |
| **Updated By: Megan Banach** |

Intent and Spirit

The New Jersey Student Learning Standards for Science (NJSLS-S) describe the expectations for what students should know and be able to do as well as promote three-dimensional science instruction across the three science domains (i.e., physical sciences, life science, Earth and space sciences). From the earliest grades, the expectation is that students will engage in learning experiences that enable them to investigate phenomena, design solutions to problems, make sense of evidence to construct arguments, and critique and discuss those arguments (in appropriate ways relative to their grade level).

The foundation of the NJSLS-S reflects three dimensions — science and engineering practices, disciplinary core ideas, and crosscutting concepts. The performance expectations are derived from the interplay of these three dimensions. It is essential that these three components are integrated into all learning experiences. Within each standard document, the three dimensions are intentionally presented as integrated components to foster sensemaking and designing solutions to problems. Because the NJSLS-S is built on the notions of coherence and contextuality, each of the science and engineering practices and crosscutting concepts appear multiple times across topics and at every grade level. Additionally, the three dimensions should be an integral part of every curriculum unit and should not be taught in isolation.

Mission

All students will develop an understanding of scientific concepts and processes essential for informed decision-making, meaningful participation in civic life, and readiness for postsecondary opportunities, including careers in STEM fields.

Vision

Prepare students to become scientifically literate individuals who can effectively:

- Apply scientific thinking, skills, and understanding to real-world phenomena and problems;
- Engage in systems thinking and modeling to explain phenomena and to give a context for the ideas to be learned;
- Conduct investigations, solve problems, and engage in discussions;
- Discuss open-ended questions that focus on the strength of the evidence used to generate claims;
- Read and evaluate multiple sources, including science-related magazine and journal articles and web-based resources to gain knowledge about current and past science problems and solutions and develop well-reasoned claims; and
- Communicate ideas through journal articles, reports, posters, and media presentations that explain and argue.

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**Stafford Township School DIstrict Curriculum Guide**

| Grade: 3 | Content Area: Science |
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| Recommended Pacing Guide | |
|---|---|
| **Motion and Stability** | **40 days** |
| **Inheritance and Variation Traits** | **40 days** |
| **Interdependent Relationships: Ecosystems/Environments** | **40 days** |
| **Weather and Climate** | **40 days** |

**Alignment with State Mandates**

The following colors are used throughout this document to indicate areas in which the curriculum is aligned with the following NJSA requirements:

- Holocaust and genocides (N.J.S.A. 18A:35-28)
- History and contributions of African-Americans (Amistad Law) (N.J.S.A. 18A:35-4.43)
- Highlight and promote diversity and inclusion (Diversity & Inclusion Law) (N.J.S.A. 18A:35-4.36a)
- History of disabled and LGBT persons included in middle and high school curriculum (Section 18A:35-4.35 )
- Asian Americans and Pacific Islanders (N.J.S.A18A:34-4,44)
- Climate Change - to prepare students to understand how and why climate change happens, the impact it has on our local and global communities and to act in informed and sustainable ways. Please click here for specific examples (by subject).

Students are expected to be able to determine the effects of balanced and unbalanced forces on the motion of an object and the cause and effect relationships of electric or magnetic interactions between two objects not in contact with each other. They are then able to apply their understanding of magnetic interactions to define a simple design problem that can be solved with magnets. Students develop an understanding of the similarities and differences of organisms' life cycles. Students acquire an understanding that organisms have different inherited traits, and that the environment can also affect the traits that an organism develops, at this level. In addition, students are able to construct an explanation using evidence for how the variations in characteristics among individuals of the same species may provide advantages in surviving, finding mates, and reproducing. Students are expected to develop an understanding of types of organisms that lived long ago and also about the nature of their environments. Third graders are expected to develop an understanding of the idea that when the environment changes, some organisms survive and reproduce, some move to new locations, some move into the transformed environment, and some die.

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| Grade: 3 | Content Area: Science |
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| Unit 1: Motion and Stability: Forces and Interactions | Duration: 40 days |
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## Suggested Accommodations

**English Language Learners:**

- Provide extra time
- Pre-teach vocabulary using visuals and gestures
- Chunk texts
- Summarize as you go
- Preview lessons
- Graphic organizers
- Highlight key words
- Prompting and cueing
- Activate schema
- Build background knowledge

**Special Education/Students with Disabilities:**

- Pre-teach vocabulary using visuals and gestures
- Chunk texts
- Summarize as you go
- Preview lessons
- Graphic organizers
- Highlight key words
- Sentence starters
- Prompting and cueing
- Activate schema
- Build background knowledge
- Provide extra time
- Provide differentiated instruction as needed
- Follow all IEP modifications
- Provide manipulatives or the opportunity to draw solution strategies
- Provide students with notes from the lesson
- For additional support and guidance, provide students with lab group or partner for lab experiences
- Provide students with a study guide about the information they will be assessed on for a test or quiz
- Teach and model note taking strategies to assist student when reading their science textbook
- Teach and model strategies to learn and practice new vocabulary words
- Assist student in completing a word web for new vocabulary words to reinforce new words in their science unit
- Provide students with an organization system to help them organize their notes, labs, and classwork
- Read directions, tests, and/or quizzes aloud
- Use graphic organizers to take notes, organize new information, and help students relate new information with previous knowledge
- Provide students with additional time to complete assignments
- Provide small group and individual conferencing to help support student throughout the lesson
- Preferential seating based on student needs
- Review concepts of previous lesson before teaching the new lesson
- Complete review activities to reinforce concepts previously taught
- Check for students understanding often with formal, informal, verbal, and nonverbal measures
- Provide student with modified tests and quizzes organized in a manner that will easy for the student to follow, assessment quality over quantity, and has clear directions

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- Allow students to verbalize before beginning tasks and lab experiments
- Repeat the directions for students as often as needed
- Allow wait time for students
- Provide visual aids to support concepts being taught, such as diagrams
- Redirect student and provide frequent breaks as needed
- Teach student mnemonic devices to help learn new concepts, as appropriate
- Use text-to-speech applications to help students when reading online texts above their reading level on the computer

**504 Plans:**

- Pre-teach vocabulary using visuals and gestures
- Chunk texts
- Summarize as you go
- Preview lessons
- Graphic organizers
- Highlight key words
- Sentence starters
- Prompting and cueing
- Activate schema
- Build background knowledge
- Provide extra time
- Provide differentiated instruction as needed
- Follow all IEP modifications
- Provide manipulatives or the opportunity to draw solution strategies
- Provide students with notes from the lesson
- For additional support and guidance, provide students with lab group or partner for lab experiences
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- Allow wait time for students
- Provide visual aids to support concepts being taught, such as diagrams
- Redirect student and provide frequent breaks as needed
- Teach student mnemonic devices to help learn new concepts, as appropriate
- Use text-to-speech applications to help students when reading online texts above their reading level on the computer

**Gifted and Talented:**

- Ask open-ended questions

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- Encourage upper level intellectual behavior based on Bloom's Taxonomy (analyzing, evaluating, creating)
- Do not always be explicit, allow for discovery
- Use centers and group students according to ability or interest
- Propose interest-based extension activities
- Use leveled texts and offer an advanced reader reading list
- Ask "why" and "what if" questions
- Use varied modes of pre-assessment and assessment
- Create an enhanced set of introductory activities (e.g. advance organizers, concept maps, concept puzzles)
- Provide options, alternatives and choices to differentiate and broaden the curriculum
- Organize and offer flexible small group learning activities
- Provide whole group enrichment explorations
- Teach cognitive and methodological skills
- Use center, stations, or contracts
- Organize integrated problem-solving simulations
- Debrief students
- Propose interest-based extension activities

**Students at Risk of Failure:**

- Work toward longer passages as skills in English increase
- Use visuals
- Introduce key vocabulary before lesson
- Teacher reads aloud daily
- Provide peer tutoring
- Use a strong student as a "buddy" (does not necessarily have to speak the primary language)
- choral reading
- chants, songs
- preferential seating

**Economically Disadvantaged:**

- Provide extra time
- Pre-teach vocabulary using visuals and gestures
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- Preview lessons
- Graphic organizers
- Highlight key words
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- Build background knowledge

**Culturally Diverse:**

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- Chunk texts
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- Preview lessons
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- Build background knowledge

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| Grade: 3 | Content Area: Science |
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| New Jersey Student Learning Standards | |
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| • **3-PS2-1** Plan and conduct an investigation to provide evidence of the effects of balanced and unbalanced forces on the motion of an object.<br>• **3-PS2-2** Make observations and/or measurements of an object's motion to provide evidence that a pattern can be used to predict future motion.<br>• **3-PS2-3** Ask questions to determine cause and effect relationships of electric or magnetic interactions between two objects not in contact with each other.<br>• **3-PS2-4** Define a simple design problem that can be solved by applying scientific ideas about magnets | |
| Science and Engineering Practices Learning Progressions | **Asking Questions and Defining Problems**<br>Asking questions and defining problems in grades 3–5 builds on grades K–2 experiences and progresses to specifying qualitative relationships.<br>• Ask questions that can be investigated based on patterns such as cause and effect relationships. (3-PS2-3)<br>• Define a simple problem that can be solved through the development of a new or improved object or tool. (3-PS2-4)<br>**Planning and Carrying Out Investigations**<br>Planning and carrying out investigations to answer questions or test solutions to problems in 3–5 builds on K–2 experiences and progresses to include investigations that control variables and provide evidence to support explanations or design solutions.<br>• Plan and conduct an investigation collaboratively to produce data to serve as the basis for evidence, using fair tests in which variables are controlled and the number of trials considered. (3-PS2-1)<br>• Make observations and/or measurements to produce data to serve as the basis for evidence for an explanation of a phenomenon or test a design solution. (3-PS2-2) |
| **Discipline Core Ideas**<br>Physical Science Learning Progressions<br>Earth & Space Science Learning Progressions<br>Life Science Learning Progressions | **PS2.A: Forces and Motion**<br>• Each force acts on one particular object and has both strength and a direction. An object at rest typically has multiple forces acting on it, but they add to give zero net force on the object. Forces that do not sum to zero can cause changes in the object's speed or direction of motion. (Boundary: Qualitative and conceptual, but not quantitative addition of forces, are used at this level.) (3-PS2-1)<br>• The patterns of an object's motion in various situations can be observed and measured; when that past motion exhibits a regular pattern, future motion can be predicted from it. (Boundary: Technical terms, such as magnitude, velocity, momentum, and vector quantity, are not introduced at this level, but the concept that some quantities need both size and direction to be described is developed.) (3-PS2-2)<br>**PS2.B: Types of Interactions**<br>• Objects in contact exert forces on each other. (3-PS2-1) |

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| | ● Electric and magnetic forces between a pair of objects do not require that the objects be in contact. The sizes of the forces in each situation depend on the properties of the objects and their distances apart and, for forces between two magnets, on their orientation relative to each other. (3-PS2-3), (3-PS2-4) |
| Crosscutting Concepts | **Patterns**<br>● Patterns of change can be used to make predictions. (3-PS2-2)<br><br>**Cause and Effect**<br><br>● Cause and effect relationships are routinely identified. (3-PS2-1)<br>● Cause and effect relationships are routinely identified, tested, and used to explain change. (3-PS2-3)<br><br>***Connections to Engineering, Technology, and Applications of Science***<br><br>**Interdependence of Science, Engineering, and Technology**<br>● *Scientific discoveries about the natural world can often lead to new and improved technologies, which are developed through the engineering design process. (3- PS2-4)*<br><br>***Connections to Nature of Science***<br><br>***Science Knowledge is Based on Empirical Evidence***<br>● *Science findings are based on recognizing patterns. (3-PS2-2)*<br><br>***Scientific Investigations Use a Variety of Methods***<br>● *Science investigations use a variety of methods, tools, and techniques. (3-PS2-1)* |
| Engineering, Technology and the Application of Science Learning Progressions | |

| Interdisciplinary Connections | |
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| | **ELA Standards** |
| L.RF.3.3 | Know and apply grade-level phonics and word analysis in decoding and encoding words. |
| L.RF.3.4 | Read with sufficient accuracy and fluency to support comprehension |

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| L.VL.3.2 | Determine or clarify the meaning of unknown and multiple-meaning academic and domain-specific words and phrases based on grade 3 reading and content, choosing flexibly from a range of strategies. |
| RL.CR.3.1 | Ask and answer questions and make relevant connections to demonstrate understanding of a literary text, referring explicitly to textual evidence as the basis for the answers. |
| RI.IT.3.3. | Describe the relationship between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text, using language that pertains to time, sequence, and cause/effect. |
| W.SE.3.6. | Use discussions, books, or media resources to gather ideas, outline them, and prioritize the information to include while planning to write a topic. |
| SL.PE.3.1. | Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher led) with diverse partners on grade 3 topics and texts, building on others' ideas and expressing their own clearly. |
| SL.ES.3.3. | Ask and answer questions about information from a speaker, offering appropriate elaboration and detail |
| | **Math Standards** |
| 3.OA.A.3 | Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem. |
| 3.M.A.2 | Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l). Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units, e.g., by using drawings (such as a beaker with a measurement scale) to represent the problem. |
| 3.NBT.A.1 | Use place value understanding to round whole numbers to the nearest 10 or 100. |
| 3.DL.A.1 | Develop data-based questions and decide what data will answer the question. (e.g. "What size shoe does a 3rd grader wear?", "How many books does a 3rd grader read?" |
| 3.DL.A.2 | Collect student-centered data (e.g. collect data on students' favorite ice cream flavor) or use existing data to answer data-based questions. |
| 3.DL.B.3 | Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two-step "how many more" and "how many less" problems using information presented in bar graphs. For example, draw a bar graph in which each square in the bar graph might represent 5 pets. |

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## Computer Science & Design Thinking

- 8.1.5.A.3. Use a graphic organizer to organize information about a problem or issue.
- 8.1.5.E.1. Use digital tools to research and evaluate the accuracy of, relevance to, and appropriateness of using print and non-print electronic information sources to complete a variety of tasks.
- 8.1.5.DA.3: Organize and present collected data visually to communicate insights gained from different views of the data.
- 8.1.5.DA.4: Organize and present climate change data visually to highlight relationships or support a claim.
- 8.2.5.ITH.1: Explain how societal needs and wants influence the development and function of a product and a system
- 8.2.5.EC.1: Analyze how technology has contributed to or reduced inequities in local and global communities and determine its short- and long-term effects.
- 8.2.8.ITH.1: Explain how the development and use of technology influences economic, political, social, and cultural issues.
- 8.2.8.EC.1: Explain ethical issues that may arise from the use of new technologies

## Career Readiness, Life Literacies & Key Skills

- 9.1.5.CR.1: Compare various ways to give back and relate them to your strengths, interests, and other personal factors.
- 9.1.5.FP.3: Analyze how spending choices and decision-making can result in positive or negative consequences.
- 9.2.5.CAP.1: Evaluate personal likes and dislikes and identify careers that might be suited to personal likes.
- 9.2.5.CAP.6: Compare the characteristics of a successful entrepreneur with the traits of successful employees
- 9.4.5.CT.1: Identify and gather relevant data that will aid in the problem-solving process (e.g., 2.1.5.EH.4, 4-ESS3-1, 6.3.5.CivicsPD.2).
- 9.4.5.CT.3: Describe how digital tools and technology may be used to solve problems.
- 9.4.5.GCA.1: Analyze how culture shapes individual and community perspectives and points of view (e.g., 1.1.5.C2a, RL.5.9, 6.1.5.HistoryCC.8).

| Career Readiness, Life Literacies, and Key Skills Practices | |
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| Act as a responsible and contributing community member and employee. | Students understand the obligations and responsibilities of being a member of a community, and they demonstrate this understanding every day through their interactions with others. They are conscientious of the impacts of their decisions on others and the environment around them. They think about the near-term and long-term consequences of their actions and seek to act in ways that contribute to the betterment of their teams, families, community and workplace. They are reliable and consistent in |

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| | going beyond the minimum expectation and in participating in activities that serve the greater good. |
| Attend to financial well-being. | Students take regular action to contribute to their personal financial well-being, understanding that personal financial security provides the peace of mind required to contribute more fully to their own career success. |
| Consider the environmental, social and economic impacts of decisions. | Students understand the interrelated nature of their actions and regularly make decisions that positively impact and/or mitigate negative impact on other people, organization, and the environment. They are aware of and utilize new technologies, understandings, procedures, materials, and regulations affecting the nature of their work as it relates to the impact on the social condition, the environment and the profitability of the organization. |
| Demonstrate creativity and innovation. | Students regularly think of ideas that solve problems in new and different ways, and they contribute those ideas in a useful and productive manner to improve their organization. They can consider unconventional ideas and suggestions as solutions to issues, tasks or problems, and they discern which ideas and suggestions will add greatest value. They seek new methods, practices, and ideas from a variety of sources and seek to apply those ideas to their own workplace. They take action on their ideas and understand how to bring innovation to an organization. |
| Utilize critical thinking to make sense of problems and persevere in solving them. | Students readily recognize problems in the workplace, understand the nature of the problem, and devise effective plans to solve the problem. They are aware of problems when they occur and take action quickly to address the problem; they thoughtfully investigate the root cause of the problem prior to introducing solutions. They carefully consider the options to solve the problem. Once a solution is agreed upon, they follow through to ensure the problem is solved, whether through their own actions or the actions of others. |
| Model integrity, ethical leadership and effective management. | Students consistently act in ways that align personal and community-held ideals and principles while employing strategies to positively influence others in the workplace. They have a clear understanding of integrity and act on this understanding in every decision. They use a variety of means to positively impact the directions and actions of a team or organization, and they apply insights into human behavior to change others' actions, attitudes and/or beliefs. They recognize the near-term and long-term effects that management's actions and attitudes can have on productivity, morals and organizational culture. |
| Plan education and career paths aligned to personal goals. | Students take personal ownership of their own education and career goals, and they regularly act on a plan to attain these goals. They understand their own career interests, preferences, goals, and requirements. They have perspective regarding the pathways available to them and the time, effort, experience and other requirements to pursue each, including a path of entrepreneurship. They recognize the value of each step in the education and experiential process, and they recognize that nearly all career paths require ongoing education and experience. They seek counselors, mentors, and other experts to assist in the planning and execution of career and personal goals. |
| Use technology to enhance productivity, increase collaboration and | Students find and maximize the productive value of existing and new technology to accomplish workplace tasks and solve workplace problems. They are flexible and adaptive in acquiring new technology. They are proficient with ubiquitous technology applications. They understand the inherent risks-personal and organizational-of technology applications, and they take actions to prevent or mitigate these risks. |

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| communicate effectively. | |
| Work productively in teams while using cultural/global competence. | Students positively contribute to every team, whether formal or informal. They apply an awareness of cultural differences to avoid barriers to productive and positive interaction. They find ways to increase the engagement and contribution of all team members. They plan and facilitate effective team meetings. |

## Evidence of Student Learning

**Formative Tasks:**
- Group Work/Class Discussion
- Rubric Guided Observations
- Question Starters
- Modified Tests/Quizzes/Classwork

**Alternative Assessments:**
- Group Work/Class Discussion Rubric
- Guided Observations
- Questions Starters
- Participation Rubric
- Modified Tests/Quizzes/Classwork
- Science Related Achieve3000 Articles and Activities
- Mystery Science Activities
- Fundamentals Unlimited Books and Assessments

**Summative Assessments:**
- RST- Research Simulation Task
- Associated Unit tests, quizzes
- Labs and engineering based projects
- Benchmark

**Benchmark Assessments:**
- Teacher-created assessment
- Projects
- Portfolio

## Knowledge & Skills

**Enduring Understandings:**
- Forces can be balanced or unbalanced and each has different effects on the movement of objects.
- Only one variable should be assessed at a time.
- Patterns can be used to predict future motion.
- There are relationships of electric or magnetic interactions between two objects not in contact with each other.
- There are different forces that affect the movement of an object.

**Essential Questions:**
- How do equal and unequal forces on an object affect the object?
- How can we use our understanding of magnets to solve problems?

## Core Instructional & Supplemental Materials

**Suggested Activities/Resources:**

**Varied Levels of Text:**

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| • **Balanced and Unbalanced Forces** (Mystery Science: Invisible Forces): students will see that by learning to think about pushes and pulls — forces — they can accomplish extraordinary things! In the activity, Hopper Popper, students make a folded piece of cardboard jump high in the air, propelled by the pulling force of a rubber band. They discuss the forces involved in making this "Hopper Popper" jump. Balanced and Unbalanced Forces<br>• **Balanced Forces and Engineering** (Mystery Science: Invisible Forces): students will learn about real-life bridge design. In the activity, Paper Bridge Engineering, students will use their knowledge of forces to build a strong bridge that supports as many pennies as possible -- using only paper. Balanced Forces and Engineering<br>• **Friction and Patterns of Motion** (Mystery Science: Invisible Forces): students will learn about friction (the force that slows you down on a playground slide). In the activity, The Great Slide Challenge, students work in groups of four to test which materials have the most friction and which materials have the least friction. Each group makes a model of a slide using a stack of books and a piece of cardboard, and makes "sliders" out of different materials.Friction and Patterns of Motion<br>• **Dancing Ghosts**: Students will rub a balloon against their shirt which builds up negative charges on the surface of the balloon. These charges attract to the positive charges on the static ghost, causing the ghost to move. **great activity to teach around Halloween.* Dancing Ghosts<br>• **Magnets and Forces** (Mystery Science: Invisible Forces): students will explore the surprising properties of magnets and experiment with an invisible force that acts at a distance. Magnets and Forces | • In the Spin of Things: Poetry of Motion by Rebecca Kai Dotlich<br>• Newton and Me by Lynne Mayer<br>• The Thrills and Chills of Amusement Parks by Jordan D. Brown<br>• Magnetism by Leon Gray<br>• Pull It, Push It by Buffy Silverman<br>• Forces Make Things Move by Kimberly Brubaker Bradley<br>• Correlated *Wonders* Texts |

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| Unit 2: Inheritance and Variation Traits-Life Science | Duration: 40 days |
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| Grade: 3 | Content Area: Science |
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## Suggested Accommodations

**English Language Learners:**

- Provide extra time
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- Build background knowledge

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- Preview lessons
- Graphic organizers
- Highlight key words
- Sentence starters
- Prompting and cueing
- Activate schema
- Build background knowledge
- Provide extra time
- Provide differentiated instruction as needed
- Follow all 504 plan modifications
- Provide manipulatives or the opportunity to draw solution strategies
- Provide students with notes from the lesson
- For additional support and guidance, provide students with lab group or partner for lab experiences
- Provide students with a study guide about the information they will be assessed on for a test or quiz
- Teach and model note taking strategies to assist student when reading their science textbook
- Teach and model strategies to learn and practice new vocabulary words
- Assist student in completing a word web for new vocabulary words to reinforce new words in their science unit
- Provide students with an organization system to help them organize their notes, labs, and classwork
- Use graphic organizers to take notes, organize new information, and help students relate new information with previous knowledge
- Provide students with additional time to complete assignments
- Provide small group and individual conferencing to help support student throughout the lesson

**504 Plans:**

- Pre-teach vocabulary using visuals and gestures
- Chunk texts
- Summarize as you go
- Preview lessons
- Graphic organizers
- Highlight key words
- Sentence starters
- Prompting and cueing
- Activate schema
- Build background knowledge
- Provide extra time

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- Provide differentiated instruction as needed
- Follow all 504 plan modifications
- Provide manipulatives or the opportunity to draw solution strategies
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- For additional support and guidance, provide students with lab group or partner for lab experiences
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- Assist student in completing a word web for new vocabulary words to reinforce new words in their science unit
- Provide students with an organization system to help them organize their notes, labs, and classwork
- Use graphic organizers to take notes, organize new information, and help students relate new information with previous knowledge
- Provide students with additional time to complete assignments
- Provide small group and individual conferencing to help support student throughout the lesson

**Gifted and Talented:**

- Ask open-ended questions
- Encourage upper level intellectual behavior based on Bloom's Taxonomy (analyzing, evaluating, creating)
- Do not always be explicit, allow for discovery
- Use centers and group students according to ability or interest
- Propose interest-based extension activities
- Use leveled texts and offer an advanced reader reading list
- Ask "why" and "what if" questions
- Use varied modes of pre-assessment and assessment
- Create an enhanced set of introductory activities (e.g. advance organizers, concept maps, concept puzzles)
- Provide options, alternatives and choices to differentiate and broaden the curriculum
- Organize and offer flexible small group learning activities
- Provide whole group enrichment explorations
- Teach cognitive and methodological skills
- Use center, stations, or contracts
- Organize integrated problem-solving simulations
- Debrief students
- Propose interest-based extension activities

**Students at Risk of Failure:**

- Work toward longer passages as skills in English increase
- Use visuals
- Introduce key vocabulary before lesson
- Teacher reads aloud daily
- Provide peer tutoring
- Use a strong student as a "buddy" (does not necessarily have to speak the primary language)
- choral reading
- chants, songs
- preferential seating

**Economically Disadvantaged:**

- Provide extra time
- Pre-teach vocabulary using visuals and gestures
- Chunk texts
- Summarize as you go
- Preview lessons
- Graphic organizers

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| Grade: 3 | Content Area: Science |
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- Highlight key words
- Prompting and cueing
- Activate schema
- Build background knowledge

**Culturally Diverse:**

- Provide extra time
- Pre-teach vocabulary using visuals and gestures
- Chunk texts
- Summarize as you go
- Preview lessons
- Graphic organizers
- Highlight key words
- Prompting and cueing
- Activate schema
- Build background knowledge

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| New Jersey Student Learning Standards | |
|---|---|
| • **3-LS3-1** Analyze and interpret data to provide evidence that plants and animals have traits inherited from parents and that variation of these traits exists in a group of similar organisms.<br>• **3-LS3-2** Use evidence to support the explanation that traits can be influenced by the environment.<br>• **3-LS4-1** Analyze and interpret data from fossils to provide evidence of the organisms and the environments in which they lived long ago.<br>• **3-LS4-2** Use evidence to construct an explanation for how the variations in characteristics among individuals of the same species may provide advantages in surviving, finding mates, and reproducing.<br>• **3-LS4-3** Construct an argument with evidence that in a particular habitat some organisms can survive well, some survive less well, and some cannot survive at all.<br>• **3-LS4-4** Make a claim about the merit of a solution to a problem caused when the environment changes and the types of plants and animals that live there may change. | |
| Science and Engineering Practices Learning Progressions | **Analyzing and Interpreting Data**<br>Analyzing data in 3–5 builds on K–2 experiences and progresses to introducing quantitative approaches to collecting data and conducting multiple trials of qualitative observations.<br><br>Clarification: When possible and feasible, digital tools should be used.<br>• Analyze and interpret data to make sense of phenomena using logical reasoning. (3-LS3-1)<br><br>**Constructing Explanations and Designing Solutions**<br><br>Constructing explanations and designing solutions in 3–5 builds on K–2 experiences and progresses to the use of evidence in constructing explanations that specify variables that describe and predict phenomena and in designing multiple solutions to design problems.<br>• Use evidence (e.g., observations, patterns) to support an explanation. (3-LS3-2) |
| **Discipline Core Ideas** | **Inheritance of Traits**<br>• Many characteristics of organisms are inherited from their parents. (3- LS3-1) |

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| Physical Science Learning Progressions<br><br>Earth & Space Science Learning Progressions<br><br>Life Science Learning Progressions | • Other characteristics result from individuals' interactions with the environment, which can range from diet to learning. Many characteristics involve both inheritance and environment. (3-LS3-2)<br><br>**LS3.B: Variation of Traits**<br>• Different organisms vary in how they look and function because they have different inherited information. (3-LS3-1)<br>• The environment also affects the traits that an organism develops. (3-LS3-2)<br><br>LS2.C: Ecosystem Dynamics, Functioning, and Resilience<br>• When the environment changes in ways that affect a place's physical characteristics, temperature, or availability of resources, some organisms survive and reproduce, others move to new locations, yet others move into the transformed environment, and some die. (secondary to 3-LS4-4)<br><br>**LS4.A: Evidence of Common Ancestry and Diversity**<br>• Some kinds of plants and animals that once lived on Earth are no longer found anywhere. (3-LS4-1) |
| Crosscutting Concepts | **Patterns**<br>• Similarities and differences in patterns can be used to sort and classify natural phenomena. (3- LS3-1)<br><br>**Cause and Effect**<br>• Cause and effect relationships are routinely identified and used to explain change. (3-LS3-2)<br><br>**Cause and Effect**<br>• Cause and effect relationships are routinely identified and used to explain change. (3-LS4-2), (3- LS4-3)<br>**Scale, Proportion, and Quantity**<br>• Observable phenomena exist from very short to very long time periods. (3-LS4-1)<br><br>**Systems and System Models**<br>• A system can be described in terms of its components and their interactions. (3-LS4-4)<br><br>***Connections to Engineering, Technology, and Applications of Science***<br><br>**Interdependence of Science, Engineering, and Technology**<br>• Knowledge of relevant scientific concepts and research findings is important in engineering. (3-LS4- 4)<br><br>***Connections to Nature of Science***<br>**Scientific Knowledge Assumes an Order and Consistency in Natural Systems**<br>• Science assumes consistent patterns in natural systems. (3-LS4-1) |

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**Stafford Township School DIstrict Curriculum Guide**

| Grade: 3 | Content Area: Science |
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Engineering, Technology and the Application of Science Learning Progressions

| Interdisciplinary Connections | |
|---|---|
| | **ELA Standards** |
| L.RF.3.3 | Know and apply grade-level phonics and word analysis in decoding and encoding words. |
| L.RF.3.4 | Read with sufficient accuracy and fluency to support comprehension |
| L.VL.3.2 | Determine or clarify the meaning of unknown and multiple-meaning academic and domain-specific words and phrases based on grade 3 reading and content, choosing flexibly from a range of strategies. |
| RL.CR.3.1 | Ask and answer questions and make relevant connections to demonstrate understanding of a literary text, referring explicitly to textual evidence as the basis for the answers. |
| RI.IT.3.3. | Describe the relationship between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text, using language that pertains to time, sequence, and cause/effect. |
| W.SE.3.6. | Use discussions, books, or media resources to gather ideas, outline them, and prioritize the information to include while planning to write a topic. |
| SL.PE.3.1. | Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher led) with diverse partners on grade 3 topics and texts, building on others' ideas and expressing their own clearly. |
| SL.ES.3.3. | Ask and answer questions about information from a speaker, offering appropriate elaboration and detail |
| | **Math Standards** |
| 3.OA.A.3 | Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem. |
| 3.M.A.2 | Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l). Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units, e.g., by using drawings (such as a beaker with a measurement scale) to represent the problem. |
| 3.NBT.A.1 | Use place value understanding to round whole numbers to the nearest 10 or 100. |

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| 3.DL.A.1 | Develop data-based questions and decide what data will answer the question. (e.g. “What size shoe does a 3rd grader wear?”, “How many books does a 3rd grader read?” |
| 3.DL.A.2 | Collect student-centered data (e.g. collect data on students’ favorite ice cream flavor) or use existing data to answer data-based questions. |
| 3.DL.B.3 | Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two-step “how many more” and “how many less” problems using information presented in bar graphs. For example, draw a bar graph in which each square in the bar graph might represent 5 pets. |

## Computer Science & Design Thinking

- 8.1.5.A.3. Use a graphic organizer to organize information about a problem or issue.
- 8.1.5.E.1. Use digital tools to research and evaluate the accuracy of, relevance to, and appropriateness of using print and non-print electronic information sources to complete a variety of tasks.
- 8.1.5.DA.3: Organize and present collected data visually to communicate insights gained from different views of the data.
- 8.1.5.DA.4: Organize and present climate change data visually to highlight relationships or support a claim.
- 8.2.5.ITH.1: Explain how societal needs and wants influence the development and function of a product and a system
- 8.2.5.EC.1: Analyze how technology has contributed to or reduced inequities in local and global communities and determine its short- and long-term effects.
- 8.2.8.ITH.1: Explain how the development and use of technology influences economic, political, social, and cultural issues.
- 8.2.8.EC.1: Explain ethical issues that may arise from the use of new technologies

## Career Readiness, Life Literacies & Key Skills

- 9.1.5.CR1.2: Compare various ways to give back and relate them to your strengths, interests, and other personal factors.
- 9.1.5.FP.3: Analyze how spending choices and decision-making can result in positive or negative consequences.
- 9.2.5.CAP.1: Evaluate personal likes and dislikes and identify careers that might be suited to personal likes.
- 9.2.5.CAP.6: Compare the characteristics of a successful entrepreneur with the traits of successful employees
- 9.4.5.CT.1: Identify and gather relevant data that will aid in the problem-solving process (e.g., 2.1.5.EH.4, 4-ESS3-1, 6.3.5.CivicsPD.2).
- 9.4.5.CT.3: Describe how digital tools and technology may be used to solve problems.

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- 9.4.5.GCA.1: Analyze how culture shapes individual and community perspectives and points of view (e.g., 1.1.5.C2a, RL.5.9, 6.1.5.HistoryCC.8).

| Career Readiness, Life Literacies, and Key Skills Practices | |
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| Act as a responsible and contributing community member and employee. | Students understand the obligations and responsibilities of being a member of a community, and they demonstrate this understanding every day through their interactions with others. They are conscientious of the impacts of their decisions on others and the environment around them. They think about the near-term and long-term consequences of their actions and seek to act in ways that contribute to the betterment of their teams, families, community and workplace. They are reliable and consistent in going beyond the minimum expectation and in participating in activities that serve the greater good. |
| Attend to financial well-being. | Students take regular action to contribute to their personal financial well-being, understanding that personal financial security provides the peace of mind required to contribute more fully to their own career success. |
| Consider the environmental, social and economic impacts of decisions. | Students understand the interrelated nature of their actions and regularly make decisions that positively impact and/or mitigate negative impact on other people, organization, and the environment. They are aware of and utilize new technologies, understandings, procedures, materials, and regulations affecting the nature of their work as it relates to the impact on the social condition, the environment and the profitability of the organization. |
| Demonstrate creativity and innovation. | Students regularly think of ideas that solve problems in new and different ways, and they contribute those ideas in a useful and productive manner to improve their organization. They can consider unconventional ideas and suggestions as solutions to issues, tasks or problems, and they discern which ideas and suggestions will add greatest value. They seek new methods, practices, and ideas from a variety of sources and seek to apply those ideas to their own workplace. They take action on their ideas and understand how to bring innovation to an organization. |
| Utilize critical thinking to make sense of problems and persevere in solving them. | Students readily recognize problems in the workplace, understand the nature of the problem, and devise effective plans to solve the problem. They are aware of problems when they occur and take action quickly to address the problem; they thoughtfully investigate the root cause of the problem prior to introducing solutions. They carefully consider the options to solve the problem. Once a solution is agreed upon, they follow through to ensure the problem is solved, whether through their own actions or the actions of others. |
| Model integrity, ethical leadership and effective management. | Students consistently act in ways that align personal and community-held ideals and principles while employing strategies to positively influence others in the workplace. They have a clear understanding of integrity and act on this understanding in every decision. They use a variety of means to positively impact the directions and actions of a team or organization, and they apply insights into human behavior to change others' actions, attitudes and/or beliefs. They recognize the near-term and long-term effects that management's actions and attitudes can have on productivity, morals and organizational culture. |

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| Plan education and career paths aligned to personal goals. | Students take personal ownership of their own education and career goals, and they regularly act on a plan to attain these goals. They understand their own career interests, preferences, goals, and requirements. They have perspective regarding the pathways available to them and the time, effort, experience and other requirements to pursue each, including a path of entrepreneurship. They recognize the value of each step in the education and experiential process, and they recognize that nearly all career paths require ongoing education and experience. They seek counselors, mentors, and other experts to assist in the planning and execution of career and personal goals. |
| Use technology to enhance productivity, increase collaboration and communicate effectively. | Students find and maximize the productive value of existing and new technology to accomplish workplace tasks and solve workplace problems. They are flexible and adaptive in acquiring new technology. They are proficient with ubiquitous technology applications. They understand the inherent risks-personal and organizational-of technology applications, and they take actions to prevent or mitigate these risks. |
| Work productively in teams while using cultural/global competence. | Students positively contribute to every team, whether formal or informal. They apply an awareness of cultural differences to avoid barriers to productive and positive interaction. They find ways to increase the engagement and contribution of all team members. They plan and facilitate effective team meetings. |

| Evidence of Student Learning | |
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| **Formative Tasks:**<br>• Graphic Organizers & Guided Note Taking<br>• Directed Reading<br>• Cooperative Group Learning<br>• Homework | **Alternative Assessments:**<br>• Group Work/Class Discussion Rubric<br>• Guided Observations<br>• Questions Starters<br>• Participation Rubric<br>• Modified Tests/Quizzes/Classwork<br>• Science Related Achieve3000 Articles and Activities<br>• Mystery Science Activities<br>• Fundamentals Unlimited Books and Assessments |
| **Summative Assessments:**<br>• RST- Research Simulation Task<br>• Associated Unit tests, quizzes<br>• Labs and engineering based projects | **Benchmark Assessments:**<br>• Teacher-created assessment<br>• Projects<br>• Portfolio |

| Knowledge & Skills | |
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| **Enduring Understandings:**<br>*Students will know...* | **Essential Questions:**<br>*Students will be able to …* |

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| • Organisms go through different stages throughout their life.<br>• Certain traits provide organisms advantages in surviving,finding mates, and reproducing.<br>• Organisms have similar traits that they inherit from their parents and these traits can vary among organisms of similar species.<br>• When the environment changes in ways that affect a place's physical characteristics, temperature, or availability of resources, some organisms survive and reproduce, others move to new locations, yet others move into the transformed environment, and some die.<br>*Students will…*<br>• Develop and refine models;<br>• Generate, discuss and analyze data;<br>• Construct spoken and written scientific explanations;<br>• Engage in evidence-based argumentation; and<br>• Reflect on their own understanding. | • Identify patterns in the similarities and differences in the Life Cycles of organisms by completing a Venn Diagram to compare the life cycle of two animals with at least three details in each area of the graphic organizer.<br>• Collect, organize, and analyze data to show evidence that traits are inherited from parents. Data will include at least 3 traits.<br>• Identify at least four environmental factors that influence traits in organisms.<br>• Identify at least five traits that assist organisms in surviving, finding mates, and reproducing. |

**Core Instructional & Supplemental Materials**

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| **Suggested Activities/Resources:**<br>• Using the information given on the PowerPoint, students will compare and contrast the life cycles of butterflies and grasshoppers as well as illustrate each step of the life cycle in their notebooks or on the pages provided. https://betterlesson.com/lesson/637832/life-cycles-lesson-1-butterflies-and-grasshoppers<br>• Using QR codes, students will explore various life cycles using a combination of passages, illustrations, photographs, videos, etc. Through research, students will observe that many organisms have similar life cycles. https://betterlesson.com/lesson/637854/life-cycle-review-using-qr-codes<br>• Trait variations, Inheritance, and Artificial Selection (Mystery Science: Animals Through Time): students learn how people create new breeds of animals by mating (selecting) individuals with desirable traits. In the visual activity, Designer Dogs, students are shown pairs of adult dogs and three potential puppies. They study the physical traits of the dogs and look for the puppy that shares these | **Varied Levels of Text:**<br>• *Secrets of Animal Life Cycles* by Andrew Solway<br>• *Life Cycles* by Julian Sayerer<br>• *The Tiny Seed* by Eric Carl<br>• *Tadpole's Promise* by Jeanne Willis<br>• Correlated *Wonders* Texts |

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traits.
https://mysteryscience.com/animals/mystery-4/trait-variation-inheritance-artificial-selection/30?code=NjcxODUzMA&t=student&chapter=all

- Just as scientists classify organisms based on specific criteria, during this introductory lesson on classifying, students classify seashells by the criteria they have agreed upon collaboratively. Start with a full bucket of various seashells and have students discuss different patterns within seashells. https://betterlesson.com/lesson/614384/she-sorts-seashells-by-the-seashore
- Trait variations, Natural Selection, and Survival (Mystery Science: Animals Through Time): students learn about an example of how nature, not human beings, can slowly change the appearance of an animal using the process of selection. In the activity, Lizard Island, students simulate how natural selection affects a group of tree-climbing green lizards when their island is invaded by hungry brown lizards. This simulation only works for groups of 16 or more students. If you have a smaller group, use the Small Group Version of this activity found in Prep Instructions. https://mysteryscience.com/animals/mystery-5/trait-variation-natural-selection-survival/120?code=NjcxODUzMA&t=student&chapter=all
- Using the information given on the PowerPoint, students will compare and contrast the life cycles of butterflies and grasshoppers as well as illustrate each step of the life cycle in their notebooks or on the pages provided. https://betterlesson.com/lesson/637832/life-cycles-lesson-1-butterflies-and-grasshoppers
- Using QR codes, students will explore various life cycles using a combination of passages, illustrations, photographs, videos, etc. Through research, students will observe that many organisms have similar life cycles. https://betterlesson.com/lesson/637854/life-cycle-review-using-qr-codes
- Animal Life Cycles (Mystery Science: Circle of Life): students explore animal life cycles by thinking about their birthday buddies—all the animals that were born on the exact same day as they were born—and what happens to

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| those birthday buddies over the course of their lives. In the activity, Birthday Buddies Timeline, students develop a model to compare the life stories of different animals. Using this model, students discover that although the lives of animals can be very different, they all have in common birth, growth, reproduction, and death. https://mysteryscience.com/circle-of-life/mystery-1/animal-life-cycles/822?code=NjcxODUzMA&t=student&chapter=all | |

| Unit 3: Interdependent Relationships: Ecosystems/Environments | Duration: 40 Days |
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**Suggested Accommodations**

**English Language Learners:**

- Provide extra time
- Pre-teach vocabulary using visuals and gestures
- Chunk texts
- Summarize as you go
- Preview lessons
- Graphic organizers
- Highlight key words
- Prompting and cueing
- Activate schema
- Build background knowledge

**Special Education/Students with Disabilities:**

- Pre-teach vocabulary using visuals and gestures
- Chunk texts
- Summarize as you go
- Preview lessons
- Graphic organizers
- Highlight key words
- Sentence starters
- Prompting and cueing
- Activate schema
- Build background knowledge
- Provide extra time
- Provide differentiated instruction as needed
- Follow all IEP modifications/504 plan
- Provide manipulatives or the opportunity to draw solution strategies
- Provide students with notes from the lesson
- For additional support and guidance, provide students with lab group or partner for lab experiences
- Provide students with a study guide about the information they will be assessed on for a test or quiz
- Teach and model note taking strategies to assist student when reading their science textbook
- Teach and model strategies to learn and practice new vocabulary words

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- Assist student in completing a word web for new vocabulary words to reinforce new words in their science unit
- Provide students with an organization system to help them organize their notes, labs, and classwork
- Read directions, tests, and/or quizzes aloud
- Use graphic organizers to take notes, organize new information, and help students relate new information with previous knowledge
- Provide students with additional time to complete assignments
- Provide small group and individual conferencing to help support student throughout the lesson
- Preferential seating based on student needs
- Review concepts of previous lesson before teaching the new lesson
- Complete review activities to reinforce concepts previously taught
- Check for students understanding often with formal, informal, verbal, and nonverbal measures
- Provide student with modified tests and quizzes organized in a manner that will easy for the student to follow, assessment quality over quantity, and has clear directions
- Allow students to verbalize before beginning tasks and lab experiments
- Repeat the directions for students as often as needed
- Allow wait time for students
- Provide visual aids to support concepts being taught, such as diagrams
- Redirect student and provide frequent breaks as needed
- Teach student mnemonic devices to help learn new concepts, as appropriate
- Use text-to-speech applications to help students when reading online texts above their reading level on the computer

**504 Plans:**

- Pre-teach vocabulary using visuals and gestures
- Chunk texts
- Summarize as you go
- Preview lessons
- Graphic organizers
- Highlight key words
- Sentence starters
- Prompting and cueing
- Activate schema
- Build background knowledge
- Provide extra time
- Provide differentiated instruction as needed
- Follow all 504 plan modifications
- Provide manipulatives or the opportunity to draw solution strategies
- Provide students with notes from the lesson
- For additional support and guidance, provide students with lab group or partner for lab experiences
- Provide students with a study guide about the information they will be assessed on for a test or quiz
- Teach and model note taking strategies to assist student when reading their science textbook
- Teach and model strategies to learn and practice new vocabulary words
- Assist student in completing a word web for new vocabulary words to reinforce new words in their science unit
- Provide students with an organization system to help them organize their notes, labs, and classwork
- Read directions, tests, and/or quizzes aloud
- Use graphic organizers to take notes, organize new information, and help students relate new information with previous knowledge
- Provide students with additional time to complete assignments
- Provide small group and individual conferencing to help support student throughout the lesson

**Gifted and Talented:**

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| Grade: 3 | Content Area: Science |
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- Ask open-ended questions
- Encourage upper level intellectual behavior based on Bloom's Taxonomy (analyzing, evaluating, creating)
- Do not always be explicit, allow for discovery
- Use centers and group students according to ability or interest
- Propose interest-based extension activities
- Use leveled texts and offer an advanced reader reading list
- Ask "why" and "what if" questions
- Use varied modes of pre-assessment and assessment
- Create an enhanced set of introductory activities (e.g. advance organizers, concept maps, concept puzzles)
- Provide options, alternatives and choices to differentiate and broaden the curriculum
- Organize and offer flexible small group learning activities
- Provide whole group enrichment explorations
- Teach cognitive and methodological skills
- Use center, stations, or contracts
- Organize integrated problem-solving simulations
- Debrief students
- Propose interest-based extension activities

**Students at Risk of Failure:**

- Work toward longer passages as skills in English increase
- Use visuals
- Introduce key vocabulary before lesson
- Teacher reads aloud daily
- Provide peer tutoring
- Use a strong student as a "buddy" (does not necessarily have to speak the primary language)
- choral reading
- chants, songs
- preferential seating

**Economically Disadvantaged:**

- Provide extra time
- Pre-teach vocabulary using visuals and gestures
- Chunk texts
- Summarize as you go
- Preview lessons
- Graphic organizers
- Highlight key words
- Prompting and cueing
- Activate schema
- Build background knowledge

**Culturally Diverse:**

- Provide extra time
- Pre-teach vocabulary using visuals and gestures
- Chunk texts
- Summarize as you go
- Preview lessons
- Graphic organizers
- Highlight key words
- Prompting and cueing
- Activate schema
- Build background knowledge

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| New Jersey Student Learning Standards | |
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| • 3-LS2-1:Construct an argument that some animals form groups that help members survive.<br>• 3-LS1-1: Develop models to describe that organisms have unique and diverse life cycles, but all have in common birth, growth, reproduction, and death. | |
| Science and Engineering Practices Learning Progressions | **Engaging in Argument from Evidence**<br><br>Engaging in argument from evidence in 3–5 builds on K–2 experiences and progresses to critiquing the scientific explanations or solutions proposed by peers by citing relevant evidence about the natural and designed world(s).<br>• Construct an argument with evidence, data, and/or a model. (3-LS2-1)<br><br>**Asking Questions and Defining Problems**<br>Asking questions and defining problems in grades 3–5 builds on grades K–2 experiences and progresses to specifying qualitative relationships.<br>• Ask questions that can be investigated based on patterns such as cause and effect relationships. (3-PS2-3)<br>• Define a simple problem that can be solved through the development of a new or improved object or tool. (3-PS2-4)<br>**Developing and Using Models**<br>Modeling in 3–5 builds on K–2 experiences and progresses to building and revising simple models and using models to represent events and design solutions.<br>• Develop models to describe phenomena. (3-LS1-1) |
| **Discipline Core Ideas**<br><br>Physical Science Learning Progressions<br><br>Earth & Space Science Learning Progressions<br><br>Life Science Learning Progressions | **LS2.D: Social Interactions and Group Behavior**<br>• Being part of a group helps animals obtain food, defend themselves, and cope with changes. Groups may serve different functions and vary dramatically in size (3-LS2-1)<br>**LS1.B: Growth and Development of Organisms**<br>• Reproduction is essential to the continued existence of every kind of organism. Plants and animals have unique and diverse life cycles. (3-LS1-1) |
| Crosscutting Concept | **Cause and Effect**<br>• Cause and effect relationships are routinely identified and used to explain change. (3-LS2-1)<br>**Patterns**<br>• Patterns of change can be used to make predictions. (3-LS1-1)<br><br>***Connections to Nature of Science***<br>**Scientific Knowledge is Based on Empirical Evidence**<br>• Science findings are based on recognizing patterns. (3-LS1-1) |
| Engineering, Technology and the Application of Science Learning Progressions | |

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| Interdisciplinary Connections | |
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| | **ELA Standards** |
| L.RF.3.3 | Know and apply grade-level phonics and word analysis in decoding and encoding words. |
| L.RF.3.4 | Read with sufficient accuracy and fluency to support comprehension |
| L.VL.3.2 | Determine or clarify the meaning of unknown and multiple-meaning academic and domain-specific words and phrases based on grade 3 reading and content, choosing flexibly from a range of strategies. |
| RL.CR.3.1 | Ask and answer questions and make relevant connections to demonstrate understanding of a literary text, referring explicitly to textual evidence as the basis for the answers. |
| RI.IT.3.3. | Describe the relationship between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text, using language that pertains to time, sequence, and cause/effect. |
| W.SE.3.6. | Use discussions, books, or media resources to gather ideas, outline them, and prioritize the information to include while planning to write a topic. |
| SL.PE.3.1. | Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher led) with diverse partners on grade 3 topics and texts, building on others' ideas and expressing their own clearly. |
| SL.ES.3.3. | Ask and answer questions about information from a speaker, offering appropriate elaboration and detail |
| | **Math Standards** |
| 3.OA.A.3 | Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem. |
| 3.M.A.2 | Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l). Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units, e.g., by using drawings (such as a beaker with a measurement scale) to represent the problem. |
| 3.NBT.A.1 | Use place value understanding to round whole numbers to the nearest 10 or 100. |
| 3.DL.A.1 | Develop data-based questions and decide what data will answer the question. (e.g. "What size shoe does a 3rd grader wear?", "How many books does a 3rd grader read?" |

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| 3.DL.A.2 | Collect student-centered data (e.g. collect data on students' favorite ice cream flavor) or use existing data to answer data-based questions. |
| 3.DL.B.3 | Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two-step "how many more" and "how many less" problems using information presented in bar graphs. For example, draw a bar graph in which each square in the bar graph might represent 5 pets. |

## Computer Science & Design Thinking

- 8.1.5.A.3. Use a graphic organizer to organize information about a problem or issue.
- 8.1.5.E.1. Use digital tools to research and evaluate the accuracy of, relevance to, and appropriateness of using print and non-print electronic information sources to complete a variety of tasks.
- 8.1.5.DA.3: Organize and present collected data visually to communicate insights gained from different views of the data.
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## Career Readiness, Life Literacies & Key Skills

- 9.1.5.CR.1: Compare various ways to give back and relate them to your strengths, interests, and other personal factors.
- 9.1.5.FP.3: Analyze how spending choices and decision-making can result in positive or negative consequences.
- 9.2.5.CAP.1: Evaluate personal likes and dislikes and identify careers that might be suited to personal likes.
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| Career Readiness, Life Literacies, and Key Skills Practices | |
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| Act as a responsible and contributing community member and employee. | Students understand the obligations and responsibilities of being a member of a community, and they demonstrate this understanding every day through their interactions with others. They are conscientious of the impacts of their decisions on others and the environment around them. They think about the near-term and long-term consequences of their actions and seek to act in ways that contribute to the betterment of their teams, families, community and workplace. They are reliable and consistent in going beyond the minimum expectation and in participating in activities that serve the greater good. |
| Attend to financial well-being. | Students take regular action to contribute to their personal financial well-being, understanding that personal financial security provides the peace of mind required to contribute more fully to their own career success. |
| Consider the environmental, social and economic impacts of decisions. | Students understand the interrelated nature of their actions and regularly make decisions that positively impact and/or mitigate negative impact on other people, organization, and the environment. They are aware of and utilize new technologies, understandings, procedures, materials, and regulations affecting the nature of their work as it relates to the impact on the social condition, the environment and the profitability of the organization. |
| Demonstrate creativity and innovation. | Students regularly think of ideas that solve problems in new and different ways, and they contribute those ideas in a useful and productive manner to improve their organization. They can consider unconventional ideas and suggestions as solutions to issues, tasks or problems, and they discern which ideas and suggestions will add greatest value. They seek new methods, practices, and ideas from a variety of sources and seek to apply those ideas to their own workplace. They take action on their ideas and understand how to bring innovation to an organization. |
| Utilize critical thinking to make sense of problems and persevere in solving them. | Students readily recognize problems in the workplace, understand the nature of the problem, and devise effective plans to solve the problem. They are aware of problems when they occur and take action quickly to address the problem; they thoughtfully investigate the root cause of the problem prior to introducing solutions. They carefully consider the options to solve the problem. Once a solution is agreed upon, they follow through to ensure the problem is solved, whether through their own actions or the actions of others. |
| Model integrity, ethical leadership and effective management. | Students consistently act in ways that align personal and community-held ideals and principles while employing strategies to positively influence others in the workplace. They have a clear understanding of integrity and act on this understanding in every decision. They use a variety of means to positively impact the directions and actions of a team or organization, and they apply insights into human behavior to change others' actions, attitudes and/or beliefs. They recognize the near-term and long-term effects that management's actions and attitudes can have on productivity, morals and organizational culture. |
| Plan education and career paths aligned to personal goals. | Students take personal ownership of their own education and career goals, and they regularly act on a plan to attain these goals. They understand their own career interests, preferences, goals, and requirements. They have perspective regarding the pathways available to them and the time, effort, experience and other requirements to pursue each, including a path of entrepreneurship. They recognize the value of each |

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| | step in the education and experiential process, and they recognize that nearly all career paths require ongoing education and experience. They seek counselors, mentors, and other experts to assist in the planning and execution of career and personal goals. |
| Use technology to enhance productivity, increase collaboration and communicate effectively. | Students find and maximize the productive value of existing and new technology to accomplish workplace tasks and solve workplace problems. They are flexible and adaptive in acquiring new technology. They are proficient with ubiquitous technology applications. They understand the inherent risks-personal and organizational-of technology applications, and they take actions to prevent or mitigate these risks. |
| Work productively in teams while using cultural/global competence. | Students positively contribute to every team, whether formal or informal. They apply an awareness of cultural differences to avoid barriers to productive and positive interaction. They find ways to increase the engagement and contribution of all team members. They plan and facilitate effective team meetings. |

**Evidence of Student Learning**

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| **Formative Tasks:**<br>• Graphic Organizers & Guided Note Taking<br>• Directed Reading<br>• Cooperative Group Learning | **Alternative Assessments:**<br>• Group Work/Class Discussion Rubric<br>• Guided Observations<br>• Questions Starters<br>• Participation Rubric<br>• Modified Tests/Quizzes/Classwork<br>• Science Related Achieve3000 Articles and Activities<br>• Mystery Science Activities<br>• Fundamentals Unlimited Books and Assessments |
| **Summative Assessments:**<br>• RST- Research Simulation Task<br>• Associated Unit tests, quizzes<br>• Labs and engineering based projects<br>• Basic Punnett Square | **Benchmark Assessments:**<br>• Projects: Create a video on Flip Grid<br>• Portfolio: Google slides presentation<br>• Teacher-Created Assessment |

**Knowledge & Skills**

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| **Enduring Understandings:**<br>• When the environment changes, some organisms survive and reproduce, some move to new locations, some move into the transformed environment, and some die. | **Essential Questions:**<br>• Why do some animals form groups to help members survive?<br>• How do fossils provide evidence of the organisms and the environments in which they lived long ago? |

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| • Being part of a group helps animals obtain food, defend themselves, and cope with changes.<br>• Some living organisms resemble organisms that once lived on Earth. Fossils provide evidence about the types of organisms and environments that existed long ago.<br>• Differences in characteristics between individuals of the same species provide advantages in surviving and reproducing.<br>• Particular organisms can only survive in particular environments.<br>• Populations of organisms live in a variety of habitats. Change in those habitats affects the organisms living there. | • How does the chosen habitat affect the survival rate of its inhabitants?<br>• Why do plants and animals change when their environment changes?<br>• What are some solutions to some problems that are caused by environmental changes?<br>• What is the impact of these changes up on plants and animals? |

**Core Instructional & Supplemental Materials**

| **Suggested Activities/Resources:** | **Varied Levels of Text:** |
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| • This lesson accompanies the BrainPOP topic Ecosystems, and supports students' understanding that organisms are dependent on their interactions with living and nonliving things in their environments. Students demonstrate understanding through a variety of projects.<br>https://educators.brainpop.com/lesson-plan/ecosystems-lesson-plan-understanding-how-organisms-interact-with-their-environments/<br>• Students use BrainPOP resources to explore the relationships between organisms within an ecosystem. Students then build a virtual food web to support a selected animal using online game play.<br>https://educators.brainpop.com/lesson-plan/food-fight-game-food-chains/?bp-topic=ecosystems<br>• Animal Survival (Mystery Science: Animal Groups and Survival): students discover why dogs' expressions, like tail wagging, are so useful when living in a pack. In the activity, Field Journal, students watch videos of different animals that live in groups to simulate observing them in their natural habitats. They discuss and record their observations, and construct an explanation of how living in groups helps these animals survive.<br>https://mysteryscience.com/animals/mystery-6/animal-groups- | • Correlated Wonders Text<br>• *What if There Were No Bees? By Susanne Slade*<br>• *Tree of Life: The Incredible Biodiversity of Life on Earth by Rochelle Strauss*<br>• *Walk This Wild World by Sam Brewster*<br>• *Over and Under the Pond by Kate Messner* |

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survival/265?code=NjcxODUzMA&t=student&chapter=al

- Just as scientists classify organisms based on specific criteria, during this introductory lesson on classifying, students classify seashells by the criteria they have agreed upon collaboratively. Start with a full bucket of various seashells and have students discuss different patterns within seashells.

https://betterlesson.com/lesson/614384/she-sorts-seashells-by-the-seashore

- Habitats, Fossils, and Environments Over Time (Mystery Science: Animals Through Time): students explore the idea that the rock under our feet sometimes contains fossils, and investigate how these fossils reveal changes in habitat through time. In the activity, Fossil Dig, students use paper to create a model fossil dig. They identify traits of fossils to determine what the habitat looked like when these organisms were alive. Then they use this information to figure out where some Mystery Fossils belong in their fossil dig.

https://mysteryscience.com/animals/mystery-1/habitats-fossils-environments-over-time/379?code=NjcxODUzMA&t=student&chapter=all

- Environmental Changes and Engineering (Mystery Science: Animals Through Time): students investigate mosquito life cycles and habitats and discover the role of mosquitoes in carrying diseases such as malaria. In the activity, Bug Off!, students evaluate the merits of different solutions for getting rid of mosquitoes at various locations in a town. Students design a solution to help the town deal with an abundance of mosquitoes resulting from a very rainy summer.

https://mysteryscience.com/animals/mystery-7/environmental-change-engineering/266?code=NjcxODUzMA&t=student&chapter=all

- Traits and Environmental Variations (Mystery Science: Animals Through Time): students examine how physical traits can be influenced by the environment. In the activity, Astronaut-in-Training, students analyze how a NASA astronaut's traits changed during his "year in space." Then they measure some of their physical traits (arm strength, height, and

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| balance) and predict how their own traits might change after living in space. https://mysteryscience.com/animals/mystery-8/traits-environmental-variation/267?code=NjcxODUzMA&t=student&chapter=all | |

| Unit 4: Weather and Climate | Duration: 40 Days |
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**Suggested Accommodations**

**English Language Learners:**

- Provide extra time
- Pre-teach vocabulary using visuals and gestures
- Chunk texts
- Summarize as you go
- Preview lessons
- Graphic organizers
- Highlight key words
- Prompting and cueing
- Activate schema
- Build background knowledge

**Special Education/Students with Disabilities:**

- Pre-teach vocabulary using visuals and gestures
- Chunk texts
- Summarize as you go
- Preview lessons
- Graphic organizers
- Highlight key words
- Sentence starters
- Prompting and cueing
- Activate schema
- Build background knowledge
- Provide extra time
- Provide differentiated instruction as needed
- Follow all IEP modifications
- Provide manipulatives or the opportunity to draw solution strategies
- Provide students with notes from the lesson
- For additional support and guidance, provide students with lab group or partner for lab experiences
- Provide students with a study guide about the information they will be assessed on for a test or quiz
- Teach and model note taking strategies to assist student when reading their science textbook
- Teach and model strategies to learn and practice new vocabulary words
- Assist student in completing a word web for new vocabulary words to reinforce new words in their science unit
- Provide students with an organization system to help them organize their notes, labs, and classwork
- Read directions, tests, and/or quizzes aloud
- Use graphic organizers to take notes, organize new information, and help students relate new information with previous knowledge

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- Provide students with additional time to complete assignments
- Provide small group and individual conferencing to help support student throughout the lesson
- Preferential seating based on student needs
- Review concepts of previous lesson before teaching the new lesson
- Complete review activities to reinforce concepts previously taught
- Check for students understanding often with formal, informal, verbal, and nonverbal measures
- Provide student with modified tests and quizzes organized in a manner that will easy for the student to follow, assessment quality over quantity, and has clear directions
- Allow students to verbalize before beginning tasks and lab experiments
- Repeat the directions for students as often as needed
- Allow wait time for students
- Provide visual aids to support concepts being taught, such as diagrams
- Redirect student and provide frequent breaks as needed
- Teach student mnemonic devices to help learn new concepts, as appropriate
- Use text-to-speech applications to help students when reading online texts above their reading level on the computer

**504 Plans:**

- Pre-teach vocabulary using visuals and gestures
- Chunk texts
- Summarize as you go
- Preview lessons
- Graphic organizers
- Highlight key words
- Sentence starters
- Prompting and cueing
- Activate schema
- Build background knowledge
- Provide differentiated instruction as needed
- Follow all 504 plan modifications
- Provide manipulatives or the opportunity to draw solution strategies
- Provide students with notes from the lesson
- For additional support and guidance, provide students with lab group or partner for lab experiences
- Provide students with a study guide about the information they will be assessed on for a test or quiz
- Teach and model note taking strategies to assist student when reading their science textbook
- Teach and model strategies to learn and practice new vocabulary words
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- Read directions, tests, and/or quizzes aloud
- Use graphic organizers to take notes, organize new information, and help students relate new information with previous knowledge
- Provide students with additional time to complete assignments
- Provide small group and individual conferencing to help support student throughout the lesson

**Gifted and Talented:**

- Ask open-ended questions
- Encourage upper level intellectual behavior based on Bloom's Taxonomy (analyzing, evaluating, creating)
- Do not always be explicit, allow for discovery
- Use centers and group students according to ability or interest
- Propose interest-based extension activities
- Use leveled texts and offer an advanced reader reading list
- Ask "why" and "what if" questions

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- Use varied modes of pre-assessment and assessment
- Create an enhanced set of introductory activities (e.g. advance organizers, concept maps, concept puzzles)
- Provide options, alternatives and choices to differentiate and broaden the curriculum
- Organize and offer flexible small group learning activities
- Provide whole group enrichment explorations
- Teach cognitive and methodological skills
- Use center, stations, or contracts
- Organize integrated problem-solving simulations
- Debrief students
- Propose interest-based extension activities

**Students at Risk of Failure:**

- Work toward longer passages as skills in English increase
- Use visuals
- Introduce key vocabulary before lesson
- Teacher reads aloud daily
- Provide peer tutoring
- Use a strong student as a “buddy” (does not necessarily have to speak the primary language)
- choral reading
- chants, songs
- preferential seating

**Economically Disadvantaged:**

- Provide extra time
- Pre-teach vocabulary using visuals and gestures
- Chunk texts
- Summarize as you go
- Preview lessons
- Graphic organizers
- Highlight key words
- Prompting and cueing
- Activate schema
- Build background knowledge

**Culturally Diverse:**

- Provide extra time
- Pre-teach vocabulary using visuals and gestures
- Chunk texts
- Summarize as you go
- Preview lessons
- Graphic organizers
- Highlight key words
- Prompting and cueing
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## New Jersey Student Learning Standards

- **3-ESS2-1:** Represent data in tables and graphical displays to describe typical weather conditions expected during a particular season.
- **3-ESS2-2:** Obtain and combine information to describe climates in different regions of the world.

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- **3-ESS3-1:** Make a claim about the merit of a design solution that reduces the impacts of a weather-related hazard.

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| Science and Engineering Practices Learning Progressions | ***Earth's Systems***<br>**Analyzing and Interpreting Data**<br><br>Analyzing data in 3–5 builds on K–2 experiences and progresses to introducing quantitative approaches to collecting data and conducting multiple trials of qualitative observations.<br><br>When possible and feasible, digital tools should be used.<br>● Represent data in tables and various graphical displays (bar graphs and pictographs) to reveal patterns that indicate relationships. (3-ESS2-1)<br><br>**Obtaining, Evaluating, and Communicating Information**<br>Obtaining, evaluating, and communicating information in 3–5 builds on K–2 experiences and progresses to evaluating the merit and accuracy of ideas and methods.<br>● Obtain and combine information from books and other reliable media to explain phenomena. (3- ESS2-2)<br><br>***Earth and Human Activity***<br>Engaging in Argument from Evidence<br>Engaging in argument from evidence in 3–5 builds on K–2 experiences and progresses to critiquing the scientific explanations or solutions proposed by peers by citing relevant evidence about the natural and designed worlds).<br>● Make a claim about the merit of a solution to a problem by citing relevant evidence about how it meets the criteria and constraints of the problem. (3-ESS3-1) |
| **Discipline Core Ideas**<br><br>Physical Science Learning Progressions<br><br>Earth & Space Science Learning Progressions<br><br>Life Science Learning Progressions | ***Earth's Systems***<br>**ESS2.D: Weather and Climate**<br>● Scientists record patterns of the weather across different times and areas so that they can make predictions about what kind of weather might happen next. (3- ESS2-1)<br>● Climate describes a range of an area's typical weather conditions and the extent to which those conditions vary over years. (3-ESS2-1)<br><br>***Earth and Human Activity***<br>**ESS3.B: Natural Hazards**<br>A variety of natural hazards result from natural processes. Humans cannot eliminate natural hazards but can take steps to reduce their impacts. (3-ESS3-1) (Note: This Disciplinary Core Idea is also addressed by 4-ESS3-2.)ESS2-2) |
| Crosscutting Concepts | ***Earth's Systems***<br>**Patterns**<br>● Patterns of change can be used to make predictions. (3-ESS2-1), (3- ESS2-2)<br><br>***Earth and Human Activity***<br>**Cause and Effect** |

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| | • Cause and effect relationships are routinely identified, tested, and used to explain change. (3-ESS3- 1)<br><br>***Connections to Engineering, Technology, and Applications of Science***<br><br>***Influence of Engineering, Technology, and Science on Society and the Natural World***<br>• Engineers improve existing technologies or develop new ones to increase their benefits (e.g., better artificial limbs), decrease known risks (e.g., seatbelts in cars), and meet societal demands (e.g., cell phones). (3-ESS3-1)<br><br>***Connections to Nature of Science***<br>**Science is a Human Endeavor**<br>• Science affects everyday life. (3- ESS3-1) |
| Engineering, Technology and the Application of Science Learning Progressions | |

| Interdisciplinary Connections | |
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| | **ELA Standards** |
| L.RF.3.3 | Know and apply grade-level phonics and word analysis in decoding and encoding words. |
| L.RF.3.4 | Read with sufficient accuracy and fluency to support comprehension |
| L.VL.3.2 | Determine or clarify the meaning of unknown and multiple-meaning academic and domain-specific words and phrases based on grade 3 reading and content, choosing flexibly from a range of strategies. |
| RL.CR.3.1 | Ask and answer questions and make relevant connections to demonstrate understanding of a literary text, referring explicitly to textual evidence as the basis for the answers. |
| RI.IT.3.3. | Describe the relationship between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text, using language that pertains to time, sequence, and cause/effect. |
| W.SE.3.6. | Use discussions, books, or media resources to gather ideas, outline them, and prioritize the information to include while planning to write a topic. |
| SL.PE.3.1. | Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher led) with diverse partners on grade 3 topics and texts, building on others' ideas and expressing their own clearly. |
| SL.ES.3.3. | Ask and answer questions about information from a speaker, offering appropriate elaboration and detail |

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**Stafford Township School DIstrict Curriculum Guide**

| Grade: 3 | Content Area: Science |
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| | Math Standards |
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| Demonstrate creativity and innovation. | Students regularly think of ideas that solve problems in new and different ways, and they contribute those ideas in a useful and productive manner to improve their organization. They can consider unconventional ideas and suggestions as solutions to issues, tasks or problems, and they discern which ideas and suggestions will add greatest value. They seek new methods, practices, and ideas from a variety of sources and seek to apply those ideas to their own workplace. They take action on their ideas and understand how to bring innovation to an organization. |
| Utilize critical thinking to make | Students readily recognize problems in the workplace, understand the nature of the problem, and devise effective plans to solve the problem. They are aware of problems |

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| sense of problems and persevere in solving them. | when they occur and take action quickly to address the problem; they thoughtfully investigate the root cause of the problem prior to introducing solutions. They carefully consider the options to solve the problem. Once a solution is agreed upon, they follow through to ensure the problem is solved, whether through their own actions or the actions of others. |
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| Plan education and career paths aligned to personal goals. | Students take personal ownership of their own education and career goals, and they regularly act on a plan to attain these goals. They understand their own career interests, preferences, goals, and requirements. They have perspective regarding the pathways available to them and the time, effort, experience and other requirements to pursue each, including a path of entrepreneurship. They recognize the value of each step in the education and experiential process, and they recognize that nearly all career paths require ongoing education and experience. They seek counselors, mentors, and other experts to assist in the planning and execution of career and personal goals. |
| Use technology to enhance productivity, increase collaboration and communicate effectively. | Students find and maximize the productive value of existing and new technology to accomplish workplace tasks and solve workplace problems. They are flexible and adaptive in acquiring new technology. They are proficient with ubiquitous technology applications. They understand the inherent risks-personal and organizational-of technology applications, and they take actions to prevent or mitigate these risks. |
| Work productively in teams while using cultural/global competence. | Students positively contribute to every team, whether formal or informal. They apply an awareness of cultural differences to avoid barriers to productive and positive interaction. They find ways to increase the engagement and contribution of all team members. They plan and facilitate effective team meetings. |

| Evidence of Student Learning | |
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| **Formative Tasks:**<br>• Graphic Organizers & Guided Note Taking<br>• Directed Reading<br>• Cooperative Group Learning<br>• Homework | **Alternative Assessments:**<br>• Group Work/Class Discussion Rubric<br>• Guided Observations<br>• Questions Starters<br>• Participation Rubric<br>• Modified Tests/Quizzes/Classwork<br>• Science Related Achieve3000 Articles and Activities<br>• Mystery Science Activities<br>• Fundamentals Unlimited Books and |

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| Grade: 3 | Content Area: Science |
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| | Assessments |
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| **Summative Assessments:**<br>• RST- Research Simulation Task<br>• Associated Unit tests, quizzes<br>• Labs and engineering based projects<br>• Basic Punnett Square | **Benchmark Assessments:**<br>• Projects: Create a video on Flip Grid<br>• Portfolio: Google slides presentation<br>• Teacher-Created Assessment |

| Knowledge & Skills | |
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| **Enduring Understandings:**<br>• Climate describes patterns of typical weather conditions over different scales and variations.<br>• Data in tables and graphical displays to describe typical weather conditions.<br>• Weather patterns can be analyzed.<br>• Solutions can be designed to reduce the impact of a weather-related hazard. | **Essential Questions:**<br>• How do seasonal changes affect weather conditions?<br>• How can I use data in tables and graphical displays to describe typical weather conditions?<br>• How does the global location of a region determine the climate?<br>• How do engineers design a solution to reduce the impact of a weather-related hazard? |

| Core Instructional & Supplemental Materials | |
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| **Suggested Activities/Resources:**<br>• In this activity, students will conduct experiments or participate in demonstrations to answer questions about sky and weather phenomena. Students also will analyze and present data.<br>http://www.earthsciweek.org/classroom-activities/sky-and-cloud-windows<br>• As a citizen scientist, students can take their own air temperatures with an outdoor thermometer and compare their readings to the official ones from the National Weather Service. It is important that you follow the correct procedures, however, for placing your thermometer. This activity will help students to do that, as well as find out what the normal yearly average temperature is for each day.<br>http://www.earthsciweek.org/classroom-activities/step-step-weather-observations<br>• This guide provides an overview of unit concepts, a spark activity, vocabulary list, Internet links, and extension activities. It describes unit resources and addresses misconceptions. Students will understand why it is clear one day and cloudy another | **Varied Levels of Text:**<br>• Correlated Wonder's Text.<br>• *Snowflake Bentley* by Jacqueline Briggs Martin<br>• *Hurricanes* by Gail Gibbons<br>• *Come On, Rain!* by Karen Hesse<br>• *Albert* by Donna Jo Napoli<br>• **'Ohana Means Family** by Ilima Loomis |

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day or why is it snowing in one location and sunny in another location.
https://www.sciencea-z.com/main/Download/resource/saz/id/326/unitId/13/format/single

- Measure the change in temperature of objects when placed under lamps or in the sunlight.
- Lamps or sunlight, glass of water, thermometer, chart paper, timer
- Water Cycles and Phases of Matter (Mystery Science: Stormy Skies): students examine clues about how clouds look and feel to discover what they're made of and how they form. In the activity, Gas Trap, students add hot water to clear cups to observe evaporation firsthand. They observe the condensation of the water vapor on the sides of the cup. They use this model to understand how clouds are formed.

https://mysteryscience.com/weather/mystery-1/water-cycle-phases-of-matter/46?code=NjcxODUzMA&t=student&chapter=all

- Local Weather Patterns and Predictions (Mystery Science: Stormy Skies): students learn how to make predictions about the weather by observing clouds and their changes. In the activity, Storm Spotter's Guide, students create a small book to record their notes, identify different types of clouds, and think about wind direction to figure out if a storm is heading their way.

https://mysteryscience.com/weather/mystery-2/local-weather-patterns-weather-prediction/47?code=NjcxODUzMA&t=student&chapter=all

- Seasonal Weather Patterns (Mystery Science: Stormy Skies): students explore seasonal weather conditions across different regions. They investigate how weather patterns can be used to make predictions about future weather. In the activity, Snow Fort Weather, students organize daily temperature data from three snowy towns into a table so that they can compare weather conditions and predict which town is most likely to have the best weather for a snow fort festival next year.

https://mysteryscience.com/weather/mystery-3/seasonal-weather-

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| patterns/828?code=NjcxODUzMA&t=student&chapter=all | |

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**Stafford Township School DIstrict Curriculum Guide**

| Grade: 4 | Content Area: Science |
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| **Original Adoption:** 2020 NJSLS Science, Social Studies, Career Readiness, Life Literacies & Key Skills, Computer Design & Thinking, Visual & Performing Arts, World Language, Comprehensive Health and Physical Education (9-12-22); 2023 NJSLS English Language Arts (9-23-24); Math NJSLS Mathematics (9-23-24) |
| **Created By: Sarah Dreher, Kelly Levrock** |
| **Updated Date: September 17, 2026** |
| **Updated By: Megan Banach** |

Intent and Spirit

The New Jersey Student Learning Standards for Science (NJSLS-S) describe the expectations for what students should know and be able to do as well as promote three-dimensional science instruction across the three science domains (i.e., physical sciences, life science, Earth and space sciences). From the earliest grades, the expectation is that students will engage in learning experiences that enable them to investigate phenomena, design solutions to problems, make sense of evidence to construct arguments, and critique and discuss those arguments (in appropriate ways relative to their grade level).

The foundation of the NJSLS-S reflects three dimensions — science and engineering practices, disciplinary core ideas, and crosscutting concepts. The performance expectations are derived from the interplay of these three dimensions. It is essential that these three components are integrated into all learning experiences. Within each standard document, the three dimensions are intentionally presented as integrated components to foster sensemaking and designing solutions to problems. Because the NJSLS-S is built on the notions of coherence and contextuality, each of the science and engineering practices and crosscutting concepts appear multiple times across topics and at every grade level. Additionally, the three dimensions should be an integral part of every curriculum unit and should not be taught in isolation.

Mission

All students will develop an understanding of scientific concepts and processes essential for informed decision-making, meaningful participation in civic life, and readiness for postsecondary opportunities, including careers in STEM fields.

Vision

Prepare students to become scientifically literate individuals who can effectively:

- Apply scientific thinking, skills, and understanding to real-world phenomena and problems;
- Engage in systems thinking and modeling to explain phenomena and to give a context for the ideas to be learned;
- Conduct investigations, solve problems, and engage in discussions;
- Discuss open-ended questions that focus on the strength of the evidence used to generate claims;
- Read and evaluate multiple sources, including science-related magazine and journal articles and web-based resources to gain knowledge about current and past science problems and solutions and develop well-reasoned claims; and
- Communicate ideas through journal articles, reports, posters, and media presentations that explain and argue.

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| Recommended Pacing Guide | |
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| Think it Through | 15 Days |
| Amazing Animals | 15 Days |
| That's the Spirit | 15 Days |
| Fact or Fiction? | 15 Days |
| Figure it Out | 15 Days |
| Past, Present, and Future | 15 Days |

**Alignment with State Mandates**

The following colors are used throughout this document to indicate areas in which the curriculum is aligned with the following NJSA requirements:

- Holocaust and genocides (N.J.S.A. 18A:35-28)
- History and contributions of African-Americans (Amistad Law) (N.J.S.A. 18A:35-4.43)
- Highlight and promote diversity and inclusion (Diversity & Inclusion Law) (N.J.S.A. 18A:35-4.36a)
- History of disabled and LGBT persons included in middle and high school curriculum (Section 18A:35-4.35 )
- Asian Americans and Pacific Islanders (N.J.S.A.18A:34-4,44)
- Climate Change - to prepare students to understand how and why climate change happens, the impact it has on our local and global communities and to act in informed and sustainable ways. Please click here for specific examples (by subject).

Fourth graders are expected to develop a model to describe that an object can be seen when light reflected from its surface enters the eye. They are able to use evidence to construct an explanation of the relationship between the speed of an object and the energy of that object. Students are expected to develop an understanding that energy can be transferred from place to place by sound, light, heat, and electric currents or from object to object through collisions. They apply their understanding of energy to design, test, and refine a device that converts energy from one form to another. Students are expected to develop an understanding that plants and animals have internal and external structures that function to support survival, growth, behavior, and reproduction. Students are also expected to develop understanding of the effects of weathering or the rate of erosion by water, ice, wind, or vegetation. They apply their knowledge of natural Earth processes to generate and compare multiple solutions to reduce the impacts of such processes on humans. Finally, students analyze and interpret data from maps to describe patterns of Earth's features.

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**Stafford Township School DIstrict Curriculum Guide**

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| **Unit 1: Think it Through**<br>(Natural Disasters) | **Duration:** 15 days |
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| **Suggested Accommodations** |
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| **Basic Skills**<br>• Provide extra time<br>• Pre-teach vocabulary using visuals and gestures<br>• Chunk texts<br>• Summarize as you go<br>• Preview lessons<br>• Graphic organizers<br>• Highlight key words<br>• Sentence starters<br>• Prompting and cueing<br>• Activate schema<br>• Build background knowledge |
| **Economically Disadvantaged**<br>• Provide extra time<br>• Pre-teach vocabulary using visuals and gestures<br>• Chunk texts<br>• Summarize as you go<br>• Preview lessons<br>• Graphic organizers<br>• Highlight key words<br>• Sentence starters<br>• Prompting and cueing<br>• Activate schema<br>• Build background knowledge |
| **Gifted and Talented**<br>• Higher level questioning<br>• Students design questions<br>• Expose to sophisticated vocabulary<br>• Extend reading response to further enrich understanding |
| **English Language Learners**<br>• Provide extra time<br>• Pre-teach vocabulary using visuals and gestures<br>• Chunk texts<br>• Summarize as you go<br>• Preview lessons<br>• Graphic organizers<br>• Highlight key words<br>• Sentence starters<br>• Prompting and cueing<br>• Activate schema<br>• Build background knowledge |

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**Students with IEPs**

- Pre-teach vocabulary using visuals and gestures
- Chunk texts
- Summarize as you go
- Preview lessons
- Graphic organizers
- Highlight key words
- Sentence starters
- Prompting and cueing
- Activate schema
- Build background knowledge
- Provide extra time
- Provide differentiated instruction as needed
- Follow all IEP modifications
- Provide manipulatives or the opportunity to draw solution strategies
- Provide students with notes from the lesson
- For additional support and guidance, provide students with lab group or partner for lab experiences
- Provide students with a study guide about the information they will be assessed on for a test or quiz
- Teach and model note taking strategies to assist student when reading their science textbook
- Teach and model strategies to learn and practice new vocabulary words
- Assist student in completing a word web for new vocabulary words to reinforce new words in their science unit
- Provide students with an organization system to help them organize their notes, labs, and classwork
- Read directions, tests, and/or quizzes aloud
- Use graphic organizers to take notes, organize new information, and help students relate new information with previous knowledge
- Provide students with additional time to complete assignments
- Provide small group and individual conferencing to help support student throughout the lesson
- Preferential seating based on student needs
- Review concepts of previous lesson before teaching the new lesson
- Complete review activities to reinforce concepts previously taught
- Check for students understanding often with formal, informal, verbal, and nonverbal measures
- Provide student with modified tests and quizzes organized in a manner that will easy for the student to follow, assessment quality over quantity, and has clear directions

**Students with 504 plan**

- Pre-teach vocabulary using visuals and gestures
- Chunk texts
- Summarize as you go
- Preview lessons
- Graphic organizers
- Highlight key words
- Sentence starters
- Prompting and cueing
- Activate schema
- Build background knowledge
- Provide extra time
- Provide differentiated instruction as needed
- Follow all 504 modifications
- Provide manipulatives or the opportunity to draw solution strategies
- Provide students with notes from the lesson

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- For additional support and guidance, provide students with lab group or partner for lab experiences
- Provide students with a study guide about the information they will be assessed on for a test or quiz
- Teach and model note taking strategies to assist student when reading their science textbook
- Teach and model strategies to learn and practice new vocabulary words
- Assist student in completing a word web for new vocabulary words to reinforce new words in their science unit
- Provide students with an organization system to help them organize their notes, labs, and classwork
- Read directions, tests, and/or quizzes aloud
- Use graphic organizers to take notes, organize new information, and help students relate new information with previous knowledge
- Provide students with additional time to complete assignments
- Provide small group and individual conferencing to help support student throughout the lesson
- Preferential seating based on student needs
- Review concepts of previous lesson before teaching the new lesson
- Complete review activities to reinforce concepts previously taught
- Check for students understanding often with formal, informal, verbal, and nonverbal measures
- Provide student with modified tests and quizzes organized in a manner that will easy for the student to follow, assessment quality over quantity, and has clear directions

**Students at Risk of Failure**

- Work toward longer passages as skills in English increase
- Use visuals
- Introduce key vocabulary before lesson
- Teacher reads aloud daily
- Provide peer tutoring
- Use a strong student as a “buddy” (does not necessarily have to speak the primary language)
- choral reading
- chants, songs
- preferential seating

| New Jersey Student Learning Standards | |
|---|---|
| **4-ESS2-1** | **Make observations and/or measurements to provide evidence of the effects of weathering or the rate of erosion by water, ice, wind, or vegetation.** |
| **4-ESS2-2** | **Analyze and interpret data from maps to describe patterns of Earth’s features.** |

| Science and Engineering Practices Learning Progressions | **Asking Questions and Defining Problems**<br><br>**Planning and Carrying Out Investigations**<br>Planning and carrying out investigations to answer questions or test solutions to problems in 3–5 builds on K–2 experiences and progresses to include investigations that control variables and provide evidence to support explanations or design solutions. |
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| | • Make observations and/or measurements to produce data to serve as the basis for evidence for an explanation of a phenomenon. (4-ESS2-1)<br><br>**Analyzing and Interpreting Data**<br>• Analyzing data in 3–5 builds on K–2 experiences and progresses to introducing quantitative approaches to collecting data and conducting multiple trials of qualitative observations. When possible and feasible, digital tools should be used.<br>• Analyze and interpret data to make sense of phenomena using logical reasoning. (4-ESS2-2) |
| **Discipline Core Ideas**<br><br>**Physical Science Learning Progressions**<br><br>**Earth & Space Science Learning Progressions**<br><br>**Life Science Learning Progressions** | **ESS2.A: Earth Materials and Systems**<br>• Rainfall helps to shape the land and affects the types of living things found in a region. Water, ice, wind, living organisms, and gravity break rocks, soils, and sediments into smaller particles and move them around. (4-ESS2- 1)<br><br>**ESS2.B: Plate Tectonics and Large-Scale System Interactions**<br><br>• The locations of mountain ranges, deep ocean trenches, ocean floor structures, earthquakes, and volcanoes occur in patterns. Most earthquakes and volcanoes occur in bands that are often along the boundaries between continents and oceans. Major mountain chains form inside continents or near their edges. Maps can help locate the different land and water features areas of Earth. (4-ESS2-2)<br><br>**ESS2.E: Biogeology**<br>• Living things affect the physical characteristics of their regions. (4-ESS2-1) |
| **Crosscutting Concepts** | **Patterns**<br>• Patterns can be used as evidence to support an explanation. (4-ESS2- 2)<br><br>**Cause and Effect**<br>• Cause and effect relationships are routinely identified, tested, and used to explain change. (4-ESS2- 1) |
| Engineering, Technology and the Application of Science Learning Progressions | |

| Interdisciplinary Connections |
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| **Reading**<br>• RL.CRL.IT.4.3. Describe the impact of individuals and events throughout the course of a text, using an in-depth analysis of the character, setting, or event that draws on textual evidence.<br>• RI.IT.4.3. Describe the impact of individuals and events throughout the course of a text, explaining events, procedures, ideas, or concepts in a historical, scientific, or technical text, including what happened and why, based on evidence in the text. |

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- RI.TS.4.4. Describe the overall structure (e.g., chronology, comparison, cause/effect, problem/solution) of events, ideas, concepts, or information in a text or part of a text.
- RL.PP.4.5. Compare and contrast the point of view from which different stories are narrated, including the difference between first- and third-person narrations.
- RI.PP.4.5. Compare and contrast multiple accounts of the same event or topic; noting important similarities and differences in the point of view they represent.
- RL.MF.4.6. Make connections between specific descriptions and directions in a text and a visual or oral representation of the text.
- RI.MF.4.6. Use evidence to show how graphics and visuals (e.g., illustrations, charts, graphs, diagrams, timelines, animations) support central ideas.
- RI.AA.4.7. Analyze how an author uses facts, details and explanations to develop ideas or to support their reasoning.

**Speaking and Listening**

- SL.PE.4.1. Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 4 topics and texts, building on others' ideas and expressing their own clearly.

  A. Explicitly draw on previously read text or material and other information known about the topic to explore ideas under discussion.

  B. Follow agreed-upon rules for discussions and carry out assigned roles.

  C. Pose and respond to specific questions to clarify or follow up on information, and make comments that contribute to the discussion and link to the remarks of others.

  D. Review the key ideas expressed and explain their own ideas and understanding in light of the discussion.

- SL.II.4.2. Paraphrase portions of a text read aloud or information presented in diverse media and formats (e.g., visually, quantitatively, and orally).
- SL.ES.4.3. Identify the reasons and evidence a speaker provides to support particular points.
- SL.PI.4.4. Report on a topic or text, tell a story, or recount an experience in an organized manner, using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.
- SL.UM.4.5. Add audio recordings and visual displays to presentations when appropriate to enhance the development of main ideas or themes.
- SL.AS.4.6. Differentiate between contexts that call for formal English (e.g., presenting ideas) and situations where informal discourse is appropriate (e.g., small-group discussion); use formal English when appropriate to task and situation.

**Writing**

- W. IW.4.2. Write informative/explanatory texts to examine a topic and convey ideas and information clearly.

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A. Introduce a topic clearly and group related information in paragraphs and sections; include formatting (e.g., headings), text features (e.g., illustrations, diagrams, captions) and multimedia when useful to aid in comprehension.

B. Develop the topic with facts, definitions, concrete details, text evidence, or other information and examples related to the topic.

C. Link ideas within paragraphs and sections of information using words and phrases (e.g., another, for example, also, because).

D. Use precise language and domain-specific vocabulary to inform about or explain the topic.

E. Provide a conclusion related to the information or explanation presented.

- W.WR.4.5. Conduct short research projects that use multiple reference sources (print and non-print) and build knowledge through investigation of different aspects of a topic.
- W.SE.4.6. Gather relevant information from multiple print and digital sources; take notes, prioritize and categorize information; provide a list of sources

**Social Studies**

- 6.1.5.CivicsPD.3: Explain how and why it is important that people from diverse cultures collaborate to find solutions to community, state, national, and global challenges.
- 6.1.5.CivicsCM.3: Identify the types of behaviors that promote collaboration and problem solving with others who have different perspectives.

**Computer Science & Design Thinking**

- 8.1.5.A.3. Use a graphic organizer to organize information about a problem or issue.
- 8.1.5.E.1. Use digital tools to research and evaluate the accuracy of, relevance to, and appropriateness of using print and non-print electronic information sources to complete a variety of tasks.
- 8.1.5.DA.3: Organize and present collected data visually to communicate insights gained from different views of the data.
- 8.1.5.DA.4: Organize and present climate change data visually to highlight relationships or support a claim.
- 8.2.5.ITH.1: Explain how societal needs and wants influence the development and function of a product and a system
- 8.2.5.EC.1: Analyze how technology has contributed to or reduced inequities in local and global communities and determine its short- and long-term effects.
- 8.2.8.ITH.1: Explain how the development and use of technology influences economic, political, social, and cultural issues.
- 8.2.8.EC.1: Explain ethical issues that may arise from the use of new technologies

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## Career Readiness, Life Literacies & Key Skills

- 9.1.5.CR.1: Compare various ways to give back and relate them to your strengths, interests, and other personal factors.
- 9.1.5.FP.3: Analyze how spending choices and decision-making can result in positive or negative consequences.
- 9.2.5.CAP.1: Evaluate personal likes and dislikes and identify careers that might be suited to personal likes.
- 9.2.5.CAP.6: Compare the characteristics of a successful entrepreneur with the traits of successful employees
- 9.4.5.CT.1: Identify and gather relevant data that will aid in the problem-solving process (e.g., 2.1.5.EH.4, 4-ESS3-1, 6.3.5.CivicsPD.2).
- 9.4.5.CT.3: Describe how digital tools and technology may be used to solve problems.
- 9.4.5.GCA.1: Analyze how culture shapes individual and community perspectives and points of view (e.g., 1.1.5.C2a, RL.5.9, 6.1.5.HistoryCC.8).

| Career Readiness, Life Literacies, and Key Skills Practices | |
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| Act as a responsible and contributing community member and employee. | Students understand the obligations and responsibilities of being a member of a community, and they demonstrate this understanding every day through their interactions with others. They are conscientious of the impacts of their decisions on others and the environment around them. They think about the near-term and long-term consequences of their actions and seek to act in ways that contribute to the betterment of their teams, families, community and workplace. They are reliable and consistent in going beyond the minimum expectation and in participating in activities that serve the greater good. |
| Attend to financial well-being. | Students take regular action to contribute to their personal financial well-being, understanding that personal financial security provides the peace of mind required to contribute more fully to their own career success. |
| Consider the environmental, social and economic impacts of decisions. | Students understand the interrelated nature of their actions and regularly make decisions that positively impact and/or mitigate negative impact on other people, organization, and the environment. They are aware of and utilize new technologies, understandings, procedures, materials, and regulations affecting the nature of their work as it relates to the impact on the social condition, the environment and the profitability of the organization. |
| Demonstrate creativity and innovation. | Students regularly think of ideas that solve problems in new and different ways, and they contribute those ideas in a useful and productive manner to improve their organization. They can consider unconventional ideas and suggestions as solutions to issues, tasks or problems, and they discern which ideas and suggestions will add greatest value. They seek new methods, practices, and ideas from a variety of sources and seek to apply those ideas to their own workplace. They take action on their ideas and understand how to bring innovation to an organization. |

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| Utilize critical thinking to make sense of problems and persevere in solving them. | Students readily recognize problems in the workplace, understand the nature of the problem, and devise effective plans to solve the problem. They are aware of problems when they occur and take action quickly to address the problem; they thoughtfully investigate the root cause of the problem prior to introducing solutions. They carefully consider the options to solve the problem. Once a solution is agreed upon, they follow through to ensure the problem is solved, whether through their own actions or the actions of others. |
| Model integrity, ethical leadership and effective management. | Students consistently act in ways that align personal and community-held ideals and principles while employing strategies to positively influence others in the workplace. They have a clear understanding of integrity and act on this understanding in every decision. They use a variety of means to positively impact the directions and actions of a team or organization, and they apply insights into human behavior to change others' actions, attitudes and/or beliefs. They recognize the near-term and long-term effects that management's actions and attitudes can have on productivity, morals and organizational culture. |
| Plan education and career paths aligned to personal goals. | Students take personal ownership of their own education and career goals, and they regularly act on a plan to attain these goals. They understand their own career interests, preferences, goals, and requirements. They have perspective regarding the pathways available to them and the time, effort, experience and other requirements to pursue each, including a path of entrepreneurship. They recognize the value of each step in the education and experiential process, and they recognize that nearly all career paths require ongoing education and experience. They seek counselors, mentors, and other experts to assist in the planning and execution of career and personal goals. |
| Use technology to enhance productivity, increase collaboration and communicate effectively. | Students find and maximize the productive value of existing and new technology to accomplish workplace tasks and solve workplace problems. They are flexible and adaptive in acquiring new technology. They are proficient with ubiquitous technology applications. They understand the inherent risks-personal and organizational-of technology applications, and they take actions to prevent or mitigate these risks. |
| Work productively in teams while using cultural/global competence. | Students positively contribute to every team, whether formal or informal. They apply an awareness of cultural differences to avoid barriers to productive and positive interaction. They find ways to increase the engagement and contribution of all team members. They plan and facilitate effective team meetings. |

| Evidence of Student Learning | |
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| **Formative Assessments:**<br>• Classroom Observation<br>• Center Activity Cards<br>• Anecdotal records<br>• Reading/Writing Companion<br>• Reader's Responses in Reader's notebooks<br>• Think-Pair-Share | **Alternative Assessments:**<br>• LLI Reading Records and Comprehension Questions<br>• LLI Written Comprehension Responses<br>• LLI Lesson Record Anecdotal Note Pages<br>• LLI Reading Response Journals<br>• LLI Conversation Rubric |

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| • Stop and Jot Post-it notes<br>• Achieve 3000<br>• Reading A to Z articles<br>• Graphic Organizers | • Stop & Jot Sentence Starters<br>• Student Conversation Rubric<br>• Reader's Response Sentence Starters<br>• Curriculum Based Assessments (CBMs) for fluency or comprehension<br>• Achieve3000 with Whole Group Introduction and Higher Lexile Level Read Aloud<br>• Reading A-Z Guided Level Assessments<br>• Drawing a Picture to Show Comprehension with Verbal Explanation<br>• Teacher Created/Modified Vocabulary Assessments<br>• Science Related Achieve3000 Articles and Activities<br>• Mystery Science Activities |
| **Summative Assessments:**<br>• Progress Monitoring<br>• Text Set Goals<br>• Show Your Knowledge<br>• Unit Assessment<br>• Content Area Reading<br>• Fluency Assessment<br>• Vocabulary assessments<br>• Short constructed reading response assessment<br>• Extended reading response to reading | **Benchmark Assessments:**<br>• DRA3<br>• Achieve 3000 Assessment<br>• Wonders Progress Monitoring Assessments<br>• Wonders Unit Assessments |

**Knowledge & Skills**

| | |
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| **Enduring Understandings:**<br>*Students will understand that...*<br>• Explain how diagrams and heading contribute to the understanding of a text<br>• Identify the text structure of compare and contrast<br>• Identify the text structure of sequence in a procedural text<br>• Explain the author's perspective on a topic in an informational text<br>• Explain how relevant details support the central idea, implied or explicit<br>• Earth's physical features occur in patterns, as do earthquakes and volcanoes. Maps can be used to locate features and determine patterns in those events.<br>• Earth's physical features occur in patterns, as do earthquakes and volcanoes. | **Essential Questions:**<br>• How do people respond to natural disasters?<br>• How do patterns in rock formations and fossils support the idea that a landscape changes over time?<br>• What is the cause of weathering and erosion?<br>• How can you use maps to describe the patterns of Earth's features?<br>• How can engineers design solutions to reduce the impacts of Earth's processes, such as volcanic activity, earthquakes, and flooding? |

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Maps can be used to locate features and determine patterns in those events.

- Humans cannot eliminate the hazards but can take steps to reduce their impacts.

Students will...

- read and understand expository text.
- use text evidence to respond to expository text.
- explain how actions affect others.
- read and understand argumentative text.
- use text evidence to respond to argumentative text.
- Analyze how a variety of hazards result from natural processes (e.g., earthquakes, tsunamis, volcanic eruptions)

**Vocabulary**

**Alter, collapse, crisis, destruction, hazard, severe, substantial, unpredictable, natural disaster, hurricane, earthquake, flood**

**Core Instructional & Supplemental Materials**

| Suggested Activities | Resources |
|---|---|
| **Mapping extreme natural events**<br>Students use an interactive natural hazards map to construct their own maps of extreme natural events by United States region and identify patterns. | http://www.nationalgeographic.org/activity/mapping-extreme-natural-events/ |
| **Will a mountain last forever?**<br>Students will explore how solid rock breaks apart into smaller pieces through a process called weathering (including root-wedging and ice-wedging.) In the activity, students will model the process of weathering that occurs when rocks tumble and crash into each other using sugar cubes in a container. | https://mysteryscience.com/rocks/mystery-3/weathering-destructive-forces/57?r=6359962<br><br>Tupperware container with a lid, sugar cubes, markers |
| **Could a volcano pop up in your backyard?**<br>Students explore the patterns of where volcanoes exist in the world today and where volcanoes have existed in the past. In the activity, students will use coordinates to locate volcanoes in different regions of the world to identify a major pattern of volcanoes known as the Ring of Fire. | Map indicating where volcanoes are located |
| **Why do some volcanoes explode?** | Newspaper, paper plates, plastic spoons, dixie cups, flour, red food coloring, water |

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| Students investigate how differences in lava types explain differences in the shape and eruption patterns among volcanoes. In the activity, students will experiment with “lava” of different thicknesses. | https://mysteryscience.com/rocks/mystery-2/volcanoes-rock-cycle/55?code=NjcxODUzMA&t=student&chapter=all |
| Students will activate their schema using Build Knowledge and Build Vocabulary pages. Students will watch a short video and listen to an Interactive Read Aloud on the topic to help build more knowledge on the topic | Wonders book/ online |
| Students will listen to the Shared Read to identify important ideas and details, take notes, and to summarize. | Wonders book/ online |
| Students will reread the Shared Read to analyze the text, craft, and structure. | Wonders book/ online |
| Students will listen to the Anchor Text to identify key information and details, take notes, and to summarize. | Wonders book/ online |
| Students will reread the Anchor Text to analyze the text, craft, and structure. | Wonders book/ online |
| Students will read the Paired Selection to apply strategies and skills. | Wonders book/ online |
| Students will reread the Paired Selection to apply strategies and skills. | Wonders book/ online |
| Write a short response about the impacts a natural disaster can have on a community. | Wonders book |
| Create a Venn diagram to compare and contrast two natural disasters. | Wonders book |
| Write a short response on why it is important to know the fast and slow changes of Earth’s surface. | Wonders book |

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| Create a pamphlet on how to stay safe during a natural disaster. | Books, magazines, websites, and videos |
| Write an argumentative essay to present to your teacher about whether people should build in flood zones. | Wonders book |

**Literature**

Unit 1 Think It Through, Wonders 2023

- *Earthquakes* by Sneed B. Collard III
- *Weathering the Storm*
- *A Crash Course in Forces and Motion with Max Axiom, Super Scientist* by Emily Sohn
- *Erosion: Changing Earth's Surface* by Robin Koontz
- *How People Have Been Shaping the Earth/Student Science Magazine*
- *Quinto's Volcano* by Aileen Friedman

| **Unit 2: Amazing Animals**<br>(Animal Adaptations) | **Duration:** 15 days |
|---|---|

**Suggested Accommodations**

**Basic Skills**

- Provide extra time
- Pre-teach vocabulary using visuals and gestures
- Chunk texts
- Summarize as you go
- Preview lessons
- Graphic organizers
- Highlight key words
- Sentence starters
- Prompting and cueing
- Activate schema
- Build background knowledge

**Economically Disadvantaged**

- Provide extra time
- Pre-teach vocabulary using visuals and gestures
- Chunk texts
- Summarize as you go
- Preview lessons
- Graphic organizers
- Highlight key words
- Sentence starters
- Prompting and cueing
- Activate schema
- Build background knowledge

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**Gifted and Talented**

- Higher level questioning
- Students design questions
- Expose to sophisticated vocabulary
- Extend reading response to further enrich understanding

**English Language Learners**

- Provide extra time
- Pre-teach vocabulary using visuals and gestures
- Chunk texts
- Summarize as you go
- Preview lessons
- Graphic organizers
- Highlight key words
- Sentence starters
- Prompting and cueing
- Activate schema
- Build background knowledge

**Students with IEPs**

- Pre-teach vocabulary using visuals and gestures
- Chunk texts
- Summarize as you go
- Preview lessons
- Graphic organizers
- Highlight key words
- Sentence starters
- Prompting and cueing
- Activate schema
- Build background knowledge
- Provide extra time
- Provide differentiated instruction as needed
- Follow all IEP modifications
- Provide manipulatives or the opportunity to draw solution strategies
- Provide students with notes from the lesson
- For additional support and guidance, provide students with lab group or partner for lab experiences
- Provide students with a study guide about the information they will be assessed on for a test or quiz
- Teach and model note taking strategies to assist student when reading their science textbook
- Teach and model strategies to learn and practice new vocabulary words
- Assist student in completing a word web for new vocabulary words to reinforce new words in their science unit
- Provide students with an organization system to help them organize their notes, labs, and classwork
- Read directions, tests, and/or quizzes aloud
- Use graphic organizers to take notes, organize new information, and help students relate new information with previous knowledge
- Provide students with additional time to complete assignments
- Provide small group and individual conferencing to help support student throughout the lesson
- Preferential seating based on student needs
- Review concepts of previous lesson before teaching the new lesson
- Complete review activities to reinforce concepts previously taught
- Check for students understanding often with formal, informal, verbal, and nonverbal measures

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- Provide student with modified tests and quizzes organized in a manner that will easy for the student to follow, assessment quality over quantity, and has clear directions

**Students with 504 plan**

- Pre-teach vocabulary using visuals and gestures
- Chunk texts
- Summarize as you go
- Preview lessons
- Graphic organizers
- Highlight key words
- Sentence starters
- Prompting and cueing
- Activate schema
- Build background knowledge
- Provide extra time
- Provide differentiated instruction as needed
- Follow all 504 modifications
- Provide manipulatives or the opportunity to draw solution strategies
- Provide students with notes from the lesson
- For additional support and guidance, provide students with lab group or partner for lab experiences
- Provide students with a study guide about the information they will be assessed on for a test or quiz
- Teach and model note taking strategies to assist student when reading their science textbook
- Teach and model strategies to learn and practice new vocabulary words
- Assist student in completing a word web for new vocabulary words to reinforce new words in their science unit
- Provide students with an organization system to help them organize their notes, labs, and classwork
- Read directions, tests, and/or quizzes aloud
- Use graphic organizers to take notes, organize new information, and help students relate new information with previous knowledge
- Provide students with additional time to complete assignments
- Provide small group and individual conferencing to help support student throughout the lesson
- Preferential seating based on student needs
- Review concepts of previous lesson before teaching the new lesson
- Complete review activities to reinforce concepts previously taught
- Check for students understanding often with formal, informal, verbal, and nonverbal measures
- Provide student with modified tests and quizzes organized in a manner that will easy for the student to follow, assessment quality over quantity, and has clear directions

**Students at Risk of Failure**

- Work toward longer passages as skills in English increase
- Use visuals
- Introduce key vocabulary before lesson
- Teacher reads aloud daily
- Provide peer tutoring
- Use a strong student as a “buddy” (does not necessarily have to speak the primary language)
- choral reading
- chants, songs
- preferential seating

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| New Jersey Student Learning Standards | |
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| 4-LS1-1 | Construct an argument that plants and animals have internal and external structures that function to support survival, growth, behavior, and reproduction. |
| 4-LS1-2 | Use a model to describe that animals receive different types of information through their senses, process the information in their brain, and respond to the information in different ways. |

| | |
|---|---|
| Science and Engineering Practices Learning Progressions | **Developing and Using Models**<br>Modeling in 3–5 builds on K–2 experiences and progresses to building and revising simple models and using models to represent events and design solutions.<br>● Use a model to test interactions concerning the functioning of a natural system. (4-LS1-2)<br>**Engaging in Argument from Evidence**<br>Engaging in argument from evidence in 3–5 builds on K–2 experiences and progresses to critiquing the scientific explanations or solutions proposed by peers by citing relevant evidence about the natural and designed world(s).<br>● Construct an argument with evidence, data, and/or a model. (4-LS1-1) |
| **Discipline Core Ideas**<br>Physical Science Learning Progressions<br>Earth & Space Science Learning Progressions<br>Life Science Learning Progressions | **LS1.A: Structure and Function**<br>● Plants and animals have both internal and external structures that serve various functions in growth, survival, behavior, and reproduction. (4-LS1-1)<br>**LS1.D: Information Processing**<br>● Different sense receptors are specialized for particular kinds of information, which may be then processed by the animal's brain. Animals are able to use their perceptions and memories to guide their actions. (4-LS1-2) |
| Crosscutting Concepts | **Systems and System Models**<br>● A system can be described in terms of its components and their interactions. (4-LS1-1), (4-LS1-2) |
| Engineering, Technology and the Application of Science Learning Progressions | |

| Interdisciplinary Connections |
|---|
| **Reading**<br>● RL.CRL.IT.4.3. Describe the impact of individuals and events throughout the course of a text, using an in-depth analysis of the character, setting, or event that draws on textual evidence. |

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- RI.IT.4.3. Describe the impact of individuals and events throughout the course of a text, explaining events, procedures, ideas, or concepts in a historical, scientific, or technical text, including what happened and why, based on evidence in the text.
- RL.CR.4.1. Refer to details and examples as textual evidence when explaining what a literary text says explicitly and make relevant connections when drawing inferences from the text.
- RI.CR.4.1. Refer to details and examples as textual evidence when explaining what an informational text says explicitly and make relevant connections when drawing inferences from the text.
- RL.CI.4.2. Summarize a literary text and interpret the author's theme citing key details from the text.
- RI.CI.4.2. Summarize an informational text and interpret the author's purpose or main idea citing key details from the text.
- RL.IT.4.3. Describe the impact of individuals and events throughout the course of a text, using an in-depth analysis of the character, setting, or event that draws on textual evidence.
- RI.IT.4.3. Describe the impact of individuals and events throughout the course of a text, explaining events, procedures, ideas, or concepts in a historical, scientific, or technical text, including what happened and why, based on evidence in the text.
- RI.TS.4.4. Describe the overall structure (e.g., chronology, comparison, cause/effect, problem/solution) of events, ideas, concepts, or information in a text or part of a text.
- RL.PP.4.5. Compare and contrast the point of view from which different stories are narrated, including the difference between first- and third-person narrations.
- RI.PP.4.5. Compare and contrast multiple accounts of the same event or topic; noting important similarities and differences in the point of view they represent.
- RL.MF.4.6. Make connections between specific descriptions and directions in a text and a visual or oral representation of the text.
- RI.MF.4.6. Use evidence to show how graphics and visuals (e.g., illustrations, charts, graphs, diagrams, timelines, animations) support central ideas.
- RI.AA.4.7. Analyze how an author uses facts, details and explanations to develop ideas or to support their reasoning.

**Speaking and Listening**

- SL.PE.4.1. Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 4 topics and texts, building on others' ideas and expressing their own clearly.

  A. Explicitly draw on previously read text or material and other information known about the topic to explore ideas under discussion.

  B. Follow agreed-upon rules for discussions and carry out assigned roles.

  C. Pose and respond to specific questions to clarify or follow up on information, and make comments that contribute to the discussion and link to the remarks of others.

  D. Review the key ideas expressed and explain their own ideas and understanding in light of the discussion.

- SL.II.4.2. Paraphrase portions of a text read aloud or information presented in diverse media and formats (e.g., visually, quantitatively, and orally).

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- SL.ES.4.3. Identify the reasons and evidence a speaker provides to support particular points.
- SL.PI.4.4. Report on a topic or text, tell a story, or recount an experience in an organized manner, using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.
- SL.UM.4.5. Add audio recordings and visual displays to presentations when appropriate to enhance the development of main ideas or themes.
- SL.AS.4.6. Differentiate between contexts that call for formal English (e.g., presenting ideas) and situations where informal discourse is appropriate (e.g., small-group discussion); use formal English when appropriate to task and situation.

**Writing**

- W.WR.4.5. Conduct short research projects that use multiple reference sources (print and non-print) and build knowledge through investigation of different aspects of a topic.
- W.SE.4.6. Gather relevant information from multiple print and digital sources; take notes, prioritize and categorize information; provide a list of sources.

**Social Studies**

- 6.1.5.GeoHE.2: Cite examples of how technological advances have changed the environment in New Jersey and the United States

## Computer Science & Design Thinking

- 8.1.5.A.3. Use a graphic organizer to organize information about a problem or issue.
- 8.1.5.E.1. Use digital tools to research and evaluate the accuracy of, relevance to, and appropriateness of using print and non-print electronic information sources to complete a variety of tasks.
- 8.1.5.DA.3: Organize and present collected data visually to communicate insights gained from different views of the data.
- 8.1.5.DA.4: Organize and present climate change data visually to highlight relationships or support a claim.
- 8.2.5.ITH.1: Explain how societal needs and wants influence the development and function of a product and a system
- 8.2.5.EC.1: Analyze how technology has contributed to or reduced inequities in local and global communities and determine its short- and long-term effects.
- 8.2.8.ITH.1: Explain how the development and use of technology influences economic, political, social, and cultural issues.
- 8.2.8.EC.1: Explain ethical issues that may arise from the use of new technologies

## Career Readiness, Life Literacies & Key Skills

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- 9.1.5.CR.1: Compare various ways to give back and relate them to your strengths, interests, and other personal factors.
- 9.1.5.FP.3: Analyze how spending choices and decision-making can result in positive or negative consequences.
- 9.2.5.CAP.1: Evaluate personal likes and dislikes and identify careers that might be suited to personal likes.
- 9.2.5.CAP.6: Compare the characteristics of a successful entrepreneur with the traits of successful employees
- 9.4.5.CT.1: Identify and gather relevant data that will aid in the problem-solving process (e.g., 2.1.5.EH.4, 4-ESS3-1, 6.3.5.CivicsPD.2).
- 9.4.5.CT.3: Describe how digital tools and technology may be used to solve problems.
- 9.4.5.GCA.1: Analyze how culture shapes individual and community perspectives and points of view (e.g., 1.1.5.C2a, RL.5.9, 6.1.5.HistoryCC.8).

| Career Readiness, Life Literacies, and Key Skills Practices | |
|---|---|
| Act as a responsible and contributing community member and employee. | Students understand the obligations and responsibilities of being a member of a community, and they demonstrate this understanding every day through their interactions with others. They are conscientious of the impacts of their decisions on others and the environment around them. They think about the near-term and long-term consequences of their actions and seek to act in ways that contribute to the betterment of their teams, families, community and workplace. They are reliable and consistent in going beyond the minimum expectation and in participating in activities that serve the greater good. |
| Attend to financial well-being. | Students take regular action to contribute to their personal financial well-being, understanding that personal financial security provides the peace of mind required to contribute more fully to their own career success. |
| Consider the environmental, social and economic impacts of decisions. | Students understand the interrelated nature of their actions and regularly make decisions that positively impact and/or mitigate negative impact on other people, organization, and the environment. They are aware of and utilize new technologies, understandings, procedures, materials, and regulations affecting the nature of their work as it relates to the impact on the social condition, the environment and the profitability of the organization. |
| Demonstrate creativity and innovation. | Students regularly think of ideas that solve problems in new and different ways, and they contribute those ideas in a useful and productive manner to improve their organization. They can consider unconventional ideas and suggestions as solutions to issues, tasks or problems, and they discern which ideas and suggestions will add greatest value. They seek new methods, practices, and ideas from a variety of sources and seek to apply those ideas to their own workplace. They take action on their ideas and understand how to bring innovation to an organization. |
| Utilize critical thinking to make sense of problems and persevere in solving them. | Students readily recognize problems in the workplace, understand the nature of the problem, and devise effective plans to solve the problem. They are aware of problems when they occur and take action quickly to address the problem; they thoughtfully investigate the root cause of the problem prior to introducing solutions. They carefully consider the options to solve the problem. Once a solution is agreed upon, they follow |

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| | through to ensure the problem is solved, whether through their own actions or the actions of others. |
| Model integrity, ethical leadership and effective management. | Students consistently act in ways that align personal and community-held ideals and principles while employing strategies to positively influence others in the workplace. They have a clear understanding of integrity and act on this understanding in every decision. They use a variety of means to positively impact the directions and actions of a team or organization, and they apply insights into human behavior to change others' actions, attitudes and/or beliefs. They recognize the near-term and long-term effects that management's actions and attitudes can have on productivity, morale and organizational culture. |
| Plan education and career paths aligned to personal goals. | Students take personal ownership of their own education and career goals, and they regularly act on a plan to attain these goals. They understand their own career interests, preferences, goals, and requirements. They have perspective regarding the pathways available to them and the time, effort, experience and other requirements to pursue each, including a path of entrepreneurship. They recognize the value of each step in the education and experiential process, and they recognize that nearly all career paths require ongoing education and experience. They seek counselors, mentors, and other experts to assist in the planning and execution of career and personal goals. |
| Use technology to enhance productivity, increase collaboration and communicate effectively. | Students find and maximize the productive value of existing and new technology to accomplish workplace tasks and solve workplace problems. They are flexible and adaptive in acquiring new technology. They are proficient with ubiquitous technology applications. They understand the inherent risks-personal and organizational-of technology applications, and they take actions to prevent or mitigate these risks. |
| Work productively in teams while using cultural/global competence. | Students positively contribute to every team, whether formal or informal. They apply an awareness of cultural differences to avoid barriers to productive and positive interaction. They find ways to increase the engagement and contribution of all team members. They plan and facilitate effective team meetings. |

| Evidence of Student Learning | |
|---|---|
| **Formative Assessments:**<br>• Classroom Observation<br>• Center Activity Cards<br>• Anecdotal records<br>• Reading/Writing Companion<br>• Reader's Responses in Reader's notebooks<br>• Think-Pair-Share<br>• Stop and Jot Post-it notes<br>• Achieve 3000<br>• Reading A to Z articles<br>• Graphic Organizers | **Alternative Assessments:**<br>• LLI Reading Records and Comprehension Questions<br>• LLI Written Comprehension Responses<br>• LLI Lesson Record Anecdotal Note Pages<br>• LLI Reading Response Journals<br>• LLI Conversation Rubric<br>• Stop & Jot Sentence Starters<br>• Student Conversation Rubric<br>• Reader's Response Sentence Starters<br>• Curriculum Based Assessments (CBMs) for fluency or comprehension |

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| | • Achieve3000 with Whole Group Introduction and Higher Lexile Level Read Aloud<br>• Reading A-Z Guided Level Assessments<br>• Drawing a Picture to Show Comprehension with Verbal Explanation<br>• Teacher Created/Modified Vocabulary Assessments<br>• Science Related Achieve3000 Articles and Activities<br>• Mystery Science Activities |
| **Summative Assessments:**<br>• Progress Monitoring<br>• Text Set Goals<br>• Show Your Knowledge<br>• Unit Assessment<br>• Content Area Reading<br>• Fluency Assessment<br>• Vocabulary assessments<br>• Short constructed reading response assessment<br>• Extended reading response to reading | **Benchmark Assessments:**<br>• DRA3<br>• Achieve 3000 Assessment<br>• Wonders Progress Monitoring Assessments<br>• Wonders Unit Assessments |

**Knowledge & Skills**

**Enduring Understandings:**

*Students will understand that...*

- That plants and animals have both internal and external structures that serve various functions in growth, survival, behavior, and reproduction.
- Animals are able to use their perceptions and memories to guide their actions.
- Students understand the main idea of a text and explain how it is supported by key details.

Students will...

- Students will summarize expository text.
- Students understand that reasons and evidence are essential to support an author's point of view.

*Students will be able to …*

- read and understand expository text.
- use text evidence to respond to expository text.
- use text evidence to respond to a drama.
- know how animals inspire writers.

**Essential Questions:**

- What helps an animal to survive?
- How do animal characters change familiar stories?
- How are writers inspired by animals?

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**Vocabulary**
Camouflaged, dribble, extraordinary, poisonous, pounce, predator, prey, and vibrations

**Core Instructional & Supplemental Materials**

| **Suggested Activities** | **Resources** |
|---|---|
| Students will activate their schema using Build Knowledge and Build Vocabulary pages. Students will watch a short video and listen to an Interactive Read Aloud on the topic to help build more knowledge on the topic | Wonders book/ online |
| Students will listen to the Shared Read to identify important ideas and details, take notes, and to summarize. | Wonders book/ online |
| Students will reread the Shared Read to analyze the text, craft, and structure. | Wonders book/ online |
| Students will listen to the Anchor Text to identify key information and details, take notes, and to summarize. | Wonders book/ online |
| Students will reread the Anchor Text to analyze the text, craft, and structure. | Wonders book/ online |
| Students will read the Paired Selection to apply strategies and skills. | Wonders book/ online |
| Students will reread the Paired Selection to apply strategies and skills. | Wonders book/ online |
| Students will use photographs, captions, and headings to learn more about adaptations. | Wonders book/ online |
| Students will find the central idea and relevant details on insects in disguise. | Wonders book/ online |
| Students will write a short response about why adaptations are so important. | Wonders book/ online |
| Students will draw a life cycle diagram. Then, this will use this diagram to compare two life cycles. | Wonders book/ online |
| Students will plan a video about animal adaptations. | Flipgrid |
| Students will write a short response about how they feel about each animal after reading the poems. | Wonders book/ online |

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| Students will make a food web that shows how plants and animals in a pond ecosystem get energy, or food. | Wonders book/ online |
| Students will write a poem inspired by animals. | Wonders book/ online |
| Students will create a project to present fun animal facts. | Wonders book/ online |
| **Literature** | |
| Unit 2 Amazing Animals, Wonders 2023<br>*Spiders* by Nic Bishop<br>*Anansi and the Birds*<br>*Ranita, The Frog Princess* by Carmen Agra Deedy<br>*Pecos Bill and the Bear Lake Monster*<br>*"The Sandpiper"* by Frances Frost<br>*"Fog"* by Carl Sandburg<br>*The Buffalo Are Back* by Jean Craighead George<br>*Energy in the Ecosystem*<br>*The Fox and the Goat*<br>Wonders Leveled Readers | |

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| **Unit 3: That's the Spirit**<br>(Plants) | **Duration:** 15 days |

| Suggested Accommodations |
|---|
| **Basic Skills**<br>• Provide extra time<br>• Pre-teach vocabulary using visuals and gestures<br>• Chunk texts<br>• Summarize as you go<br>• Preview lessons<br>• Graphic organizers<br>• Highlight key words<br>• Sentence starters<br>• Prompting and cueing<br>• Activate schema<br>• Build background knowledge |
| **Economically Disadvantaged**<br>• Provide extra time |

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- Pre-teach vocabulary using visuals and gestures
- Chunk texts
- Summarize as you go
- Preview lessons
- Graphic organizers
- Highlight key words
- Sentence starters
- Prompting and cueing
- Activate schema
- Build background knowledge

**Gifted and Talented**

- Higher level questioning
- Students design questions
- Expose to sophisticated vocabulary
- Extend reading response to further enrich understanding

**English Language Learners**

- Provide extra time
- Pre-teach vocabulary using visuals and gestures
- Chunk texts
- Summarize as you go
- Preview lessons
- Graphic organizers
- Highlight key words
- Sentence starters
- Prompting and cueing
- Activate schema
- Build background knowledge

**Students with IEPs**

- Pre-teach vocabulary using visuals and gestures
- Chunk texts
- Summarize as you go
- Preview lessons
- Graphic organizers
- Highlight key words
- Sentence starters
- Prompting and cueing
- Activate schema
- Build background knowledge
- Provide extra time
- Provide differentiated instruction as needed
- Follow all IEP modifications
- Provide manipulatives or the opportunity to draw solution strategies
- Provide students with notes from the lesson
- For additional support and guidance, provide students with lab group or partner for lab experiences
- Provide students with a study guide about the information they will be assessed on for a test or quiz
- Teach and model note taking strategies to assist student when reading their science textbook
- Teach and model strategies to learn and practice new vocabulary words

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- Assist student in completing a word web for new vocabulary words to reinforce new words in their science unit
- Provide students with an organization system to help them organize their notes, labs, and classwork
- Read directions, tests, and/or quizzes aloud
- Use graphic organizers to take notes, organize new information, and help students relate new information with previous knowledge
- Provide students with additional time to complete assignments
- Provide small group and individual conferencing to help support student throughout the lesson
- Preferential seating based on student needs
- Review concepts of previous lesson before teaching the new lesson
- Complete review activities to reinforce concepts previously taught
- Check for students understanding often with formal, informal, verbal, and nonverbal measures
- Provide student with modified tests and quizzes organized in a manner that will easy for the student to follow, assessment quality over quantity, and has clear directions

**Students with 504 plan**

- Pre-teach vocabulary using visuals and gestures
- Chunk texts
- Summarize as you go
- Preview lessons
- Graphic organizers
- Highlight key words
- Sentence starters
- Prompting and cueing
- Activate schema
- Build background knowledge
- Provide extra time
- Provide differentiated instruction as needed
- Follow all 504 modifications
- Provide manipulatives or the opportunity to draw solution strategies
- Provide students with notes from the lesson
- For additional support and guidance, provide students with lab group or partner for lab experiences
- Provide students with a study guide about the information they will be assessed on for a test or quiz
- Teach and model note taking strategies to assist student when reading their science textbook
- Teach and model strategies to learn and practice new vocabulary words
- Assist student in completing a word web for new vocabulary words to reinforce new words in their science unit
- Provide students with an organization system to help them organize their notes, labs, and classwork
- Read directions, tests, and/or quizzes aloud
- Use graphic organizers to take notes, organize new information, and help students relate new information with previous knowledge
- Provide students with additional time to complete assignments
- Provide small group and individual conferencing to help support student throughout the lesson
- Preferential seating based on student needs
- Review concepts of previous lesson before teaching the new lesson
- Complete review activities to reinforce concepts previously taught
- Check for students understanding often with formal, informal, verbal, and nonverbal measures
- Provide student with modified tests and quizzes organized in a manner that will easy for the student to follow, assessment quality over quantity, and has clear directions

**Students at Risk of Failure**

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- Work toward longer passages as skills in English increase
- Use visuals
- Introduce key vocabulary before lesson
- Teacher reads aloud daily
- Provide peer tutoring
- Use a strong student as a “buddy” (does not necessarily have to speak the primary language)
- choral reading
- chants, songs
- preferential seating

| New Jersey Student Learning Standards | |
|---|---|
| 4-LS1-1 | Construct an argument that plants and animals have internal and external structures that function to support survival, growth, behavior, and reproduction. |
| 4-ESS3-1 | Obtain and combine information to describe that energy and fuels are derived from natural resources and their uses affect the environment |

| | |
|---|---|
| Science and Engineering Practices Learning Progressions | **Developing and Using Models**<br>Modeling in 3–5 builds on K–2 experiences and progresses to building and revising simple models and using models to represent events and design solutions.<br>• Use a model to test interactions concerning the functioning of a natural system. (4-LS1-2)<br>**Engaging in Argument from Evidence**<br>Engaging in argument from evidence in 3–5 builds on K–2 experiences and progresses to critiquing the scientific explanations or solutions proposed by peers by citing relevant evidence about the natural and designed world(s).<br>• Construct an argument with evidence, data, and/or a model. (4- LS1-1) |
| **Discipline Core Ideas**<br>Physical Science Learning Progressions<br>Earth & Space Science Learning Progressions<br>Life Science Learning Progressions | **LS1.A: Structure and Function**<br>• Plants and animals have both internal and external structures that serve various functions in growth, survival, behavior, and reproduction. (4-LS1-1)<br>**ESS3.A: Natural Resources**<br>• Energy and fuels that humans use are derived from natural sources, and their use affects the environment in multiple ways. Some resources are renewable over time, and others are not. (4-ESS3- 1) |

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| Crosscutting Concepts | **Cause and Effect**<br>● Cause and effect relationships are routinely identified and used to explain change. (4-ESS3-1)<br>● Cause and effect relationships are routinely identified, tested, and used to explain change. (4-ESS3-2)<br>**Systems and System Models**<br>● A system can be described in terms of its components and their interactions. (4-LS1-1), (4-LS1-2)<br>**Influence of Science, Engineering and Technology on Society and the Natural World**<br>● Over time, people's needs and wants change, as do their demands for new and improved technologies. (4-ESS3-1)<br>● Engineers improve existing technologies or develop new ones to increase their benefits, to decrease known risks, and to meet societal demands. (4-ESS3-2) |
|---|---|
| Engineering, Technology and the Application of Science Learning Progressions | |

## Interdisciplinary Connections

### English Language Arts

**Reading**

- RL.CR.4.1. Refer to details and examples as textual evidence when explaining what a literary text says explicitly and make relevant connections when drawing inferences from the text.
- RI.CR.4.1. Refer to details and examples as textual evidence when explaining what an informational text says explicitly and make relevant connections when drawing inferences from the text.
- RL.CI.4.2. Summarize a literary text and interpret the author's theme citing key details from the text.
- RI.CI.4.2. Summarize an informational text and interpret the author's purpose or main idea citing key details from the text.
- RI.IT.4.3. Describe the impact of individuals and events throughout the course of a text, explaining events, procedures, ideas, or concepts in a historical, scientific, or technical text, including what happened and why, based on evidence in the text.
- RI.TS.4.4. Describe the overall structure (e.g., chronology, comparison, cause/effect, problem/solution) of events, ideas, concepts, or information in a text or part of a text.
- RL.MF.4.6. Make connections between specific descriptions and directions in a text and a visual or oral representation of the text.
- RI.MF.4.6. Use evidence to show how graphics and visuals (e.g., illustrations, charts, graphs, diagrams, timelines, animations) support central ideas.
- RI.AA.4.7. Analyze how an author uses facts, details and explanations to develop ideas or to support their reasoning.

**Speaking and Listening**

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- SL.PE.4.1. Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 4 topics and texts, building on others' ideas and expressing their own clearly.

  A. Explicitly draw on previously read text or material and other information known about the topic to explore ideas under discussion.

  B. Follow agreed-upon rules for discussions and carry out assigned roles.

  C. Pose and respond to specific questions to clarify or follow up on information, and make comments that contribute to the discussion and link to the remarks of others.

  D. Review the key ideas expressed and explain their own ideas and understanding in light of the discussion.

- SL.II.4.2. Paraphrase portions of a text read aloud or information presented in diverse media and formats (e.g., visually, quantitatively, and orally).
- SL.ES.4.3. Identify the reasons and evidence a speaker provides to support particular points.
- SL.PI.4.4. Report on a topic or text, tell a story, or recount an experience in an organized manner, using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.
- SL.UM.4.5. Add audio recordings and visual displays to presentations when appropriate to enhance the development of main ideas or themes.
- SL.AS.4.6. Differentiate between contexts that call for formal English (e.g., presenting ideas) and situations where informal discourse is appropriate (e.g., small-group discussion); use formal English when appropriate to task and situation.

**Writing**

- W.AW.4.1. Write opinion pieces on topics or texts, supporting a point of view with reasons and information.

  A. Introduce a topic or text clearly, state an opinion, and create an organizational structure in which related ideas are grouped to support the writer's purpose.

  B. Provide reasons that are supported by facts from texts and/or other sources.

  C. Link opinion and reasons using words and phrases (e.g., for instance, in order to, in addition).

  D. Provide a conclusion related to the opinion presented.

- W.WP.4.4. With guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, and editing.

  A. Identify audience, purpose, and intended length of composition before writing

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B. Use specialized, topic-specific language appropriate for the audience, purpose and subject matter.

C. Consider writing as a process, including self-evaluation, revision and editing.

D. With adult and peer feedback, and digital or print tools such as a dictionary, thesaurus, and/or spell checker, evaluate whether the writing achieved its goal and make changes in content or form as necessary.

E. After initial drafting, expand, combine, and reduce sentences for meaning, audience, and style

- W.WR.4.5. Conduct short research projects that use multiple reference sources (print and non-print) and build knowledge through investigation of different aspects of a topic.
- W.SE.4.6. Gather relevant information from multiple print and digital sources, take notes, prioritize and categorize information; provide a list of sources.
- W.WR.4.5. Conduct short research projects that use multiple reference sources (print and non-print) and build knowledge through investigation of different aspects of a topic.
- W.SE.4.6. Gather relevant information from multiple print and digital sources; take notes, prioritize and categorize information; provide a list of sources.

## Computer Science & Design Thinking

- 8.1.5.A.3. Use a graphic organizer to organize information about a problem or issue.
- 8.1.5.E.1. Use digital tools to research and evaluate the accuracy of, relevance to, and appropriateness of using print and non-print electronic information sources to complete a variety of tasks.
- 8.1.5.DA.3: Organize and present collected data visually to communicate insights gained from different views of the data.
- 8.1.5.DA.4: Organize and present climate change data visually to highlight relationships or support a claim.
- 8.2.5.ITH.1: Explain how societal needs and wants influence the development and function of a product and a system
- 8.2.5.EC.1: Analyze how technology has contributed to or reduced inequities in local and global communities and determine its short- and long-term effects.
- 8.2.8.ITH.1: Explain how the development and use of technology influences economic, political, social, and cultural issues.
- 8.2.8.EC.1: Explain ethical issues that may arise from the use of new technologies

## Career Readiness, Life Literacies & Key Skills

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- 9.1.5.CR.1: Compare various ways to give back and relate them to your strengths, interests, and other personal factors.
- 9.1.5.FP.3: Analyze how spending choices and decision-making can result in positive or negative consequences.
- 9.2.5.CAP.1: Evaluate personal likes and dislikes and identify careers that might be suited to personal likes.
- 9.2.5.CAP.6: Compare the characteristics of a successful entrepreneur with the traits of successful employees
- 9.4.5.CT.1: Identify and gather relevant data that will aid in the problem-solving process (e.g., 2.1.5.EH.4, 4-ESS3-1, 6.3.5.CivicsPD.2).
- 9.4.5.CT.3: Describe how digital tools and technology may be used to solve problems.
- 9.4.5.GCA.1: Analyze how culture shapes individual and community perspectives and points of view (e.g., 1.1.5.C2a, RL.5.9, 6.1.5.HistoryCC.8).

| Career Readiness, Life Literacies, and Key Skills Practices | |
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| Act as a responsible and contributing community member and employee. | Students understand the obligations and responsibilities of being a member of a community, and they demonstrate this understanding every day through their interactions with others. They are conscientious of the impacts of their decisions on others and the environment around them. They think about the near-term and long-term consequences of their actions and seek to act in ways that contribute to the betterment of their teams, families, community and workplace. They are reliable and consistent in going beyond the minimum expectation and in participating in activities that serve the greater good. |
| Attend to financial well-being. | Students take regular action to contribute to their personal financial well-being, understanding that personal financial security provides the peace of mind required to contribute more fully to their own career success. |
| Consider the environmental, social and economic impacts of decisions. | Students understand the interrelated nature of their actions and regularly make decisions that positively impact and/or mitigate negative impact on other people, organization, and the environment. They are aware of and utilize new technologies, understandings, procedures, materials, and regulations affecting the nature of their work as it relates to the impact on the social condition, the environment and the profitability of the organization. |
| Demonstrate creativity and innovation. | Students regularly think of ideas that solve problems in new and different ways, and they contribute those ideas in a useful and productive manner to improve their organization. They can consider unconventional ideas and suggestions as solutions to issues, tasks or problems, and they discern which ideas and suggestions will add greatest value. They seek new methods, practices, and ideas from a variety of sources and seek to apply those ideas to their own workplace. They take action on their ideas and understand how to bring innovation to an organization. |
| Utilize critical thinking to make sense of problems and persevere in solving them. | Students readily recognize problems in the workplace, understand the nature of the problem, and devise effective plans to solve the problem. They are aware of problems when they occur and take action quickly to address the problem; they thoughtfully investigate the root cause of the problem prior to introducing solutions. They carefully consider the options to solve the problem. Once a solution is agreed upon, they follow |

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| | through to ensure the problem is solved, whether through their own actions or the actions of others. |
| Model integrity, ethical leadership and effective management. | Students consistently act in ways that align personal and community-held ideals and principles while employing strategies to positively influence others in the workplace. They have a clear understanding of integrity and act on this understanding in every decision. They use a variety of means to positively impact the directions and actions of a team or organization, and they apply insights into human behavior to change others' actions, attitudes and/or beliefs. They recognize the near-term and long-term effects that management's actions and attitudes can have on productivity, morale and organizational culture. |
| Plan education and career paths aligned to personal goals. | Students take personal ownership of their own education and career goals, and they regularly act on a plan to attain these goals. They understand their own career interests, preferences, goals, and requirements. They have perspective regarding the pathways available to them and the time, effort, experience and other requirements to pursue each, including a path of entrepreneurship. They recognize the value of each step in the education and experiential process, and they recognize that nearly all career paths require ongoing education and experience. They seek counselors, mentors, and other experts to assist in the planning and execution of career and personal goals. |
| Use technology to enhance productivity, increase collaboration and communicate effectively. | Students find and maximize the productive value of existing and new technology to accomplish workplace tasks and solve workplace problems. They are flexible and adaptive in acquiring new technology. They are proficient with ubiquitous technology applications. They understand the inherent risks-personal and organizational-of technology applications, and they take actions to prevent or mitigate these risks. |
| Work productively in teams while using cultural/global competence. | Students positively contribute to every team, whether formal or informal. They apply an awareness of cultural differences to avoid barriers to productive and positive interaction. They find ways to increase the engagement and contribution of all team members. They plan and facilitate effective team meetings. |

| Evidence of Student Learning | |
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| **Formative Assessments:**<br>• Classroom Observation<br>• Center Activity Cards<br>• Anecdotal records<br>• Reading/Writing Companion<br>• Reader's Responses in Reader's notebooks<br>• Think-Pair-Share<br>• Stop and Jot Post-it notes<br>• Achieve 3000<br>• Reading A to Z articles<br>• Graphic Organizers | **Alternative Assessments:**<br>• LLI Reading Records and Comprehension Questions<br>• LLI Written Comprehension Responses<br>• LLI Lesson Record Anecdotal Note Pages<br>• LLI Reading Response Journals<br>• LLI Conversation Rubric<br>• Stop & Jot Sentence Starters<br>• Student Conversation Rubric<br>• Reader's Response Sentence Starters<br>• Curriculum Based Assessments (CBMs) for fluency or comprehension |

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| | • Achieve3000 with Whole Group Introduction and Higher Lexile Level Read Aloud<br>• Reading A-Z Guided Level Assessments<br>• Drawing a Picture to Show Comprehension with Verbal Explanation<br>• Teacher Created/Modified Vocabulary Assessments |
| **Summative Assessments:**<br>• Progress Monitoring<br>• Text Set Goals<br>• Show Your Knowledge<br>• Unit Assessment<br>• Content Area Reading<br>• Fluency Assessment<br>• Vocabulary assessments<br>• Short constructed reading response assessment<br>• Extended reading response to reading | **Benchmark Assessments:**<br>• DRA3<br>• Achieve 3000 Assessment<br>• Wonders Progress Monitoring Assessments<br>• Wonders Unit Assessments |

**Knowledge & Skills**

| | |
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| **Enduring Understandings:**<br>*Students will understand that...*<br>• Plants and animals have both internal and external structures that serve various functions in growth, survival, behavior, and reproduction<br>• Energy and fuels that humans use are derived from natural sources, and their use affects the environment in multiple ways. Some resources are renewable over time, and others are not.<br>Students will...<br>• Students will visualize what they are reading to understand realistic fiction<br>• Students will reread to analyze text, craft, and structure and compare texts.<br>• Students will apply strategies and skills to read an expository text.<br>• develop and refine models;<br>• generate, discuss and analyze data;<br>• construct spoken and written scientific explanations;<br>• engage in evidence-based argumentation; and<br>• Reflect on their own understanding. | **Essential Questions:**<br>• In what ways can advances in science be helpful and harmful?<br>• How are energy and fuels derived from natural resources, and how does their use impact the environment? |

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**Stafford Township School DIstrict Curriculum Guide**

| Grade: 4 | Content Area: Science |
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**Vocabulary**
Advancements, Agriculture, Characteristics, Inherit, Resistance, Molecule, Cell, Organism

**Core Instructional & Supplemental Materials**

| Suggested Activities | Resources |
|---|---|
| **How do plants carry out life processes?**<br>Students will describe the process of photosynthesis and how plants reproduce. Plants have the ability to make their own food. | https://www.youtube.com/watch?v=3pD68uxRLkM |
| **Which Stimulus Causes Plants to Grow the Fastest**<br>Students will determine what stimulus will cause the greatest growth response in a plant. The goal of the project involves measuring the growth response of a plant as its roots grow in response to water and gravity. | https://www.education.com/science-fair/article/stimulus-greatest-growth-plant/ |
| **"How Do You Identify a Mysterious Fruit?"** | How do you identify a mysterious fruit? (mysteryscience.com) |
| • Students will activate their schema using Build Knowledge and Build Vocabulary pages. Students will watch a short video and listen to an Interactive Read Aloud on the topic to help build more knowledge on the topic.<br>• Students will listen to the Shared Read to identify important ideas and details, take notes, and to summarize.<br>• Students will reread the Shared Read to analyze the text, craft, and structure.<br>• Students will listen to the Anchor Text to identify key information and details, take notes, and to summarize.<br>• Students will reread the Anchor Text to analyze the text, craft, and structure.<br>• Students will read the Paired Selection to apply strategies and skills.<br>• Students will reread the Paired Selection to apply strategies and skills. | *Wonders* book/online |

**Literature**

**Wonders Unit 3 "That's The Spirit"**

- *Aguinaldo* by Lulu Delacre
- *Partaking in Public Service*
- *Delivering Justice: W.W. Law and the Fight for Civil Rights* by Jim Haskins
- *Keeping Freedom in the Family*
- *A New Kind of Corn (Time for Kids)*
- *The PIck of the Patch*
- *The Cricket in Times Square* by George Selden
- *At the Library*

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- *Abe's Honest Words* by Doreen Rappaport
- *A New Birth of Freedom*
- *Wonders Leveled Readers*

| Unit 4: Fact or Fiction<br>Earth's Place in the Universe<br>Earth and Human Activity | **Duration:** 15 days |
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**Suggested Accommodations**

**Basic Skills**
- Provide extra time
- Pre-teach vocabulary using visuals and gestures
- Chunk texts
- Summarize as you go
- Preview lessons
- Graphic organizers
- Highlight key words
- Sentence starters
- Prompting and cueing
- Activate schema
- Build background knowledge

**Economically Disadvantaged**
- Provide extra time
- Pre-teach vocabulary using visuals and gestures
- Chunk texts
- Summarize as you go
- Preview lessons
- Graphic organizers
- Highlight key words
- Sentence starters
- Prompting and cueing
- Activate schema
- Build background knowledge

**Gifted and Talented**
- Higher level questioning
- Students design questions
- Expose to sophisticated vocabulary
- Extend reading response to further enrich understanding

**English Language Learners**
- Provide extra time
- Pre-teach vocabulary using visuals and gestures
- Chunk texts
- Summarize as you go
- Preview lessons
- Graphic organizers
- Highlight key words

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- Sentence starters
- Prompting and cueing
- Activate schema
- Build background knowledge

**Students with IEPs**

- Pre-teach vocabulary using visuals and gestures
- Chunk texts
- Summarize as you go
- Preview lessons
- Graphic organizers
- Highlight key words
- Sentence starters
- Prompting and cueing
- Activate schema
- Build background knowledge
- Provide extra time
- Provide differentiated instruction as needed
- Follow all IEP modifications
- Provide manipulatives or the opportunity to draw solution strategies
- Provide students with notes from the lesson
- For additional support and guidance, provide students with lab group or partner for lab experiences
- Provide students with a study guide about the information they will be assessed on for a test or quiz
- Teach and model note taking strategies to assist student when reading their science textbook
- Teach and model strategies to learn and practice new vocabulary words
- Assist student in completing a word web for new vocabulary words to reinforce new words in their science unit
- Provide students with an organization system to help them organize their notes, labs, and classwork
- Read directions, tests, and/or quizzes aloud
- Use graphic organizers to take notes, organize new information, and help students relate new information with previous knowledge
- Provide students with additional time to complete assignments
- Provide small group and individual conferencing to help support student throughout the lesson
- Preferential seating based on student needs
- Review concepts of previous lesson before teaching the new lesson
- Complete review activities to reinforce concepts previously taught
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- Provide student with modified tests and quizzes organized in a manner that will easy for the student to follow, assessment quality over quantity, and has clear directions

**Students with 504 plan**

- Pre-teach vocabulary using visuals and gestures
- Chunk texts
- Summarize as you go
- Preview lessons
- Graphic organizers
- Highlight key words
- Sentence starters
- Prompting and cueing
- Activate schema
- Build background knowledge

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- Provide extra time
- Provide differentiated instruction as needed
- Follow all 504 modifications
- Provide manipulatives or the opportunity to draw solution strategies
- Provide students with notes from the lesson
- For additional support and guidance, provide students with lab group or partner for lab experiences
- Provide students with a study guide about the information they will be assessed on for a test or quiz
- Teach and model note taking strategies to assist student when reading their science textbook
- Teach and model strategies to learn and practice new vocabulary words
- Assist student in completing a word web for new vocabulary words to reinforce new words in their science unit
- Provide students with an organization system to help them organize their notes, labs, and classwork
- Read directions, tests, and/or quizzes aloud
- Use graphic organizers to take notes, organize new information, and help students relate new information with previous knowledge
- Provide students with additional time to complete assignments
- Provide small group and individual conferencing to help support student throughout the lesson
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**Students at Risk of Failure**

- Work toward longer passages as skills in English increase
- Use visuals
- Introduce key vocabulary before lesson
- Teacher reads aloud daily
- Provide peer tutoring
- Use a strong student as a “buddy” (does not necessarily have to speak the primary language)
- choral reading
- chants, songs
- preferential seating

| New Jersey Student Learning Standards | |
|---|---|
| 4-ESS2-1 | Make observations and/or measurements to provide evidence of the effects of weathering or the rate of erosion by water, ice, wind, or vegetation |
| 4-ESS2-2 | Analyze and interpret data from maps to describe patterns of Earth’s features. |
| 4-ESS3-2 | Generate and compare multiple solutions to reduce the impacts of natural Earth processes and climate change have on humans. |
| 4-ESS1-1 | Identify evidence from patterns in rock formations and fossils in rock layers to support an explanation for changes in a landscape over time |

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| Science and Engineering Practices Learning Progressions | ***Earth's Place in the Universe***<br><br>**Constructing Explanations and Designing Solutions**<br>Constructing explanations and designing solutions in 3–5 builds on K–2 experiences and progresses to the use of evidence in constructing explanations that specify variables that describe and predict phenomena and in designing multiple solutions to design problems.<br>**Planning and Carrying Out Investigations**<br><br>Planning and carrying out investigations to answer questions or test solutions to problems in 3–5 builds on K–2 experiences and progresses to include investigations that control variables and provide evidence to support explanations or design solutions.<br>• Make observations and/or measurements to produce data to serve as the basis for evidence for an explanation of a phenomenon. (4-ESS2-1)<br><br>**Analyzing and Interpreting Data**<br><br>Analyzing data in 3–5 builds on K–2 experiences and progresses to introducing quantitative approaches to collecting data and conducting multiple trials of qualitative observations. When possible and feasible, digital tools should be used.<br>• Analyze and interpret data to make sense of phenomena using logical reasoning. (4-ESS2-2)<br><br>***Earth's Systems***<br><br>**Constructing Explanations and Designing Solutions**<br>Constructing explanations and designing solutions in 3–5 builds on K–2 experiences and progresses to the use of evidence in constructing explanations that specify variables that describe and predict phenomena and in designing multiple solutions to design problems.<br><br>• Generate and compare multiple solutions to a problem based on how well they meet the criteria and constraints of the design solution. (4-ESS3-2)<br><br>**Obtaining, Evaluating, and Communicating Information**<br>Obtaining, evaluating, and communicating information in 3–5 builds on K–2 experiences and progresses to evaluate the merit and accuracy of ideas and methods.<br>• Obtain and combine information from books and other reliable media to explain phenomena. (4- ESS3-1)<br>***Earth and Human Activity***<br>**Constructing Explanations and Designing Solutions**<br>Constructing explanations and designing solutions in 3–5 builds on K–2 experiences and progresses to the use of evidence in constructing explanations that specify variables that describe and predict phenomena and in designing multiple solutions to design problems. |

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| | • Generate and compare multiple solutions to a problem based on how well they meet the criteria and constraints of the design solution. (4-ESS3-2)<br><br>**Obtaining, Evaluating, and Communicating Information**<br>Obtaining, evaluating, and communicating information in 3–5 builds on K–2 experiences and progresses to evaluate the merit and accuracy of ideas and methods.<br>• Obtain and combine information from books and other reliable media to explain phenomena. (4- ESS3-1) |
| **Discipline Core Ideas**<br><br>**Physical Science Learning Progressions**<br><br>**Earth & Space Science Learning Progressions**<br><br>**Life Science Learning Progressions** | ***Earth's Place in the Universe***<br><br>**ESS1.C: The History of Planet Earth**<br>• Local, regional, and global patterns of rock formations reveal changes over time due to earth forces, such as earthquakes. The presence and location of certain fossil types indicate the order in which rock layers were formed. (4-ESS1-1)<br>***Earth's Systems***<br><br>**ESS2.A: Earth Materials and Systems**<br>• Rainfall helps to shape the land and affects the types of living things found in a region. Water, ice, wind, living organisms, and gravity break rocks, soils, and sediments into smaller particles and move them around. (4-ESS2- 1)<br><br>**ESS2.B: Plate Tectonics and Large-Scale System Interactions**<br>• The locations of mountain ranges, deep ocean trenches, ocean floor structures, earthquakes, and volcanoes occur in patterns. Most earthquakes and volcanoes occur in bands that are often along the boundaries between continents and oceans. Major mountain chains form inside continents or near their edges. Maps can help locate the different land and water features areas of Earth. (4-ESS2-2)<br><br>**ESS2.E: Biogeology**<br>• Living things affect the physical characteristics of their regions. (4-ESS2-1)<br><br>***Earth and Human Activity***<br>**ESS3.A: Natural Resources**<br>• Energy and fuels that humans use are derived from natural sources, and their use affects the environment in multiple ways. Some resources are renewable over time, and others are not. (4-ESS3- 1)<br><br>**ESS3.B: Natural Hazards**<br>• A variety of hazards result from natural processes (e.g., earthquakes, tsunamis, volcanic eruptions). Humans cannot eliminate the hazards but can take steps to reduce their impacts. (4- ESS3-2) (Note: This Disciplinary Core Idea can also be found in 3.WC.)<br><br>**ETS1.B: Developing Possible Solutions**<br>• Testing a solution involves investigating how well it performs under a range of likely conditions. (secondary to 4-ESS3-2) |

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| Crosscutting Concepts | ***Earth's Place in the Universe***<br><br>**Patterns**<br>● Patterns can be used as evidence to support an explanation. (4-ESS1-1)<br><br>***Connections to Nature of Science***<br><br>**Scientific Knowledge Assumes an Order and Consistency in Natural Systems**<br>● Science assumes consistent patterns in natural systems. (4- ESS1-1)<br><br>***Earth's Systems***<br>**Patterns**<br>● Patterns can be used as evidence to support an explanation. (4-ESS2- 2)<br><br>**Cause and Effect**<br>● Cause and effect relationships are routinely identified, tested, and used to explain change. (4-ESS2- 1)<br><br>***Earth and Human Activity***<br>**Cause and Effect**<br>● Cause and effect relationships are routinely identified and used to explain change. (4-ESS3-1)<br>● Cause and effect relationships are routinely identified, tested, and used to explain change. (4-ESS3- 2)<br><br>**Connections to Engineering, Technology, and Applications of Science**<br><br>**Interdependence of Science, Engineering, and Technology**<br>● Knowledge of relevant scientific concepts and research findings is important in engineering. (4-ESS3- 1)<br><br>**Influence of Science, Engineering and Technology on Society and the Natural World**<br>● Over time, people's needs and wants change, as do their demands for new and improved technologies. (4-ESS3-1)<br>● Engineers improve existing technologies or develop new ones to increase their benefits, to decrease known risks, and to meet societal demands. (4-ESS3-2) |
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| Engineering, Technology and the Application of Science Learning Progressions | |

| Interdisciplinary Connections |
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| **Reading**<br>● RL.CR.4.1. Refer to details and examples as textual evidence when explaining what a literary text says explicitly and make relevant connections when drawing inferences from the text. |

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- RI.CR.4.1. Refer to details and examples as textual evidence when explaining what an informational text says explicitly and make relevant connections when drawing inferences from the text.
- RL.CI.4.2. Summarize a literary text and interpret the author's theme citing key details from the text.
- RI.CI.4.2. Summarize an informational text and interpret the author's purpose or main idea citing key details from the text.
- RL.IT.4.3. Describe the impact of individuals and events throughout the course of a text, using an in-depth analysis of the character, setting, or event that draws on textual evidence.
- RI.IT.4.3. Describe the impact of individuals and events throughout the course of a text, explaining events, procedures, ideas, or concepts in a historical, scientific, or technical text, including what happened and why, based on evidence in the text.
- RI.TS.4.4. Describe the overall structure (e.g., chronology, comparison, cause/effect, problem/solution) of events, ideas, concepts, or information in a text or part of a text.
- RL.PP.4.5. Compare and contrast the point of view from which different stories are narrated, including the difference between first- and third-person narrations.
- RI.PP.4.5. Compare and contrast multiple accounts of the same event or topic; noting important similarities and differences in the point of view they represent.
- RL.MF.4.6. Make connections between specific descriptions and directions in a text and a visual or oral representation of the text.
- RI.MF.4.6. Use evidence to show how graphics and visuals (e.g., illustrations, charts, graphs, diagrams, timelines, animations) support central ideas.
- RI.AA.4.7. Analyze how an author uses facts, details and explanations to develop ideas or to support their reasoning.

**Speaking and Listening**

- SL.PE.4.1. Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 4 topics and texts, building on others' ideas and expressing their own clearly.

  A. Explicitly draw on previously read text or material and other information known about the topic to explore ideas under discussion.

  B. Follow agreed-upon rules for discussions and carry out assigned roles.

  C. Pose and respond to specific questions to clarify or follow up on information, and make comments that contribute to the discussion and link to the remarks of others.

  D. Review the key ideas expressed and explain their own ideas and understanding in light of the discussion.

- SL.II.4.2. Paraphrase portions of a text read aloud or information presented in diverse media and formats (e.g., visually, quantitatively, and orally).
- SL.ES.4.3. Identify the reasons and evidence a speaker provides to support particular points.

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- SL.PI.4.4. Report on a topic or text, tell a story, or recount an experience in an organized manner, using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.
- SL.UM.4.5. Add audio recordings and visual displays to presentations when appropriate to enhance the development of main ideas or themes.
- SL.AS.4.6. Differentiate between contexts that call for formal English (e.g., presenting ideas) and situations where informal discourse is appropriate (e.g., small-group discussion); use formal English when appropriate to task and situation.

**Writing**

- W. IW.4.2. Write informative/explanatory texts to examine a topic and convey ideas and information clearly.

  A. Introduce a topic clearly and group related information in paragraphs and sections; include formatting (e.g., headings), text features (e.g., illustrations, diagrams, captions) and multimedia when useful to aid in comprehension.

  B. Develop the topic with facts, definitions, concrete details, text evidence, or other information and examples related to the topic.

  C. Link ideas within paragraphs and sections of information using words and phrases (e.g., another, for example, also, because).

  D. Use precise language and domain-specific vocabulary to inform about or explain the topic.

  E. Provide a conclusion related to the information or explanation presented.

- W.WP.4.4. With guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, and editing.

  A. Identify audience, purpose, and intended length of composition before writing.

  B. Use specialized, topic-specific language appropriate for the audience, purpose and subject matter.

  C. Consider writing as a process, including self-evaluation, revision and editing.

  D. With adult and peer feedback, and digital or print tools such as a dictionary, thesaurus, and/or spell checker, evaluate whether the writing achieved its goal and make changes in content or form as necessary.

  E. After initial drafting, expand, combine, and reduce sentences for meaning, audience, and style.

- W.WR.4.5. Conduct short research projects that use multiple reference sources (print and non-print) and build knowledge through investigation of different aspects of a topic.

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- W.SE.4.6. Gather relevant information from multiple print and digital sources; take notes, prioritize and categorize information; provide a list of sources.

## Computer Science & Design Thinking

- 8.1.5.A.3. Use a graphic organizer to organize information about a problem or issue.
- 8.1.5.E.1. Use digital tools to research and evaluate the accuracy of, relevance to, and appropriateness of using print and non-print electronic information sources to complete a variety of tasks.
- 8.1.5.DA.3: Organize and present collected data visually to communicate insights gained from different views of the data.
- 8.1.5.DA.4: Organize and present climate change data visually to highlight relationships or support a claim.
- 8.2.5.ITH.1: Explain how societal needs and wants influence the development and function of a product and a system
- 8.2.5.EC.1: Analyze how technology has contributed to or reduced inequities in local and global communities and determine its short- and long-term effects.
- 8.2.8.ITH.1: Explain how the development and use of technology influences economic, political, social, and cultural issues.
- 8.2.8.EC.1: Explain ethical issues that may arise from the use of new technologies

## Career Readiness, Life Literacies & Key Skills

- 9.1.5.CR.1: Compare various ways to give back and relate them to your strengths, interests, and other personal factors.
- 9.1.5.FP.3: Analyze how spending choices and decision-making can result in positive or negative consequences.
- 9.2.5.CAP.1: Evaluate personal likes and dislikes and identify careers that might be suited to personal likes.
- 9.2.5.CAP.6: Compare the characteristics of a successful entrepreneur with the traits of successful employees.
- 9.4.5.CT.1: Identify and gather relevant data that will aid in the problem-solving process (e.g., 2.1.5.EH.4, 4-ESS3-1, 6.3.5.CivicsPD.2).
- 9.4.5.CT.3: Describe how digital tools and technology may be used to solve problems.
- 9.4.5.GCA.1: Analyze how culture shapes individual and community perspectives and points of view (e.g., 1.1.5.C2a, RL.5.9, 6.1.5.HistoryCC.8).

## Career Readiness, Life Literacies, and Key Skills Practices

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| Grade: 4 | Content Area: Science |
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| Act as a responsible and contributing community member and employee. | Students understand the obligations and responsibilities of being a member of a community, and they demonstrate this understanding every day through their interactions with others. They are conscientious of the impacts of their decisions on others and the environment around them. They think about the near-term and long-term consequences of their actions and seek to act in ways that contribute to the betterment of their teams, families, community and workplace. They are reliable and consistent in going beyond the minimum expectation and in participating in activities that serve the greater good. |
| Attend to financial well-being. | Students take regular action to contribute to their personal financial well-being, understanding that personal financial security provides the peace of mind required to contribute more fully to their own career success. |
| Consider the environmental, social and economic impacts of decisions. | Students understand the interrelated nature of their actions and regularly make decisions that positively impact and/or mitigate negative impact on other people, organization, and the environment. They are aware of and utilize new technologies, understandings, procedures, materials, and regulations affecting the nature of their work as it relates to the impact on the social condition, the environment and the profitability of the organization. |
| Demonstrate creativity and innovation. | Students regularly think of ideas that solve problems in new and different ways, and they contribute those ideas in a useful and productive manner to improve their organization. They can consider unconventional ideas and suggestions as solutions to issues, tasks or problems, and they discern which ideas and suggestions will add greatest value. They seek new methods, practices, and ideas from a variety of sources and seek to apply those ideas to their own workplace. They take action on their ideas and understand how to bring innovation to an organization. |
| Utilize critical thinking to make sense of problems and persevere in solving them. | Students readily recognize problems in the workplace, understand the nature of the problem, and devise effective plans to solve the problem. They are aware of problems when they occur and take action quickly to address the problem; they thoughtfully investigate the root cause of the problem prior to introducing solutions. They carefully consider the options to solve the problem. Once a solution is agreed upon, they follow through to ensure the problem is solved, whether through their own actions or the actions of others. |
| Model integrity, ethical leadership and effective management. | Students consistently act in ways that align personal and community-held ideals and principles while employing strategies to positively influence others in the workplace. They have a clear understanding of integrity and act on this understanding in every decision. They use a variety of means to positively impact the directions and actions of a team or organization, and they apply insights into human behavior to change others' actions, attitudes and/or beliefs. They recognize the near-term and long-term effects that management's actions and attitudes can have on productivity, morals and organizational culture. |
| Plan education and career paths aligned to personal goals. | Students take personal ownership of their own education and career goals, and they regularly act on a plan to attain these goals. They understand their own career interests, preferences, goals, and requirements. They have perspective regarding the pathways available to them and the time, effort, experience and other requirements to pursue each, including a path of entrepreneurship. They recognize the value of each step in the education and experiential process, and they recognize that nearly all career |

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| | paths require ongoing education and experience. They seek counselors, mentors, and other experts to assist in the planning and execution of career and personal goals. |
| Use technology to enhance productivity, increase collaboration and communicate effectively. | Students find and maximize the productive value of existing and new technology to accomplish workplace tasks and solve workplace problems. They are flexible and adaptive in acquiring new technology. They are proficient with ubiquitous technology applications. They understand the inherent risks-personal and organizational-of technology applications, and they take actions to prevent or mitigate these risks. |
| Work productively in teams while using cultural/global competence. | Students positively contribute to every team, whether formal or informal. They apply an awareness of cultural differences to avoid barriers to productive and positive interaction. They find ways to increase the engagement and contribution of all team members. They plan and facilitate effective team meetings. |

| Evidence of Student Learning | |
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| **Formative Assessments:**<br>• Classroom Observation<br>• Center Activity Cards<br>• Anecdotal records<br>• Reading/Writing Companion<br>• Reader's Responses in Reader's notebooks<br>• Think-Pair-Share<br>• Stop and Jot Post-it notes<br>• Achieve 3000<br>• Reading A to Z articles<br>• Graphic Organizers | **Alternative Assessments:**<br>• LLI Reading Records and Comprehension Questions<br>• LLI Written Comprehension Responses<br>• LLI Lesson Record Anecdotal Note Pages<br>• LLI Reading Response Journals<br>• LLI Conversation Rubric<br>• Stop & Jot Sentence Starters<br>• Student Conversation Rubric<br>• Reader's Response Sentence Starters<br>• Curriculum Based Assessments (CBMs) for fluency or comprehension<br>• Achieve3000 with Whole Group Introduction and Higher Lexile Level Read Aloud<br>• Reading A-Z Guided Level Assessments<br>• Drawing a Picture to Show Comprehension with Verbal Explanation<br>• Teacher Created/Modified Vocabulary Assessments |
| **Summative Assessments:**<br>• Progress Monitoring<br>• Text Set Goals<br>• Show Your Knowledge<br>• Unit Assessment<br>• Content Area Reading<br>• Fluency Assessment<br>• Vocabulary assessments<br>• Short constructed reading response assessment | **Benchmark Assessments:**<br>• DRA3<br>• Achieve 3000 Assessment<br>• Wonders Progress Monitoring Assessments<br>• Wonders Unit Assessments |

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| • Extended reading response to reading | |

**Knowledge & Skills**

**Enduring Understandings:**
*Students will understand that...*

- Certain features on Earth can be used to order events that have occurred in a landscape.
- Water, ice, wind, organisms and gravity break rocks, soils, and sediments into smaller pieces and move them around.
- Earth's physical features occur in patterns, as do earthquakes and volcanoes. Maps can be used to locate features and determine patterns in those events.

*Students will know how to…*

- Interpret information presented visually, orally, or quantitatively and explain how the information contributes to an understanding of the text in which it appears.
- Determine the central, or main, idea of a text and explain how it is supported by relevant, or key, details; summarize the text.
- Describe the overall structure (e.g., chronology, comparison, cause/effect, problem/solution) of events, ideas, concepts, or information in a text or part of a text.
- Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.

**Essential Questions:**

- How do patterns in rock formations and fossils support the idea that a landscape changes over time?
- What is the cause of weathering and erosion?
- How can you use maps to describe the patterns of Earth's features?

**Vocabulary**
Engineering, Technology, Attain, Fossils, Erosion, Weathering, Natural Resources, Fossil Fuels

**Core Instructional & Supplemental Materials**

| Suggested Activities | Resources |
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| • Students will activate their schema using Build Knowledge and Build Vocabulary pages. Students will watch a short video and listen to an Interactive Read Aloud on the topic to help build more knowledge on the topic. | Wonders book/online |

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| • Students will listen to the Shared Read to identify important ideas and details, take notes, and to summarize.<br>• Students will reread the Shared Read to analyze the text, craft, and structure.<br>• Students will listen to the Anchor Text to identify key information and details, take notes, and to summarize.<br>• Students will reread the Anchor Text to analyze the text, craft, and structure.<br>• Students will read the Paired Selection to apply strategies and skills.<br>• Students will reread the Paired Selection to apply strategies and skills. | |
| **What is the rock cycle? -**Students will sort rock specimens based on their color, hardness, and texture. They will identify Earth's layers, recognize that the Earth's crust is made up of three types of rock and interpret the rock cycle diagram. | Several rock specimens of various colors, texture, and hardness, diagram of the Earth's layers, rock cycle diagram |
| **"What Did Your Town Look Like 100 Million Years Ago?"** | What did your town look like 100 million years ago? (mysteryscience.com) |
| **"Can We Make it Rain?"** | Can we make it rain? (mysteryscience.com) |
| **Literature** | |
| Unit 4 Fact or Fiction?, Wonders, 2023<br>• *See How They Run* by Susan E. Goodman<br>• *The Birth of American Democracy*<br>• *The Moon Over Star* by Dianna Hutts Aston<br>• *Star Parties*<br>• *Why does the Moon Change Shape?* by Melissa Stewart<br>• *How It Came to Be*<br>• *LaRue for Mayor* by Mark Teague<br>• *Bringing Government Home*<br>• The Rough Face Girl by Rafe Martin<br>• Women Win the Vote, by Joanne A. Grote<br>• Children of the Dust Bowl: The True Story of the School at Weedpatch Camp, by Jerry Stanley<br>• When Stars Are Scattered by Victoria Jamieson and Omar Mohamed<br>• *Wonders* Leveled Readers<br><br>*Erosion: Changing Earth's Surface* by Robin Koontz<br>*How People Have Been Shaping the Earth/Student Science Magazine*<br>*Quino's Volcano* by Aileen Friedman | |

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**Stafford Township School DIstrict Curriculum Guide**

| **Grade: 4** | **Content Area: Science** |
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| **Unit 5: Figure it Out**<br>Waves | **Duration:** 15 days |
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| **Suggested Accommodations** |
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| **Basic Skills**<br>• Provide extra time<br>• Pre-teach vocabulary using visuals and gestures<br>• Chunk texts<br>• Summarize as you go<br>• Preview lessons<br>• Graphic organizers<br>• Highlight key words<br>• Sentence starters<br>• Prompting and cueing<br>• Activate schema<br>• Build background knowledge |
| **Economically Disadvantaged**<br>• Provide extra time<br>• Pre-teach vocabulary using visuals and gestures<br>• Chunk texts<br>• Summarize as you go<br>• Preview lessons<br>• Graphic organizers<br>• Highlight key words<br>• Sentence starters<br>• Prompting and cueing<br>• Activate schema<br>• Build background knowledge |
| **Gifted and Talented**<br>• Higher level questioning<br>• Students design questions<br>• Expose to sophisticated vocabulary<br>• Extend reading response to further enrich understanding |
| **English Language Learners**<br>• Provide extra time<br>• Pre-teach vocabulary using visuals and gestures<br>• Chunk texts<br>• Summarize as you go<br>• Preview lessons<br>• Graphic organizers<br>• Highlight key words<br>• Sentence starters<br>• Prompting and cueing<br>• Activate schema<br>• Build background knowledge |

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**Students with IEPs**

- Pre-teach vocabulary using visuals and gestures
- Chunk texts
- Summarize as you go
- Preview lessons
- Graphic organizers
- Highlight key words
- Sentence starters
- Prompting and cueing
- Activate schema
- Build background knowledge
- Provide extra time
- Provide differentiated instruction as needed
- Follow all IEP modifications
- Provide manipulatives or the opportunity to draw solution strategies
- Provide students with notes from the lesson
- For additional support and guidance, provide students with lab group or partner for lab experiences
- Provide students with a study guide about the information they will be assessed on for a test or quiz
- Teach and model note taking strategies to assist student when reading their science textbook
- Teach and model strategies to learn and practice new vocabulary words
- Assist student in completing a word web for new vocabulary words to reinforce new words in their science unit
- Provide students with an organization system to help them organize their notes, labs, and classwork
- Read directions, tests, and/or quizzes aloud
- Use graphic organizers to take notes, organize new information, and help students relate new information with previous knowledge
- Provide students with additional time to complete assignments
- Provide small group and individual conferencing to help support student throughout the lesson
- Preferential seating based on student needs
- Review concepts of previous lesson before teaching the new lesson
- Complete review activities to reinforce concepts previously taught
- Check for students understanding often with formal, informal, verbal, and nonverbal measures
- Provide student with modified tests and quizzes organized in a manner that will easy for the student to follow, assessment quality over quantity, and has clear directions

**Students with 504 plan**

- Pre-teach vocabulary using visuals and gestures
- Chunk texts
- Summarize as you go
- Preview lessons
- Graphic organizers
- Highlight key words
- Sentence starters
- Prompting and cueing
- Activate schema
- Build background knowledge
- Provide extra time
- Provide differentiated instruction as needed
- Follow all 504 modifications
- Provide manipulatives or the opportunity to draw solution strategies
- Provide students with notes from the lesson

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- For additional support and guidance, provide students with lab group or partner for lab experiences
- Provide students with a study guide about the information they will be assessed on for a test or quiz
- Teach and model note taking strategies to assist student when reading their science textbook
- Teach and model strategies to learn and practice new vocabulary words
- Assist student in completing a word web for new vocabulary words to reinforce new words in their science unit
- Provide students with an organization system to help them organize their notes, labs, and classwork
- Read directions, tests, and/or quizzes aloud
- Use graphic organizers to take notes, organize new information, and help students relate new information with previous knowledge
- Provide students with additional time to complete assignments
- Provide small group and individual conferencing to help support student throughout the lesson
- Preferential seating based on student needs
- Review concepts of previous lesson before teaching the new lesson
- Complete review activities to reinforce concepts previously taught
- Check for students understanding often with formal, informal, verbal, and nonverbal measures
- Provide student with modified tests and quizzes organized in a manner that will easy for the student to follow, assessment quality over quantity, and has clear directions

**Students at Risk of Failure**

- Work toward longer passages as skills in English increase
- Use visuals
- Introduce key vocabulary before lesson
- Teacher reads aloud daily
- Provide peer tutoring
- Use a strong student as a “buddy” (does not necessarily have to speak the primary language)
- choral reading
- chants, songs
- preferential seating

| New Jersey Student Learning Standards | |
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| 4-PS4-1 | Develop a model of waves to describe patterns in terms of amplitude and wavelength and that waves can cause objects to move. |
| 4-PS4-2 | Develop a model to describe that light reflecting from objects and entering the eye allows objects to be seen. |
| 4-PS4-3 | Generate and compare multiple solutions that use patterns to transfer information. |

| Science and Engineering Practices Learning Progressions | **Developing and Using Models**<br>Modeling in 3–5 builds on K–2 experiences and progresses to building and revising simple models and using models to represent events and design solutions.<br>• Develop a model using an analogy, example, or abstract representation to describe a scientific principle. (4-PS4-1)<br>• Develop a model to describe phenomena. (4-PS4-2) |
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| | **Constructing Explanations and Designing Solutions**<br>Constructing explanations and designing solutions in 3–5 builds on K–2 experiences and progresses to the use of evidence in constructing explanations that specify variables that describe and predict phenomena and in designing multiple solutions to design problems.<br>• Generate and compare multiple solutions to a problem based on how well they meet the criteria and constraints of the design solution. (4-PS4-3)<br>**Analyzing and Interpreting Data** Analyzing data in 3–5 builds on K–2 experiences and progresses to introducing quantitative approaches to collecting data and conducting multiple trials of qualitative observations. When possible and feasible, digital tools should be used.<br>• Analyze and interpret data to make sense of phenomena using logical reasoning. (4-ESS2-2)<br>**Obtaining, Evaluating, and Communicating Information**<br>Obtaining, evaluating, and communicating information in 3–5 builds on K–2 experiences and progresses to evaluate the merit and accuracy of ideas and methods.<br>• Obtain and combine information from books and other reliable media to explain phenomena. (4- ESS3-1) |
| **Discipline Core Ideas**<br><br>**Physical Science Learning Progressions**<br><br>**Earth & Space Science Learning Progressions**<br><br>**Life Science Learning Progressions** | **PS4.A: Wave Properties**<br>• Waves, which are regular patterns of motion, can be made in water by disturbing the surface. When waves move across the surface of deep water, the water goes up and down in place; there is no net motion in the direction of the wave except when the water meets a beach. (Note: This grade band endpoint was moved from K–2.) (4-PS4-1)<br>• Waves of the same type can differ in amplitude (height of the wave) and wavelength (spacing between wave peaks). (4-PS4-1)<br>•<br>**PS4.B: Electromagnetic Radiation**<br>• An object can be seen when light reflected from its surface enters the eyes. (4-PS4-2)<br><br>**PS4.C: Information Technologies and Instrumentation**<br>Digitized information can be transmitted over long distances without significant degradation. High-tech devices, such as computers or cell phones, can receive and decode information— convert it from digitized form to voice—and vice versa. (4-PS4-3)<br><br>**ETS1.C: Optimizing the Design Solution**<br>• Different solutions need to be tested in order to determine which of them best solves the problem, given the criteria and the constraints. (secondary to 4-PS4-3) |
| **Crosscutting Concepts** | **Patterns**<br>• Similarities and differences in patterns can be used to sort and classify natural phenomena. (4- PS4-1) |

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| | • Similarities and differences in patterns can be used to sort and classify designed products. (4- PS4-3)<br><br>**Cause and Effect**<br>• Cause and effect relationships are routinely identified. (4-PS4-2)<br><br>***Connections to Engineering, Technology, and Applications of Science***<br><br>**Interdependence of Science, Engineering, and Technology**<br>• Knowledge of relevant scientific concepts and research findings is important in engineering. (4-PS4- 3) |
| Engineering, Technology and the Application of Science Learning Progressions | |

## Interdisciplinary Connections

**Reading**

- RL.CR.4.1. Refer to details and examples as textual evidence when explaining what a literary text says explicitly and make relevant connections when drawing inferences from the text.
- RI.CR.4.1. Refer to details and examples as textual evidence when explaining what an informational text says explicitly and make relevant connections when drawing inferences from the text.
- RL.CI.4.2. Summarize a literary text and interpret the author's theme citing key details from the text.
- RI.CI.4.2. Summarize an informational text and interpret the author's purpose or main idea citing key details from the text.
- RL.IT.4.3. Describe the impact of individuals and events throughout the course of a text, using an in-depth analysis of the character, setting, or event that draws on textual evidence.
- RI.IT.4.3. Describe the impact of individuals and events throughout the course of a text, explaining events, procedures, ideas, or concepts in a historical, scientific, or technical text, including what happened and why, based on evidence in the text.
- RI.TS.4.4. Describe the overall structure (e.g., chronology, comparison, cause/effect, problem/solution) of events, ideas, concepts, or information in a text or part of a text.
- RL.PP.4.5. Compare and contrast the point of view from which different stories are narrated, including the difference between first- and third-person narrations.
- RI.PP.4.5. Compare and contrast multiple accounts of the same event or topic; noting important similarities and differences in the point of view they represent.
- RL.MF.4.6. Make connections between specific descriptions and directions in a text and a visual or oral representation of the text.
- RI.MF.4.6. Use evidence to show how graphics and visuals (e.g., illustrations, charts, graphs, diagrams, timelines, animations) support central ideas.
- RI.AA.4.7. Analyze how an author uses facts, details and explanations to develop ideas or to support their reasoning.
- RL.CT.4.8. Compare and contrast the treatment of similar themes, topics and patterns of events in literary texts from authors of different cultures.
- RI.CT.4.8. Compare and contrast the treatment of similar themes, topics and patterns of events in informational texts from authors of different cultures.

**Speaking and Listening**

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- SL.PE.4.1. Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 4 topics and texts, building on others' ideas and expressing their own clearly.

  A. Explicitly draw on previously read text or material and other information known about the topic to explore ideas under discussion.

  B. Follow agreed-upon rules for discussions and carry out assigned roles.

  C. Pose and respond to specific questions to clarify or follow up on information, and make comments that contribute to the discussion and link to the remarks of others.

  D. Review the key ideas expressed and explain their own ideas and understanding in light of the discussion.

- SL.II.4.2. Paraphrase portions of a text read aloud or information presented in diverse media and formats (e.g., visually, quantitatively, and orally).
- SL.ES.4.3. Identify the reasons and evidence a speaker provides to support particular points.
- SL.PI.4.4. Report on a topic or text, tell a story, or recount an experience in an organized manner, using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.
- SL.UM.4.5. Add audio recordings and visual displays to presentations when appropriate to enhance the development of main ideas or themes.
- SL.AS.4.6. Differentiate between contexts that call for formal English (e.g., presenting ideas) and situations where informal discourse is appropriate (e.g., small-group discussion); use formal English when appropriate to task and situation.

**Writing**

- W. IW.4.2. Write informative/explanatory texts to examine a topic and convey ideas and information clearly.

  A. Introduce a topic clearly and group related information in paragraphs and sections; include formatting (e.g., headings), text features (e.g., illustrations, diagrams, captions) and multimedia when useful to aid in comprehension.

  B. Develop the topic with facts, definitions, concrete details, text evidence, or other information and examples related to the topic.

  C. Link ideas within paragraphs and sections of information using words and phrases (e.g., another, for example, also, because).

  D. Use precise language and domain-specific vocabulary to inform about or explain the topic.

  E. Provide a conclusion related to the information or explanation presented.

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- W.WP.4.4. With guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, and editing.

  A. Identify audience, purpose, and intended length of composition before writing.

  B. Use specialized, topic-specific language appropriate for the audience, purpose and subject matter.

  C. Consider writing as a process, including self-evaluation, revision and editing.

  D. With adult and peer feedback, and digital or print tools such as a dictionary, thesaurus, and/or spell checker, evaluate whether the writing achieved its goal and make changes in content or form as necessary.

  E. After initial drafting, expand, combine, and reduce sentences for meaning, audience, and style.

- W.WR.4.5. Conduct short research projects that use multiple reference sources (print and non-print) and build knowledge through investigation of different aspects of a topic.
- W.SE.4.6. Gather relevant information from multiple print and digital sources; take notes, prioritize and categorize information; provide a list of sources.

## Computer Science & Design Thinking

- 8.1.5.A.3. Use a graphic organizer to organize information about a problem or issue.
- 8.1.5.E.1. Use digital tools to research and evaluate the accuracy of, relevance to, and appropriateness of using print and non-print electronic information sources to complete a variety of tasks.
- 8.1.5.DA.3: Organize and present collected data visually to communicate insights gained from different views of the data.
- 8.1.5.DA.4: Organize and present climate change data visually to highlight relationships or support a claim.
- 8.2.5.ITH.1: Explain how societal needs and wants influence the development and function of a product and a system
- 8.2.5.EC.1: Analyze how technology has contributed to or reduced inequities in local and global communities and determine its short- and long-term effects.
- 8.2.8.ITH.1: Explain how the development and use of technology influences economic, political, social, and cultural issues.
- 8.2.8.EC.1: Explain ethical issues that may arise from the use of new technologies

## Career Readiness, Life Literacies & Key Skills

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- 9.1.5.CR.1: Compare various ways to give back and relate them to your strengths, interests, and other personal factors.
- 9.1.5.FP.3: Analyze how spending choices and decision-making can result in positive or negative consequences.
- 9.2.5.CAP.1: Evaluate personal likes and dislikes and identify careers that might be suited to personal likes.
- 9.2.5.CAP.6: Compare the characteristics of a successful entrepreneur with the traits of successful employees
- 9.4.5.CT.1: Identify and gather relevant data that will aid in the problem-solving process (e.g., 2.1.5.EH.4, 4-ESS3-1, 6.3.5.CivicsPD.2).
- 9.4.5.CT.3: Describe how digital tools and technology may be used to solve problems.
- 9.4.5.GCA.1: Analyze how culture shapes individual and community perspectives and points of view (e.g., 1.1.5.C2a, RL.5.9, 6.1.5.HistoryCC.8).

| Career Readiness, Life Literacies, and Key Skills Practices | |
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| Act as a responsible and contributing community member and employee. | Students understand the obligations and responsibilities of being a member of a community, and they demonstrate this understanding every day through their interactions with others. They are conscientious of the impacts of their decisions on others and the environment around them. They think about the near-term and long-term consequences of their actions and seek to act in ways that contribute to the betterment of their teams, families, community and workplace. They are reliable and consistent in going beyond the minimum expectation and in participating in activities that serve the greater good. |
| Attend to financial well-being. | Students take regular action to contribute to their personal financial well-being, understanding that personal financial security provides the peace of mind required to contribute more fully to their own career success. |
| Consider the environmental, social and economic impacts of decisions. | Students understand the interrelated nature of their actions and regularly make decisions that positively impact and/or mitigate negative impact on other people, organization, and the environment. They are aware of and utilize new technologies, understandings, procedures, materials, and regulations affecting the nature of their work as it relates to the impact on the social condition, the environment and the profitability of the organization. |
| Demonstrate creativity and innovation. | Students regularly think of ideas that solve problems in new and different ways, and they contribute those ideas in a useful and productive manner to improve their organization. They can consider unconventional ideas and suggestions as solutions to issues, tasks or problems, and they discern which ideas and suggestions will add greatest value. They seek new methods, practices, and ideas from a variety of sources and seek to apply those ideas to their own workplace. They take action on their ideas and understand how to bring innovation to an organization. |
| Utilize critical thinking to make sense of problems and persevere in solving them. | Students readily recognize problems in the workplace, understand the nature of the problem, and devise effective plans to solve the problem. They are aware of problems when they occur and take action quickly to address the problem; they thoughtfully investigate the root cause of the problem prior to introducing solutions. They carefully consider the options to solve the problem. Once a solution is agreed upon, they follow |

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| | through to ensure the problem is solved, whether through their own actions or the actions of others. |
| Model integrity, ethical leadership and effective management. | Students consistently act in ways that align personal and community-held ideals and principles while employing strategies to positively influence others in the workplace. They have a clear understanding of integrity and act on this understanding in every decision. They use a variety of means to positively impact the directions and actions of a team or organization, and they apply insights into human behavior to change others' actions, attitudes and/or beliefs. They recognize the near-term and long-term effects that management's actions and attitudes can have on productivity, morale and organizational culture. |
| Plan education and career paths aligned to personal goals. | Students take personal ownership of their own education and career goals, and they regularly act on a plan to attain these goals. They understand their own career interests, preferences, goals, and requirements. They have perspective regarding the pathways available to them and the time, effort, experience and other requirements to pursue each, including a path of entrepreneurship. They recognize the value of each step in the education and experiential process, and they recognize that nearly all career paths require ongoing education and experience. They seek counselors, mentors, and other experts to assist in the planning and execution of career and personal goals. |
| Use technology to enhance productivity, increase collaboration and communicate effectively. | Students find and maximize the productive value of existing and new technology to accomplish workplace tasks and solve workplace problems. They are flexible and adaptive in acquiring new technology. They are proficient with ubiquitous technology applications. They understand the inherent risks-personal and organizational-of technology applications, and they take actions to prevent or mitigate these risks. |
| Work productively in teams while using cultural/global competence. | Students positively contribute to every team, whether formal or informal. They apply an awareness of cultural differences to avoid barriers to productive and positive interaction. They find ways to increase the engagement and contribution of all team members. They plan and facilitate effective team meetings. |

| Evidence of Student Learning | |
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| **Formative Assessments:**<br>• Classroom Observation<br>• Center Activity Cards<br>• Anecdotal records<br>• Reading/Writing Companion<br>• Reader's Responses in Reader's notebooks<br>• Think-Pair-Share<br>• Stop and Jot Post-it notes<br>• Achieve 3000<br>• Reading A to Z articles<br>• Graphic Organizers | **Alternative Assessments:**<br>• LLI Reading Records and Comprehension Questions<br>• LLI Written Comprehension Responses<br>• LLI Lesson Record Anecdotal Note Pages<br>• LLI Reading Response Journals<br>• LLI Conversation Rubric<br>• Stop & Jot Sentence Starters<br>• Student Conversation Rubric<br>• Reader's Response Sentence Starters<br>• Curriculum Based Assessments (CBMs) for fluency or comprehension |

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| | • Achieve3000 with Whole Group Introduction and Higher Lexile Level Read Aloud<br>• Reading A-Z Guided Level Assessments |
| **Summative Assessments:**<br>• Progress Monitoring<br>• Text Set Goals<br>• Show Your Knowledge<br>• Unit Assessment<br>• Content Area Reading<br>• Fluency Assessment<br>• Vocabulary assessments<br>• Short constructed reading response assessment<br>• Extended reading response to reading | **Benchmark Assessments:**<br>• DRA3<br>• Achieve 3000 Assessment<br>• Wonders Progress Monitoring Assessments<br>• Wonders Unit Assessments |

**Knowledge & Skills**

**Enduring Understandings:**

*Students will understand that...*

- Students explain what they know about sound and analyze a diagram of a sound wave.
- Students use physical models to observe wave motion and discover that waves move in patterns.
- Students read the book Warning: Tsunami! To obtain and evaluate information about waves as a pattern of displacement rather than movement of matter across distances.
- Students engage with a variety of wave models that depict sound energy as a wave that travels through material, which moves only a little in response to the wave.
- Students construct a scientific explanation about how mother dolphins communicate across a distance with their calves.

*Students will know...*

- Waves are regular patterns of motion.
- Waves can cause objects to move.
- Digitized information can be transmitted over long distances without significant degradation.

*Students will be able to …*

- read and understand expository text.
- use text evidence to respond to expository text.

**Essential Questions:**

- How do waves cause objects to move?
- What are some patterns you can utilize to transfer information?

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| • know what we can discover when we look at things closely.<br>• read and understand realistic fiction.<br>• use text evidence to respond to realistic fiction.<br>• know ways people show they care about each other.<br>• read and understand expository text.<br>• use text evidence to respond to expository text.<br>• know how learning about the past helps us understand the present. | |
| **Vocabulary**<br>Wave, Wavelength, Crest, Trough, Amplitude, Reflection, Refraction, Sound, Light | |

| **Core Instructional & Supplemental Materials** | |
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| **Suggested Activities** | **Resources** |
| • Students will activate their schema using Build Knowledge and Build Vocabulary pages. Students will watch a short video and listen to an Interactive Read Aloud on the topic to help build more knowledge on the topic.<br>• Students will listen to the Shared Read to identify important ideas and details, take notes, and to summarize.<br>• Students will reread the Shared Read to analyze the text, craft, and structure.<br>• Students will listen to the Anchor Text to identify key information and details, take notes, and to summarize.<br>• Students will reread the Anchor Text to analyze the text, craft, and structure.<br>• Students will read the Paired Selection to apply strategies and skills.<br>• Students will reread the Paired Selection to apply strategies and skills. | Wonders book/online |
| **What would happen if you scream in space?**<br>Students explore the role that air plays in enabling a sound vibration to travel. In the activity students create a model of sound vibration. | https://mysteryscience.com/waves/mystery-2/sound-vibrations/51?r=6359962<br>Balloons, binder clips, masking tape |
| **Interactive Wave Machine**<br>Students will observe and measure transverse, longitudinal, and combined waves on a model of a spring moved by a hand. Adjust the amplitude and frequency of the hand, and the tension | https://www.explorelearning.com/index.cfm?method=cResource.dspDetail&ResourceID=1053 |

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| and density of the spring. The speed and power of the waves is reported, and the wavelength and amplitude can be measured. | |
| **Drum experiment:**<br>Students will place 10 paper clips onto a drum. They will then strike the drum with a stick and watch the paper clips vibrate. Students will experiment with varying the speed at which they strike the drum and record vibration results. | Drum, 10 paper clips |
| **Ocean Waves Simulation**<br>Students will explore ocean waves by placing water in a Tupperware bin. Students will rock the bin back and forth at various speeds and measure the wave heights in inches. | Tupperware Bins, rubber ball (Fill ¾ with water and create waves by moving the bin back and forth very slowly. Students can also place a rubber ball into the water to see the effects of the waves.) |
| **Literature** | |
| Unit 5 Figure It Out, Wonders 2023<br>• *A Drop of Water* by Walter Wick<br>• *The Incredible Shrinking Potion*<br>• *Mama, I'll Give You the World* by Roni Schotter<br>• *Miami by Way of Fujian*<br>• *Rediscovering Our Spanish Beginnings*<br>• *History's Mysteries*<br>• *How Ben Franklin Stole the Lightning* by Rosalyn Schanzer<br>• *Energy is Everywhere*<br>• *Apples to Oregon* by Debroah Hopkinson<br>• *Go for the Gold!*<br>Wonders Leveled Readers<br>• *Sound Waves* by Ian F. Mahaney<br>• *What Are Light Waves?* By Robin Johnson | |
| Flocabulary: Wave Properties | https://www.flocabulary.com/unit/wave-properties/ |
| BrainPOP: waves | https://educators.brainpop.com/lesson-plan/waves-lesson-plan-energy/ |
| Flocabulary: Sound | https://www.flocabulary.com/unit/sound/ |

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| **Unit 6: Past, Present, and Future**<br>Energy | **Duration:** 15 days |

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| Suggested Accommodations |
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| **Basic Skills**<br>• Provide extra time<br>• Pre-teach vocabulary using visuals and gestures<br>• Chunk texts<br>• Summarize as you go<br>• Preview lessons<br>• Graphic organizers<br>• Highlight key words<br>• Sentence starters<br>• Prompting and cueing<br>• Activate schema<br>• Build background knowledge |
| **Economically Disadvantaged**<br>• Provide extra time<br>• Pre-teach vocabulary using visuals and gestures<br>• Chunk texts<br>• Summarize as you go<br>• Preview lessons<br>• Graphic organizers<br>• Highlight key words<br>• Sentence starters<br>• Prompting and cueing<br>• Activate schema<br>• Build background knowledge |
| **Gifted and Talented**<br>• Higher level questioning<br>• Students design questions<br>• Expose to sophisticated vocabulary<br>• Extend reading response to further enrich understanding |
| **English Language Learners**<br>• Provide extra time<br>• Pre-teach vocabulary using visuals and gestures<br>• Chunk texts<br>• Summarize as you go<br>• Preview lessons<br>• Graphic organizers<br>• Highlight key words<br>• Sentence starters<br>• Prompting and cueing<br>• Activate schema<br>• Build background knowledge |
| **Students with IEPs**<br>• Pre-teach vocabulary using visuals and gestures<br>• Chunk texts<br>• Summarize as you go |

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- Preview lessons
- Graphic organizers
- Highlight key words
- Sentence starters
- Prompting and cueing
- Activate schema
- Build background knowledge
- Provide extra time
- Provide differentiated instruction as needed
- Follow all IEP modifications
- Provide manipulatives or the opportunity to draw solution strategies
- Provide students with notes from the lesson
- For additional support and guidance, provide students with lab group or partner for lab experiences
- Provide students with a study guide about the information they will be assessed on for a test or quiz
- Teach and model note taking strategies to assist student when reading their science textbook
- Teach and model strategies to learn and practice new vocabulary words
- Assist student in completing a word web for new vocabulary words to reinforce new words in their science unit
- Provide students with an organization system to help them organize their notes, labs, and classwork
- Read directions, tests, and/or quizzes aloud
- Use graphic organizers to take notes, organize new information, and help students relate new information with previous knowledge
- Provide students with additional time to complete assignments
- Provide small group and individual conferencing to help support student throughout the lesson
- Preferential seating based on student needs
- Review concepts of previous lesson before teaching the new lesson
- Complete review activities to reinforce concepts previously taught
- Check for students understanding often with formal, informal, verbal, and nonverbal measures
- Provide student with modified tests and quizzes organized in a manner that will easy for the student to follow, assessment quality over quantity, and has clear directions

**Students with 504 plan**

- Pre-teach vocabulary using visuals and gestures
- Chunk texts
- Summarize as you go
- Preview lessons
- Graphic organizers
- Highlight key words
- Sentence starters
- Prompting and cueing
- Activate schema
- Build background knowledge
- Provide extra time
- Provide differentiated instruction as needed
- Follow all 504 modifications
- Provide manipulatives or the opportunity to draw solution strategies
- Provide students with notes from the lesson
- For additional support and guidance, provide students with lab group or partner for lab experiences
- Provide students with a study guide about the information they will be assessed on for a test or quiz
- Teach and model note taking strategies to assist student when reading their science textbook
- Teach and model strategies to learn and practice new vocabulary words

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- Assist student in completing a word web for new vocabulary words to reinforce new words in their science unit
- Provide students with an organization system to help them organize their notes, labs, and classwork
- Read directions, tests, and/or quizzes aloud
- Use graphic organizers to take notes, organize new information, and help students relate new information with previous knowledge
- Provide students with additional time to complete assignments
- Provide small group and individual conferencing to help support student throughout the lesson
- Preferential seating based on student needs
- Review concepts of previous lesson before teaching the new lesson
- Complete review activities to reinforce concepts previously taught
- Check for students understanding often with formal, informal, verbal, and nonverbal measures
- Provide student with modified tests and quizzes organized in a manner that will easy for the student to follow, assessment quality over quantity, and has clear directions

**Students at Risk of Failure**

- Work toward longer passages as skills in English increase
- Use visuals
- Introduce key vocabulary before lesson
- Teacher reads aloud daily
- Provide peer tutoring
- Use a strong student as a “buddy” (does not necessarily have to speak the primary language)
- choral reading
- chants, songs
- preferential seating

| New Jersey Student Learning Standards | |
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| **4-PS3-1** | Use evidence to construct an explanation relating the speed of an object to the energy of that object |
| **4-PS3-2** | Make observations to provide evidence that energy can be transferred from place to place by sound, light, heat, and electric currents |
| **4-PS3-3** | Ask questions and predict outcomes about the changes in energy that occur when objects collide |
| **4-PS3-4** | Apply scientific ideas to design, test, and refine a device that converts energy from one form to another |

| Science and Engineering Practices Learning Progressions | **Asking Questions and Defining Problems**<br>Asking questions and defining problems in grades 3–5 builds on K–2 experiences and progresses to specifying qualitative relationships.<br>• Ask questions that can be investigated and predict reasonable outcomes based on patterns such as cause and effect relationships. (4-PS3-3)<br><br>**Planning and Carrying Out Investigations** |
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| | Planning and carrying out investigations to answer questions or test solutions to problems in 3–5 builds on K–2 experiences and progresses to include investigations that control variables and provide evidence to support explanations or design solutions<br>Make observations to produce data to serve as the basis for evidence for an explanation of a phenomenon or test a design solution. (4-PS3-2)<br>**Constructing Explanations and Designing Solutions**<br><br>Constructing explanations and designing solutions in 3–5 builds on K–2 experiences and progresses to the use of evidence in constructing explanations that specify variables that describe and predict phenomena and in designing multiple solutions to design problems.<br>● Use evidence (e.g., measurements, observations, patterns) to construct an explanation. (4-PS3-1)<br>● Apply scientific ideas to solve design problems. (4-PS3-4) |
| **Discipline Core Ideas**<br><br>**Physical Science Learning Progressions**<br><br>**Earth & Space Science Learning Progressions**<br><br>**Life Science Learning Progressions** | **PS3.A: Definitions of Energy**<br>● The faster a given object is moving, the more energy it possesses. (4-PS3-1)<br>● Energy can be moved from place to place by moving objects or through sound, light, or electric currents. (4-PS3-2), (4-PS3-3)<br><br>**PS3.B: Conservation of Energy and Energy Transfer**<br>● Energy is present whenever there are moving objects, sound, light, or heat. When objects collide, energy can be transferred from one object to another, thereby changing their motion. In such collisions, some energy is typically also transferred to the surrounding air; as a result, the air gets heated and sound is produced. (4-PS3-2), (4-PS3-3)<br>● Light also transfers energy from place to place. (4-PS3-2) Energy can also be transferred from place to place by electric currents, which can then be used locally to produce motion, sound, heat, or light. The currents may have been produced to begin with by transforming the energy of motion into electrical energy. (4- PS3-2), (4-PS3-4)<br>● Energy can also be transferred from place to place by electric currents, which can then be used locally to produce motion, sound, heat, or light. The currents may have been produced to begin with by transforming the energy of motion into electrical energy. (4-PS3-2), (4-PS3-4)<br><br>**PS3.C: Relationship Between Energy and Forces**<br>● When objects collide, the contact forces transfer energy so as to change the objects' motions. (4- PS3-3)<br><br>**PS3.D: Energy in Chemical Processes and Everyday Life**<br>● The expression "produce energy" typically refers to the conversion of stored energy into a desired form for practical use. (4-PS3-4)<br>**ETS1.A: Defining and Delimiting Engineering Problems**<br>● Possible solutions to a problem are limited by available materials and resources (constraints). The success of a designed solution is determined by considering the desired features of a solution (criteria). Different proposals for solutions can be compared on the |

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| | basis of how well each one meets the specified criteria for success or how well each takes the constraints into account. (secondary to 4-PS3- 4) |
| Crosscutting Concepts | **Energy and Matter**<br>Energy can be transferred in various ways and between objects. (4-PS3-1), (4-PS3-2), (4-PS3-3), (4-PS3-4)<br><br>***Connections to Engineering, Technology, and Applications of Science***<br>**Influence of Science, Engineering and Technology on Society and the Natural World**<br>● Engineers improve existing technologies or develop new ones. (4-PS3-4)<br><br>***Connections to Nature of Science***<br><br>**Science is a Human Endeavor**<br>● Most scientists and engineers work in teams. (4-PS3-4)<br>● Science affects everyday life. (4- PS3-4) |
| Engineering, Technology and the Application of Science Learning Progressions | |

## Interdisciplinary Connections

**Reading**

- RL.CR.4.1. Refer to details and examples as textual evidence when explaining what a literary text says explicitly and make relevant connections when drawing inferences from the text.
- RI.CR.4.1. Refer to details and examples as textual evidence when explaining what an informational text says explicitly and make relevant connections when drawing inferences from the text.
- RL.CI.4.2. Summarize a literary text and interpret the author's theme citing key details from the text.
- RI.CI.4.2. Summarize an informational text and interpret the author's purpose or main idea citing key details from the text.
- RL.IT.4.3. Describe the impact of individuals and events throughout the course of a text, using an in-depth analysis of the character, setting, or event that draws on textual evidence.
- RI.IT.4.3. Describe the impact of individuals and events throughout the course of a text, explaining events, procedures, ideas, or concepts in a historical, scientific, or technical text, including what happened and why, based on evidence in the text.
- RI.TS.4.4. Describe the overall structure (e.g., chronology, comparison, cause/effect, problem/solution) of events, ideas, concepts, or information in a text or part of a text.
- RL.PP.4.5. Compare and contrast the point of view from which different stories are narrated, including the difference between first- and third-person narrations.
- RI.PP.4.5. Compare and contrast multiple accounts of the same event or topic; noting important similarities and differences in the point of view they represent.
- RL.MF.4.6. Make connections between specific descriptions and directions in a text and a visual or oral representation of the text.
- RI.MF.4.6. Use evidence to show how graphics and visuals (e.g., illustrations, charts, graphs, diagrams, timelines, animations) support central ideas.

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- RI.AA.4.7. Analyze how an author uses facts, details and explanations to develop ideas or to support their reasoning.
- RL.CT.4.8. Compare and contrast the treatment of similar themes, topics and patterns of events in literary texts from authors of different cultures.
- RI.CT.4.8. Compare and contrast the treatment of similar themes, topics and patterns of events in informational texts from authors of different cultures.

**Speaking and Listening**

- SL.PE.4.1. Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 4 topics and texts, building on others' ideas and expressing their own clearly.

  A. Explicitly draw on previously read text or material and other information known about the topic to explore ideas under discussion.

  B. Follow agreed-upon rules for discussions and carry out assigned roles.

  C. Pose and respond to specific questions to clarify or follow up on information, and make comments that contribute to the discussion and link to the remarks of others.

  D. Review the key ideas expressed and explain their own ideas and understanding in light of the discussion.

- SL.II.4.2. Paraphrase portions of a text read aloud or information presented in diverse media and formats (e.g., visually, quantitatively, and orally).
- SL.ES.4.3. Identify the reasons and evidence a speaker provides to support particular points.
- SL.PI.4.4. Report on a topic or text, tell a story, or recount an experience in an organized manner, using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.
- SL.UM.4.5. Add audio recordings and visual displays to presentations when appropriate to enhance the development of main ideas or themes.
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**Writing**

- W.WR.4.5. Conduct short research projects that use multiple reference sources (print and non-print) and build knowledge through investigation of different aspects of a topic.
- W.SE.4.6. Gather relevant information from multiple print and digital sources; take notes, prioritize and categorize information; provide a list of sources.
- W.RW.4.7. Write routinely over extended time frames (with time for research and revision) and shorter time frames (a single sitting) for a range of tasks, purposes, and audiences

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## Computer Science & Design Thinking

- 8.1.5.A.3. Use a graphic organizer to organize information about a problem or issue.
- 8.1.5.E.1. Use digital tools to research and evaluate the accuracy of, relevance to, and appropriateness of using print and non-print electronic information sources to complete a variety of tasks.
- 8.1.5.DA.3: Organize and present collected data visually to communicate insights gained from different views of the data.
- 8.1.5.DA.4: Organize and present climate change data visually to highlight relationships or support a claim.
- 8.2.5.ITH.1: Explain how societal needs and wants influence the development and function of a product and a system
- 8.2.5.EC.1: Analyze how technology has contributed to or reduced inequities in local and global communities and determine its short- and long-term effects.
- 8.2.8.ITH.1: Explain how the development and use of technology influences economic, political, social, and cultural issues.
- 8.2.8.EC.1: Explain ethical issues that may arise from the use of new technologies

## Career Readiness, Life Literacies & Key Skills

- 9.1.5.CR.1: Compare various ways to give back and relate them to your strengths, interests, and other personal factors.
- 9.1.5.FP.3: Analyze how spending choices and decision-making can result in positive or negative consequences.
- 9.2.5.CAP.1: Evaluate personal likes and dislikes and identify careers that might be suited to personal likes.
- 9.2.5.CAP.6: Compare the characteristics of a successful entrepreneur with the traits of successful employees
- 9.4.5.CT.1: Identify and gather relevant data that will aid in the problem-solving process (e.g., 2.1.5.EH.4, 4-ESS3-1, 6.3.5.CivicsPD.2).
- 9.4.5.CT.3: Describe how digital tools and technology may be used to solve problems.
- 9.4.5.GCA.1: Analyze how culture shapes individual and community perspectives and points of view (e.g., 1.1.5.C2a, RL.5.9, 6.1.5.HistoryCC.8).

## Career Readiness, Life Literacies, and Key Skills Practices

| | |
|---|---|
| Act as a responsible and contributing community | Students understand the obligations and responsibilities of being a member of a community, and they demonstrate this understanding every day through their interactions with others. They are conscientious of the impacts of their decisions on others and the environment around them. They think about the near-term and long-term consequences of their actions and seek to act in ways that contribute to the betterment |

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| member and employee. | of their teams, families, community and workplace. They are reliable and consistent in going beyond the minimum expectation and in participating in activities that serve the greater good. |
| Attend to financial well-being. | Students take regular action to contribute to their personal financial well-being, understanding that personal financial security provides the peace of mind required to contribute more fully to their own career success. |
| Consider the environmental, social and economic impacts of decisions. | Students understand the interrelated nature of their actions and regularly make decisions that positively impact and/or mitigate negative impact on other people, organization, and the environment. They are aware of and utilize new technologies, understandings, procedures, materials, and regulations affecting the nature of their work as it relates to the impact on the social condition, the environment and the profitability of the organization. |
| Demonstrate creativity and innovation. | Students regularly think of ideas that solve problems in new and different ways, and they contribute those ideas in a useful and productive manner to improve their organization. They can consider unconventional ideas and suggestions as solutions to issues, tasks or problems, and they discern which ideas and suggestions will add greatest value. They seek new methods, practices, and ideas from a variety of sources and seek to apply those ideas to their own workplace. They take action on their ideas and understand how to bring innovation to an organization. |
| Utilize critical thinking to make sense of problems and persevere in solving them. | Students readily recognize problems in the workplace, understand the nature of the problem, and devise effective plans to solve the problem. They are aware of problems when they occur and take action quickly to address the problem; they thoughtfully investigate the root cause of the problem prior to introducing solutions. They carefully consider the options to solve the problem. Once a solution is agreed upon, they follow through to ensure the problem is solved, whether through their own actions or the actions of others. |
| Model integrity, ethical leadership and effective management. | Students consistently act in ways that align personal and community-held ideals and principles while employing strategies to positively influence others in the workplace. They have a clear understanding of integrity and act on this understanding in every decision. They use a variety of means to positively impact the directions and actions of a team or organization, and they apply insights into human behavior to change others' actions, attitudes and/or beliefs. They recognize the near-term and long-term effects that management's actions and attitudes can have on productivity, morals and organizational culture. |
| Plan education and career paths aligned to personal goals. | Students take personal ownership of their own education and career goals, and they regularly act on a plan to attain these goals. They understand their own career interests, preferences, goals, and requirements. They have perspective regarding the pathways available to them and the time, effort, experience and other requirements to pursue each, including a path of entrepreneurship. They recognize the value of each step in the education and experiential process, and they recognize that nearly all career paths require ongoing education and experience. They seek counselors, mentors, and other experts to assist in the planning and execution of career and personal goals. |
| Use technology to enhance productivity, | Students find and maximize the productive value of existing and new technology to accomplish workplace tasks and solve workplace problems. They are flexible and adaptive in acquiring new technology. They are proficient with ubiquitous technology |

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| increase collaboration and communicate effectively. | applications. They understand the inherent risks-personal and organizational-of technology applications, and they take actions to prevent or mitigate these risks. |
| Work productively in teams while using cultural/global competence. | Students positively contribute to every team, whether formal or informal. They apply an awareness of cultural differences to avoid barriers to productive and positive interaction. They find ways to increase the engagement and contribution of all team members. They plan and facilitate effective team meetings. |

**Evidence of Student Learning**

**Formative Assessments:**

- Classroom Observation
- Center Activity Cards
- Anecdotal records
- Reading/Writing Companion
- Reader's Responses in Reader's notebooks
- Think-Pair-Share
- Stop and Jot Post-it notes
- Achieve 3000
- Reading A to Z articles
- Graphic Organizers

**Alternative Assessments:**

- LLI Reading Records and Comprehension Questions
- LLI Written Comprehension Responses
- LLI Lesson Record Anecdotal Note Pages
- LLI Reading Response Journals
- LLI Conversation Rubric
- Stop & Jot Sentence Starters
- Student Conversation Rubric
- Reader's Response Sentence Starters
- Curriculum Based Assessments (CBMs) for fluency or comprehension
- Achieve3000 with Whole Group Introduction and Higher Lexile Level Read Aloud
- Reading A-Z Guided Level Assessments
- Drawing a Picture to Show Comprehension with Verbal Explanation
- Teacher Created/Modified Vocabulary Assessments

**Summative Assessments:**

- Progress Monitoring
- Text Set Goals
- Show Your Knowledge
- Unit Assessment
- Content Area Reading
- Fluency Assessment
- Vocabulary assessments
- Short constructed reading response assessment
- Extended reading response to reading

**Benchmark Assessments:**

- DRA3
- Achieve 3000 Assessment
- Wonders Unit Assessments
- Wonders Progress Monitoring Assessments

**Knowledge & Skills**

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**Enduring Understandings:**
*Students will understand that…*

- Energy and fuels humans use are derived from natural sources and their use affects the environment. Some resources are renewable, others are not.
- Energy can be transferred in various ways and between objects.
- The faster a given object is moving, the more energy it possesses.
- Energy is present whenever there are moving objects, sound, light, or heat.
- Energy can be converted.
- Renewable energy sources can be found through wind energy, sunlight, and water.
- Nonrenewable energy sources like fossil fuels are limited in supply.

Students will...

- Interpret information presented visually, orally, or quantitatively and explain how the information contributes to an understanding of the text in which it appears.
- Determine the central, or main, idea of a text and explain how it is supported by relevant, or key, details; summarize the text.
- Describe the overall structure (e.g., chronology, comparison, cause/effect, problem/solution) of events, ideas, concepts, or information in a text or part of a text.
- Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.
- develop and refine models;
- generate, discuss and analyze data;
- construct spoken and written scientific explanations;
- engage in evidence-based argumentation; and
- Reflect on their own understanding.

**Essential Questions:**

- How have our energy resources changed over the years?
- How can energy be converted from one form to another?
- How are energy and fuels derived from natural resources, and how does their use impact the environment?

**Vocabulary**
Energy, Force, Converted, Efficient, Renewable Energy, Nonrenewable Energy, Fossil Fuel, Potential Energy, Kinetic Energy

| **Core Instructional & Supplemental Materials** | |
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| **Suggested Activities** | **Resources** |

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| • Students will activate their schema using Build Knowledge and Build Vocabulary pages. Students will watch a short video and listen to an Interactive Read Aloud on the topic to help build more knowledge on the topic.<br>• Students will listen to the Shared Read to identify important ideas and details, take notes, and to summarize.<br>• Students will reread the Shared Read to analyze the text, craft, and structure.<br>• Students will listen to the Anchor Text to identify key information and details, take notes, and to summarize.<br>• Students will reread the Anchor Text to analyze the text, craft, and structure.<br>• Students will read the Paired Selection to apply strategies and skills.<br>• Students will reread the Paired Selection to apply strategies and skills. | Wonders book/online |
| **Energy Swing-** Students will work collaboratively by reviewing potential and kinetic energy by creating a pendulum and observing if increasing weight on a pendulum will make it swing faster. | String, small weights, ruler, meter stick, stopwatch<br>http://lincoln8science.weebly.com/uploads/3/6/5/0/3650206/pendulum_lab6.pdf |
| **How does light behave? -**Students will observe the refraction of light through water. They will describe the behavior and properties of light, including reflection, refraction, absorption, and colors. | White paper, markers, empty water bottles, masking tape<br>http://www.lookwerelearning.com/simple-light-refraction-experiment/ |
| **Potential and Kinetic Energy Marble Lab**<br>Students will observe and record the amount of work done by marbles rolling down a plane and more fully understand the relationship between potential and kinetic energy. | https://www.canteach.ca/resources/science/physical-science/potential-and-kinetic-energy/<br>Marbles, inclined planes of various heights |
| **Motion Mass and Acceleration Lab**<br>Students will observe that two objects with the same shape and the same mass may behave differently when they roll down a hill. How quickly an object accelerates depends partly on how its mass is distributed. A cylinder with a heavy hub accelerates more quickly than a cylinder with a heavy rim. | https://www.exploratorium.edu/snacks/downhill-race<br>Various objects that will roll down an inclined plane, stopwatch |
| **Energy Interactive Computer Activities**<br>Students will engage in technological simulations of energy based concepts. Sled Wars, Circuit Builder, Conduction and Convection, Energy Conversions, Heat Absorption, Radiation, and Trebuchet are a few activities that simulate energy concepts. Questions and lessons that are based around these simulations are available for students to engage with. | https://www.explorelearning.com/index.cfm?method=cResource.dspStandardCorrelation&id=1889 |
| **Literature** | |

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Unit 6 Past, Present, and Future, Wonders 2023

- *Energy Island* by Allan Durmmpnd
- *Of Fire and Water*
- *The Game of Silence* by Louse Erdrich
- *Native Americans: Yesterday and Today*
- *"the drum"* by Nikki Giovanni
- *"Growing Up"* by Liz Ann Baez Aguilar
- *The Big Picture of Economics* by David A. Adler
- Wonders Leveled Readers

*Energy by Matt Mullins*
*Electrical Wizard: How Nikola Tesla Lit Up the World by Elizabeth Rusch*
*Sound by Anna Claybourne*
*My Light by Molly Bang*

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| **Original Adoption:** 2020 NJSLS Science, Social Studies, Career Readiness, Life Literacies & Key Skills, Computer Design & Thinking, Visual & Performing Arts, World Language, Comprehensive Health and Physical Education (9-12-22); 2023 NJSLS English Language Arts (9-23-24); Math NJSLS Mathematics (9-23-24) |
| **Created By: Daniel Breslow and Laurie McAvoy** |
| **Updated Date: September 17, 2026** |
| **Updated By: Megan Banach** |

Intent and Spirit

The New Jersey Student Learning Standards for Science (NJSLS-S) describe the expectations for what students should know and be able to do as well as promote three-dimensional science instruction across the three science domains (i.e., physical sciences, life science, Earth and space sciences). From the earliest grades, the expectation is that students will engage in learning experiences that enable them to investigate phenomena, design solutions to problems, make sense of evidence to construct arguments, and critique and discuss those arguments (in appropriate ways relative to their grade level).

The foundation of the NJSLS-S reflects three dimensions — science and engineering practices, disciplinary core ideas, and crosscutting concepts. The performance expectations are derived from the interplay of these three dimensions. It is essential that these three components are integrated into all learning experiences. Within each standard document, the three dimensions are intentionally presented as integrated components to foster sensemaking and designing solutions to problems. Because the NJSLS-S is built on the notions of coherence and contextuality, each of the science and engineering practices and crosscutting concepts appear multiple times across topics and at every grade level. Additionally, the three dimensions should be an integral part of every curriculum unit and should not be taught in isolation.

Mission

All students will develop an understanding of scientific concepts and processes essential for informed decision-making, meaningful participation in civic life, and readiness for postsecondary opportunities, including careers in STEM fields.

Vision

Prepare students to become scientifically literate individuals who can effectively:

- Apply scientific thinking, skills, and understanding to real-world phenomena and problems;
- Engage in systems thinking and modeling to explain phenomena and to give a context for the ideas to be learned;
- Conduct investigations, solve problems, and engage in discussions;
- Discuss open-ended questions that focus on the strength of the evidence used to generate claims;
- Read and evaluate multiple sources, including science-related magazine and journal articles and web-based resources to gain knowledge about current and past science problems and solutions and develop well-reasoned claims; and
- Communicate ideas through journal articles, reports, posters, and media presentations that explain and argue.

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| Recommended Pacing Guide | |
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| Unit 1: Structures and Properties of Matter | 25 days (September-November) |
| Unit 2: Matter and Energy in Ecosystems | 17 days (November-January) |
| Unit 3: Space Systems: Stars & the Solar Systems | 26 Days (January - April) |
| Unit 4 : Earth's Systems | 20 Days (May - June) |

**Alignment with State Mandates**

The following colors are used throughout this document to indicate areas in which the curriculum is aligned with the following NJSA requirements:

- Holocaust and genocides (N.J.S.A. 18A:35-28)
- History and contributions of African-Americans (Amistad Law) (N.J.S.A. 18A:35-4.43)
- Highlight and promote diversity and inclusion (Diversity & Inclusion Law) (N.J.S.A. 18A:35-4.36a)
- History of disabled and LGBT persons included in middle and high school curriculum (Section 18A:35-4.35 )
- Asian Americans and Pacific Islanders (N.J.S.A18A:35-4.44)
- Climate Change - to prepare students to understand how and why climate change happens, the impact it has on our local and global communities and to act in informed and sustainable ways. Please click here for specific examples (by subject).

Students are able to describe that matter is made of particles too small to be seen through the development of a model. Students develop an understanding of the idea that regardless of the type of change that matter undergoes, the total weight of matter is conserved. Students determine whether the mixing of two or more substances results in new substances. Through the development of a model using an example, students are able to describe ways the geosphere, biosphere, hydrosphere, and/or atmosphere interact. They describe and graph data to provide evidence about the distribution of water on Earth. Students develop an understanding of the idea that plants get the materials they need for growth chiefly from air and water. Using models, students can describe the movement of matter among plants, animals, decomposers, and the environment and that energy in animals' food was once energy from the sun. Students are expected to develop an understanding of patterns of daily changes in length and direction of shadows, day and night, and the seasonal appearance of some stars in the night sky.

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| Unit 1: Structures and Properties of Matter | Duration: 25 days |
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**Suggested Accommodations**

**English Language Learners:**
- Elicit Prior Knowledge
- Rephrase
- Understand Context
- Scaffold Language
- Restate
- Cooperative Grouping

**Special Education/Students with Disabilities:**
- One on one instruction
- Adaptive devices
- Provide differentiated instruction as needed
- Follow all IEP modifications/504 plan
- Provide manipulatives or the opportunity to draw solution strategies

**504 Plans:**
- One on one instruction
- Adaptive devices
- Provide differentiated instruction as needed
- Follow all 504 plan modifications
- Provide manipulatives or the opportunity to draw solution strategies

**Gifted and Talented:**
- Problem based learning
- Enrichment Lesson
- Presentation

**Students at Risk of Failure:**
- 1:1
- Repeating Directions
- Small Group
- Manipulatives
- Interactive Notes
- Reteach/Enrichment Pages for each lesson (RTI)

**Economically Disadvantaged:**
- 1:1
- Repeating Directions
- Small Group
- Manipulatives
- Interactive Notes
- Reteach/Enrichment Pages for each lesson (RTI)

**Culturally Diverse:**
- One on one instruction
- Adaptive devices
- Provide differentiated instruction as needed

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- Provide manipulatives or the opportunity to draw solution strategies

| New Jersey Student Learning Standards | |
|---|---|
| 5-PS1-1 | Develop a model to describe that matter is made of particles too small to be seen. |
| 5-PS1-2 | Measure and graph quantities to provide evidence that regardless of the type of change that occurs when heating, cooling, or mixing substances, the total weight of matter is conserved. |
| 5-PS1-3 | Make observations and measurements to identify materials based on their properties. |
| 5-PS1-4 | Conduct an investigation to determine whether the mixing of two or more substances results in new substances. |
| Science and Engineering Practices Learning Progressions | Developing and Using Models<br>Build and revise simple models and use models to represent events and design solutions.<br>Use models to describe phenomena. |
| **Discipline Core Ideas**<br><br>Physical Science Learning Progressions<br><br>Earth & Space Science Learning Progressions<br><br>Life Science Learning Progressions | Structure and Properties of Matter of any type can be subdivided into particles that are too small to see, but even then the matter still exists and can be detected by other means. (Air in a balloon) The amount (weight) of matter is conserved when it changes form, even in transitions in which it seems to vanish. Measurements of a variety of properties can be used to identify materials. |
| Crosscutting Concepts | Cause and Effect-identify cause and effect relationships and use them to explain changes in matter |
| Engineering, Technology and the Application of Science Learning Progressions | |

## Interdisciplinary Connections

**Language Arts Standards**

- RI.5.1 - Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text (3-5-ETS1-2)
- RI.5.1 - Draw on information from multiple print or digital sources, demonstrating the ability to locate an answer to a question quickly or to solve a problem efficiently. (3-5-ETS1-2)
- RI.5.9 - Integrate information from several tests on the same topic in order to write or speak about the subject knowledgeably (3-5-ETS1-2)

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- W.5.7 - Conduct short research projects that use several sources to build knowledge through investigation of different aspects of a topic (3-5 ETS1-1) (3-5 ETS1-3)
- W.5.8 - Recall relevant information from experiences or gather relevant information from print and digital resources; summarize or paraphrase information in notes and finished work and provide a list of sources. (3-5 ETS1-1) (3-5 ETS1-3)
- **SL.PE.5.1**. Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 5 topics and texts, building on others' ideas and expressing their own clearly.

**Mathematics**

- 5.NBT.A.3 - Read, write and compare decimals to thousandths
- 5.NBT.A.4 - Use place value understanding to round decimals to any place
- 5.NBT.B.5-7 - Perform operations with multi-digit whole numbers and with decimals to hundredths
- 5.NF.A- Use equivalent fractions as a strategy to add and subtract fractions
- 5.NF.B - Apply and extend previous understanding of multiplication and division to multiply and divide fractions
- 5M.A.1 - Convert like measurement units within a given measurement system
- 5.M.B.2-4 - Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition
- 5.DL.A.1-4 - Understand and analyze data visualizations
- 5.DL.B.5 - Represent and interpret data

## Computer Science & Design Thinking

- 8.1.5.A.3. Use a graphic organizer to organize information about a problem or issue.
- 8.1.5.E.1. Use digital tools to research and evaluate the accuracy of, relevance to, and appropriateness of using print and non-print electronic information sources to complete a variety of tasks.
- 8.1.5.DA.3: Organize and present collected data visually to communicate insights gained from different views of the data.
- 8.1.5.DA.4: Organize and present climate change data visually to highlight relationships or support a claim.
- 8.2.5.ITH.1: Explain how societal needs and wants influence the development and function of a product and a system
- 8.2.5.EC.1: Analyze how technology has contributed to or reduced inequities in local and global communities and determine its short- and long-term effects.
- 8.2.8.ITH.1: Explain how the development and use of technology influences economic, political, social, and cultural issues.
- 8.2.8.EC.1: Explain ethical issues that may arise from the use of new technologies

## Career Readiness, Life Literacies & Key Skills

- 9.1.5.CR.1: Compare various ways to give back and relate them to your strengths, interests, and other personal factors.

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- 9.1.5.FP.3: Analyze how spending choices and decision-making can result in positive or negative consequences.
- 9.2.5.CAP.1: Evaluate personal likes and dislikes and identify careers that might be suited to personal likes.
- 9.2.5.CAP.6: Compare the characteristics of a successful entrepreneur with the traits of successful employees
- 9.4.5.CT.1: Identify and gather relevant data that will aid in the problem-solving process (e.g., 2.1.5.EH.4, 4-ESS3-1, 6.3.5.CivicsPD.2).
- 9.4.5.CT.3: Describe how digital tools and technology may be used to solve problems.
- 9.4.5.GCA.1: Analyze how culture shapes individual and community perspectives and points of view (e.g., 1.1.5.C2a, RL.5.9, 6.1.5.HistoryCC.8).

| Career Readiness, Life Literacies, and Key Skills Practices | |
|---|---|
| Act as a responsible and contributing community member and employee. | Students understand the obligations and responsibilities of being a member of a community, and they demonstrate this understanding every day through their interactions with others. They are conscientious of the impacts of their decisions on others and the environment around them. They think about the near-term and long-term consequences of their actions and seek to act in ways that contribute to the betterment of their teams, families, community and workplace. They are reliable and consistent in going beyond the minimum expectation and in participating in activities that serve the greater good. |
| Attend to financial well-being. | Students take regular action to contribute to their personal financial well-being, understanding that personal financial security provides the peace of mind required to contribute more fully to their own career success. |
| Consider the environmental, social and economic impacts of decisions. | Students understand the interrelated nature of their actions and regularly make decisions that positively impact and/or mitigate negative impact on other people, organization, and the environment. They are aware of and utilize new technologies, understandings, procedures, materials, and regulations affecting the nature of their work as it relates to the impact on the social condition, the environment and the profitability of the organization. |
| Demonstrate creativity and innovation. | Students regularly think of ideas that solve problems in new and different ways, and they contribute those ideas in a useful and productive manner to improve their organization. They can consider unconventional ideas and suggestions as solutions to issues, tasks or problems, and they discern which ideas and suggestions will add greatest value. They seek new methods, practices, and ideas from a variety of sources and seek to apply those ideas to their own workplace. They take action on their ideas and understand how to bring innovation to an organization. |
| Utilize critical thinking to make sense of problems and persevere in solving them. | Students readily recognize problems in the workplace, understand the nature of the problem, and devise effective plans to solve the problem. They are aware of problems when they occur and take action quickly to address the problem; they thoughtfully investigate the root cause of the problem prior to introducing solutions. They carefully consider the options to solve the problem. Once a solution is agreed upon, they follow through to ensure the problem is solved, whether through their own actions or the actions of others. |

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| Grade: 5 | Content Area: Science |
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| Model integrity, ethical leadership and effective management. | Students consistently act in ways that align personal and community-held ideals and principles while employing strategies to positively influence others in the workplace. They have a clear understanding of integrity and act on this understanding in every decision. They use a variety of means to positively impact the directions and actions of a team or organization, and they apply insights into human behavior to change others' actions, attitudes and/or beliefs. They recognize the near-term and long-term effects that management's actions and attitudes can have on productivity, morals and organizational culture. |
| Plan education and career paths aligned to personal goals. | Students take personal ownership of their own education and career goals, and they regularly act on a plan to attain these goals. They understand their own career interests, preferences, goals, and requirements. They have perspective regarding the pathways available to them and the time, effort, experience and other requirements to pursue each, including a path of entrepreneurship. They recognize the value of each step in the education and experiential process, and they recognize that nearly all career paths require ongoing education and experience. They seek counselors, mentors, and other experts to assist in the planning and execution of career and personal goals. |
| Use technology to enhance productivity, increase collaboration and communicate effectively. | Students find and maximize the productive value of existing and new technology to accomplish workplace tasks and solve workplace problems. They are flexible and adaptive in acquiring new technology. They are proficient with ubiquitous technology applications. They understand the inherent risks-personal and organizational-of technology applications, and they take actions to prevent or mitigate these risks. |
| Work productively in teams while using cultural/global competence. | Students positively contribute to every team, whether formal or informal. They apply an awareness of cultural differences to avoid barriers to productive and positive interaction. They find ways to increase the engagement and contribution of all team members. They plan and facilitate effective team meetings. |

| Evidence of Student Learning | |
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| **Formative Tasks:**<br>• Oral Questioning<br>• Class work<br>• Student Conference<br>• Self-Assessment<br>• Think-Pair-Share<br>• Hand Signals<br>• Peer Reflections<br>• Constructive Response<br>• Teacher Observation<br>• Exit Slip | **Alternative Assessments:**<br>• Manipulative Driven Assessment<br>• Modified/Teacher Created Assessments<br>• Visual Representation of Skills Assessed<br>• Modified Classwork Assignments<br>• Modified Benchmarks |
| **Summative Assessments:**<br>• Quizzes<br>• Tests<br>• Unit Projects | **Benchmark Assessments:**<br>• State Assessment |

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| • Presentations<br>• State Assessment | |

| Knowledge & Skills | |
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| **Enduring Understandings:**<br>*Students will understand that…*<br>• Since matter exists as particles that are too small to see, matter is always conserved even if it seems to disappear. Measurements of a variety of observable properties can be used to identify particular materials.<br>• Chemical reactions that occur when substances are mixed can be identified by the emergence of substances with different properties, but the total mass remains the same.<br>  • There are differences among the three states of matter. | **Essential Questions:**<br>• How can I describe matter when it is made up of particles too small to be seen?<br>• Why is the total weight of matter conserved regardless of the type of change that occurs when heating, cooling, or mixing substances,<br>• How can I use a material's properties to identify the material?<br>• How can I use two or more different substances to make a new substance, and why will this result in a change of properties? |

| Core Instructional & Supplemental Materials |
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| **The Giant Atom:** Students will draw out the orbits of an atom. The students will be using their knowledge from the unit to complete the demonstration by describing the structure of atoms. |
| **Ooblek:** Students will create slime to show how compounds are made. The students will be using their knowledge from the unit to create their own ooblek/slime by applying the concepts of compounds vs. elements and how mixtures are created. |
| **Penny Bright:** Students will observe the changes made when a penny is placed in an acid. The students will be using their knowledge from the unit to complete the experiment by describing the properties of a penny before and after the penny has sat in the salt-and-vinegar solutions. |
| **Can soda clean a penny?:** Students will experiment to determine if soda is acidic enough to dissolve the tarnish of a penny. The students will be using their knowledge from the unit to complete the experiment by comparing and contrasting the reactions of soda, vinegar, and salt on the tarnish of a penny. |
| **How Sweet!:** Students will observe the differences/changes as cubed and loose sugar is mixed in water. The students will be using their knowledge from the unit to complete the demonstration by describing the properties of the sugar mixtures that began as cubes and loose. |
| **LITERATURE**<br>Wonders: "When Volcanoes Erupt" page 408<br><br>**WEBSITES**<br>• http://interactivesites.weebly.com/matter-chemical--physical.html (links to interactive activities on Matter: Physical andChemical Changes)<br>• https://www.brainpop.com/science/matterandchemistry/statesofmatter/<br>• https://quizlet.com/subject/5th-grade-science-properties-matter/ |

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- http://www.middleschoolchemistry.com/multimedia/chapter1/lesson2

| Unit 2: Matter and Energy in Ecosystems | Duration: 17 days |
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**Suggested Accommodations**

**English Language Learners:**
- Elicit Prior Knowledge
- Rephrase
- Understand Context
- Scaffold Language
- Restate
- Cooperative Grouping

**Special Education/Students with Disabilities:**
- One on one instruction
- Adaptive devices
- Provide differentiated instruction as needed
- Follow all IEP modifications/504 plan
- Provide manipulatives or the opportunity to draw solution strategies

**504 Plans:**
- One on one instruction
- Adaptive devices
- Provide differentiated instruction as needed
- Follow all 504 plan modifications
- Provide manipulatives or the opportunity to draw solution strategies

**Gifted and Talented:**
- Problem based learning
- Enrichment Lesson
- Presentation

**Students at Risk of Failure:**
- 1:1
- Repeating Directions
- Small Group
- Manipulatives
- Interactive Notes
- Reteach/Enrichment Pages for each lesson (RTI)

**Economically Disadvantaged:**
- 1:1
- Repeating Directions
- Small Group
- Manipulatives
- Interactive Notes
- Reteach/Enrichment Pages for each lesson (RTI)

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**Culturally Diverse:**
- One on one instruction
- Adaptive devices
- Provide differentiated instruction as needed
- Provide manipulatives or the opportunity to draw solution strategies

| New Jersey Student Learning Standards | |
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| 5-PS3-1 | Use models to describe that energy in animals' food (used for body repair, growth, motion, and to maintain body warmth) was once energy from the sun. |
| 5-LS1-1 | Support an argument that plants get the materials they need for growth chiefly from air and water. |
| 5-LS2-1 | Develop a model to describe the movement of matter among plants, animals, decomposers, and the environment. |
| Science and Engineering Practices Learning Progressions | Build and revise simple models and use models to represent events and design solutions.<br>Use models to describe phenomena.<br>Develop a model to describe phenomena.<br>Support an argument with evidence, data, or a model.<br>Science explanations describe the mechanisms for natural events. |
| **Discipline Core Ideas**<br><br>Physical Science Learning Progressions<br><br>Earth & Space Science Learning Progressions<br><br>Life Science Learning Progressions | The energy released [from] food was once energy from the sun that was captured by plants in the chemical process that forms plant matter (from air and water).<br>Food provides animals with the materials they need for body repair and growth and the energy they need to maintain body warmth and for motion.<br>Plants acquire their material for growth chiefly from air and water.<br>The food of almost any kind of animal can be traced back to plants.<br>Organisms are related in food webs in which some animals eat plants for food and other animals eat the animals that eat plants. Some organisms, such as fungi and bacteria, break down dead organisms (both plants or plants parts and animals) and therefore operate as "decomposers." Decomposition eventually restores (recycles) some materials back to the soil. Organisms can survive only in environments in which their particular needs are met. A healthy ecosystem is one in which multiple species of different types are each able to meet their needs in a relatively stable web of life. Newly introduced species can damage the balance of an ecosystem.<br>Matter cycles between the air and soil and among plants, animals, and microbes as these organisms live and die. Organisms obtain gasses, and water, from the environment, and release waste matter (gas, liquid, or solid) back into the environment. |
| Crosscutting Concepts | A system can be described in terms of its components and their interactions.<br>Matter is transported into, out of, and within systems.<br>Energy can be transferred in various ways and between objects.<br>http://www.nap.edu/openbook.php?record_id=13165&page=94 |
| Engineering, Technology and the Application of Science Learning Progressions | |

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## Interdisciplinary Connections

**Language Arts Standards**

- RI.5.1 - Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text (3-5-ETS1-2)
- RI.5.1 - Draw on information from multiple print or digital sources, demonstrating the ability to locate an answer to a question quickly or to solve a problem efficiently. (3-5-ETS1-2)
- RI.5.9 - Integrate information from several tests on the same topic in order to write or speak about the subject knowledgeably (3-5-ETS1-2)
- W.5.7 - Conduct short research projects that use several sources to build knowledge through investigation of different aspects of a topic (3-5 ETS1-1) (3-5 ETS1-3)
- W.5.8 - Recall relevant information from experiences or gather relevant information from print and digital resources; summarize or paraphrase information in notes and finished work and provide a list of sources. (3-5 ETS1-1) (3-5 ETS1-3)
- **SL.PE.5.1**. Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 5 topics and texts, building on others' ideas and expressing their own clearly.

**Mathematics**

- 5.NBT.A.3 - Read, write and compare decimals to thousandths
- 5.NBT.A.4 - Use place value understanding to round decimals to any place
- 5.NBT.B.5-7 - Perform operations with multi-digit whole numbers and with decimals to hundredths
- 5.NF.A- Use equivalent fractions as a strategy to add and subtract fractions
- 5.NF.B - Apply and extend previous understanding of multiplication and division to multiply and divide fractions
- 5M.A.1 - Convert like measurement units within a given measurement system
- 5.M.B.2-4 - Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition
- 5.DL.A.1-4 - Understand and analyze data visualizations
- 5.DL.B.5 - Represent and interpret data

## Computer Science & Design Thinking

- 8.1.5.A.3. Use a graphic organizer to organize information about a problem or issue.
- 8.1.5.E.1. Use digital tools to research and evaluate the accuracy of, relevance to, and appropriateness of using print and non-print electronic information sources to complete a variety of tasks.
- 8.1.5.DA.3: Organize and present collected data visually to communicate insights gained from different views of the data.
- 8.1.5.DA.4: Organize and present climate change data visually to highlight relationships or support a claim.
- 8.2.5.ITH.1: Explain how societal needs and wants influence the development and function of a product and a system
- 8.2.5.EC.1: Analyze how technology has contributed to or reduced inequities in local and global communities and determine its short- and long-term effects.

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- 8.2.8.ITH.1: Explain how the development and use of technology influences economic, political, social, and cultural issues.
- 8.2.8.EC.1: Explain ethical issues that may arise from the use of new technologies

## Career Readiness, Life Literacies & Key Skills

- 9.1.5.CR.1: Compare various ways to give back and relate them to your strengths, interests, and other personal factors.
- 9.1.5.FP.3: Analyze how spending choices and decision-making can result in positive or negative consequences.
- 9.2.5.CAP.1: Evaluate personal likes and dislikes and identify careers that might be suited to personal likes.
- 9.2.5.CAP.6: Compare the characteristics of a successful entrepreneur with the traits of successful employees
- 9.4.5.CT.1: Identify and gather relevant data that will aid in the problem-solving process (e.g., 2.1.5.EH.4, 4-ESS3-1, 6.3.5.CivicsPD.2).
- 9.4.5.CT.3: Describe how digital tools and technology may be used to solve problems.
- 9.4.5.GCA.1: Analyze how culture shapes individual and community perspectives and points of view (e.g., 1.1.5.C2a, RL.5.9, 6.1.5.HistoryCC.8).

| Career Readiness, Life Literacies, and Key Skills Practices | |
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| Act as a responsible and contributing community member and employee. | Students understand the obligations and responsibilities of being a member of a community, and they demonstrate this understanding every day through their interactions with others. They are conscientious of the impacts of their decisions on others and the environment around them. They think about the near-term and long-term consequences of their actions and seek to act in ways that contribute to the betterment of their teams, families, community and workplace. They are reliable and consistent in going beyond the minimum expectation and in participating in activities that serve the greater good. |
| Attend to financial well-being. | Students take regular action to contribute to their personal financial well-being, understanding that personal financial security provides the peace of mind required to contribute more fully to their own career success. |
| Consider the environmental, social and economic impacts of decisions. | Students understand the interrelated nature of their actions and regularly make decisions that positively impact and/or mitigate negative impact on other people, organization, and the environment. They are aware of and utilize new technologies, understandings, procedures, materials, and regulations affecting the nature of their work as it relates to the impact on the social condition, the environment and the profitability of the organization. |
| Demonstrate creativity and innovation. | Students regularly think of ideas that solve problems in new and different ways, and they contribute those ideas in a useful and productive manner to improve their organization. They can consider unconventional ideas and suggestions as solutions to issues, tasks or problems, and they discern which ideas and suggestions will add greatest value. They seek new methods, practices, and ideas from a variety of sources |

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| | and seek to apply those ideas to their own workplace. They take action on their ideas and understand how to bring innovation to an organization. |
| Utilize critical thinking to make sense of problems and persevere in solving them. | Students readily recognize problems in the workplace, understand the nature of the problem, and devise effective plans to solve the problem. They are aware of problems when they occur and take action quickly to address the problem; they thoughtfully investigate the root cause of the problem prior to introducing solutions. They carefully consider the options to solve the problem. Once a solution is agreed upon, they follow through to ensure the problem is solved, whether through their own actions or the actions of others. |
| Model integrity, ethical leadership and effective management. | Students consistently act in ways that align personal and community-held ideals and principles while employing strategies to positively influence others in the workplace. They have a clear understanding of integrity and act on this understanding in every decision. They use a variety of means to positively impact the directions and actions of a team or organization, and they apply insights into human behavior to change others' actions, attitudes and/or beliefs. They recognize the near-term and long-term effects that management's actions and attitudes can have on productivity, morals and organizational culture. |
| Plan education and career paths aligned to personal goals. | Students take personal ownership of their own education and career goals, and they regularly act on a plan to attain these goals. They understand their own career interests, preferences, goals, and requirements. They have perspective regarding the pathways available to them and the time, effort, experience and other requirements to pursue each, including a path of entrepreneurship. They recognize the value of each step in the education and experiential process, and they recognize that nearly all career paths require ongoing education and experience. They seek counselors, mentors, and other experts to assist in the planning and execution of career and personal goals. |
| Use technology to enhance productivity, increase collaboration and communicate effectively. | Students find and maximize the productive value of existing and new technology to accomplish workplace tasks and solve workplace problems. They are flexible and adaptive in acquiring new technology. They are proficient with ubiquitous technology applications. They understand the inherent risks-personal and organizational-of technology applications, and they take actions to prevent or mitigate these risks. |
| Work productively in teams while using cultural/global competence | Students positively contribute to every team, whether formal or informal. They apply an awareness of cultural differences to avoid barriers to productive and positive interaction. They find ways to increase the engagement and contribution of all team members. They plan and facilitate effective team meetings. |

| Evidence of Student Learning | |
|---|---|
| **Formative Tasks:**<br>• Oral Questioning<br>• Class work<br>• Student Conference<br>• Self-Assessment<br>• Think-Pair-Share | **Alternative Assessments:**<br>• Manipulative Driven Assessment<br>• Modified/Teacher Created Assessments<br>• Visual Representation of Skills Assessed<br>• Modified Classwork Assignments |

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| • Hand Signals<br>• Peer Reflections<br>• Constructive Response<br>• Teacher Observation<br>• Exit Slip | • Modified Benchmarks |
| **Summative Assessments:**<br>• Quizzes<br>• Tests<br>• Unit Projects<br>• Presentations<br>• State Assessment | **Benchmark Assessments:**<br>• State Assessment |

| Knowledge & Skills | |
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| **Enduring Understandings:**<br>*Students will understand that…*<br>• Food provides animals with the materials and energy they need for body repair, growth, warmth and motion. Plants acquire material for growth chiefly from air, water, and process matter and obtain energy from sunlight, which is used to maintain conditions necessary for survival.<br>• The food of almost any animal can be traced back to plants. Organisms are related in food webs in which some animals eat plants for food and other animals eat the animals that eat plants, while decomposers restore some materials back to the soil.<br>• Matter cycles between the air and soil and among organisms as they live and die.<br>• Energy can be “produced,” “used,” or “released” by converting stored energy. Plants capture energy from sunlight, which can later be used as fuel or food. | **Essential Questions:**<br>• How did energy from the sun become the energy found in animals’ food that is used for:<br>○ body repair<br>○ growth<br>○ motion<br>○ maintaining body warmth<br>• How do plants get the materials they need for growth chiefly from air and water?<br>• How does matter move among plants, animals, decomposers, and the environment? |

| Core Instructional & Supplemental Materials |
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| **Fix the Ecosystem:** The students will examine a local/foreign habitat and evaluate its health. Based on the habitat’s needs, the students will select an organism to introduce/reintroduce to benefit the health and longevity of the habitat. The students will have to explain their organism selection and explain how it will benefit the habitat. They will also have to examine any potential side-effects of the organism and how they can be alleviated. |
| **Soda Bottle Planters:** Students will plant seeds into a self-watering soda bottle planter to observe their growth over the course of 2-4 weeks. The students will be using their knowledge from the unit to complete the set of observations by describing the growth and changes that takes place over a period of time. |

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**Yarn Food Webs:** Students will combine several food chains into a large food web using balls of yarn. The students will be using their knowledge from the unit to complete the demonstration by "sending their sun's energy" to the organisms in the group's respective ecosystems.

**Carbon/Oxygen Cycle Beads:** Students will use different color beads to represent the different elements of the Carbon/Oxygen Cycle. The students will be using their knowledge from the unit to complete the activity by describing how the individual molecules of carbon, oxygen, and hydrogen are always present in their respective amounts, but the composition of the compounds change.

**Bag It!:** Students will examine the changes that take place when a plastic bag or piece of plastic wrap surrounds a plant. The students will be using their knowledge from the unit to complete the experiment by observing the changes inside of the plastic wrap and explain the changes they witness.

**Food Chains/Web Poster** - The students will reconstruct a food web by using pictures of various animals/plants on a poster. The students will be using their knowledge from the unit to complete the activity by describing the different niches and roles each organism fills in their respective ecosystem.

**Writing Task**: Students will create an image web and complete a writing task. Students will identify the needs of living things and trace each need back to a natural origin. The visual aid will show pictorial representations of the links while the writing task will fully explain the link between origin and point of consumption.

**LITERATURE**

Wonders: "The Boy Who Drew Birds" page 144
Wonders: "Winter's Tale" page 198
Wonders: "Weslandia" page 224
Wonders: "Fibonacci's Amazing Find" page 258
Wonders: "The Dirt on Dirt" page 324
Wonders: "The Case of the Missing Bees" page 386
Wonders: "Busy, Beneficial Bees" page 390
Wonders: "Global Warming" page 392
Wonders: "Why The Evergreen Trees Never Lose Their Leaves" page 468
Wonders: "Planting the Trees of Kenya" page 496
Wonders: "Survival at 40 Below" page 450

**WEBSITES**

http://www.history.com/videos/aztec-ingenuity#aztec-ingenuity learn how early Aztec chinampas were the precursor to hydroponics
www.arkive.org (Free wildlife photos and videos)
https://switchzoo.com/animal_games.html (Build an online habitat)
http://www.carolina.com/teacher-resources/Video/how-to-set-up-a-terrarium-video/tr11209.tr (How to Set up a Terrarium)
http://www.internet4classrooms.com/science_elem_plants.htm (Collection of Resources on Plants)
http://kidsmaps.ucsb.edu/biomes/index.html#terrestrial (Kids Do Ecology)
http://www.windows2universe.org/earth/Life/life.html (Life and Ecology)
http://phet.colorado.edu/en/simulations/category/by-level/elementary-school (Simulations)
http://nationalzoo.si.edu/education/ (Articles, Webcams, Interactive Activities)
http://www.oregonzoo.org/discover/animals (Oregon Zoo)
http://www.worldwildlife.org/places (Conservation)
http://www.sheppardsoftware.com/content/animals/kidscorner/games/foodchaingame.htm (Interactive Activity)
http://www.state.nj.us/dep/fgw/tandespp.htm (New Jersey Endangered and Threatened Wildlife)
http://concord.org/stem-resources/experiment-ecosystems (Modeling Interdependence)

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http://concord.org/stem-resources/virtual-ecosystem (Virtual Ecosystem)
http://concord.org/sites/default/files/projects/er/materials/TeacherGuide_Activity10-TXMO-final.pdf (Teacher Guide for Virtual Ecosystem)
https://betterlesson.com/lesson/633027/food-webs - Food Web Poster Activity
http://concord.org/stem-resources/variations-and-adaptations (Effect of Climate on Ecosystems)
http://concord.org/stem-resources/competition (Use a Model to Study Effect of Competition)

| **Unit 3:** Space Systems : Stars & the Solar Systems | **Duration:** 26 days |
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**Suggested Accommodations**

**English Language Learners:**
- Elicit Prior Knowledge
- Rephrase
- Understand Context
- Scaffold Language
- Restate
- Cooperative Grouping

**Special Education/Students with Disabilities:**
- One on one instruction
- Adaptive devices
- Provide differentiated instruction as needed
- Follow all IEP modifications/504 plan
- Provide manipulatives or the opportunity to draw solution strategies

**504 Plans:**
- One on one instruction
- Adaptive devices
- Provide differentiated instruction as needed
- Follow all 504 plan modifications
- Provide manipulatives or the opportunity to draw solution strategies

**Gifted and Talented:**
- Problem based learning
- Enrichment Lesson
- Presentation

**Students at Risk of Failure:**
- 1:1
- Repeating Directions
- Small Group
- Manipulatives
- Interactive Notes
- Reteach/Enrichment Pages for each lesson (RTI)

**Economically Disadvantaged:**
- 1:1
- Repeating Directions
- Small Group

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- Manipulatives
- Interactive Notes
- Reteach/Enrichment Pages for each lesson (RTI)

**Culturally Diverse:**
- One on one instruction
- Adaptive devices
- Provide differentiated instruction as needed
- Provide manipulatives or the opportunity to draw solution strategies

| New Jersey Student Learning Standards | |
|---|---|
| 5-PS2-1 | Support an argument that the gravitational force exerted by Earth on objects is directed down. |
| 5-ESS1-1 | Support an argument that differences in the apparent brightness of the sun compared to other stars is due to their relative distances from the Earth. |
| 5-ESS1-2 | Represent data in graphical displays to reveal patterns of daily changes in length and direction of shadows, day and night, and the seasonal appearance of some stars in the night sky. |
| Science and Engineering Practices Learning Progressions | Represent data in graphical displays (bar graphs, pictographs and/or pie charts) to reveal patterns that indicate relationships.<br>Support an argument with evidence, data, or a model. |
| **Discipline Core Ideas**<br><br>Physical Science Learning Progressions<br><br>Earth & Space Science Learning Progressions<br><br>Life Science Learning Progressions | The gravitational force of Earth acting on an object near Earth's surface pulls that object toward the planet's center.<br>The sun is a star that appears larger and brighter than other stars because it is closer. Stars range greatly in their distance from Earth.<br>The orbits of Earth around the sun and of the moon around Earth, together with the rotation of Earth about an axis between its North and South poles, cause observable patterns. These include day and night; daily changes in the length and direction of shadows; and different positions of the sun, moon, and stars at different times of the day, month, and year. |
| Crosscutting Concepts | Similarities and differences in patterns can be used to sort, classify, communicate and analyze simple rates of change for natural phenomena.<br>Cause and effect relationships are routinely identified and used to explain change.<br>Natural objects exist from the very small to the immensely large. |
| Engineering, Technology and the Application of Science Learning Progressions | |

| Interdisciplinary Connections |
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**Language Arts Standards**

- RI.5.1 - Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text (3-5-ETS1-2)
- RI.5.1 - Draw on information from multiple print or digital sources, demonstrating the ability to locate an answer to a question quickly or to solve a problem efficiently. (3-5-ETS1-2)
- RI.5.9 - Integrate information from several tests on the same topic in order to write or speak about the subject knowledgeably (3-5-ETS1-2)
- W.5.7 - Conduct short research projects that use several sources to build knowledge through investigation of different aspects of a topic (3-5 ETS1-1) (3-5 ETS1-3)
- W.5.8 - Recall relevant information from experiences or gather relevant information from print and digital resources; summarize or paraphrase information in notes and finished work and provide a list of sources. (3-5 ETS1-1) (3-5 ETS1-3)
- **SL.PE.5.1**. Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 5 topics and texts, building on others' ideas and expressing their own clearly.

**Mathematics**

- 5.NBT.A.3 - Read, write and compare decimals to thousandths
- 5.NBT.A.4 - Use place value understanding to round decimals to any place
- 5.NBT.B.5-7 - Perform operations with multi-digit whole numbers and with decimals to hundredths
- 5.NF.A- Use equivalent fractions as a strategy to add and subtract fractions
- 5.NF.B - Apply and extend previous understanding of multiplication and division to multiply and divide fractions
- 5M.A.1 - Convert like measurement units within a given measurement system
- 5.M.B.2-4 - Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition
- 5.DL.A.1-4 - Understand and analyze data visualizations
- 5.DL.B.5 - Represent and interpret data

**Computer Science & Design Thinking**

- 8.1.5.A.3. Use a graphic organizer to organize information about a problem or issue.
- 8.1.5.E.1. Use digital tools to research and evaluate the accuracy of, relevance to, and appropriateness of using print and non-print electronic information sources to complete a variety of tasks.
- 8.1.5.DA.3: Organize and present collected data visually to communicate insights gained from different views of the data.
- 8.1.5.DA.4: Organize and present climate change data visually to highlight relationships or support a claim.
- 8.2.5.ITH.1: Explain how societal needs and wants influence the development and function of a product and a system
- 8.2.5.EC.1: Analyze how technology has contributed to or reduced inequities in local and global communities and determine its short- and long-term effects.
- 8.2.8.ITH.1: Explain how the development and use of technology influences economic, political, social, and cultural issues.
- 8.2.8.EC.1: Explain ethical issues that may arise from the use of new technologies

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## Career Readiness, Life Literacies & Key Skills

- 9.1.5.CR.1: Compare various ways to give back and relate them to your strengths, interests, and other personal factors.
- 9.1.5.FP.3: Analyze how spending choices and decision-making can result in positive or negative consequences.
- 9.2.5.CAP.1: Evaluate personal likes and dislikes and identify careers that might be suited to personal likes.
- 9.2.5.CAP.6: Compare the characteristics of a successful entrepreneur with the traits of successful employees
- 9.4.5.CT.1: Identify and gather relevant data that will aid in the problem-solving process (e.g., 2.1.5.EH.4, 4-ESS3-1, 6.3.5.CivicsPD.2).
- 9.4.5.CT.3: Describe how digital tools and technology may be used to solve problems.
- 9.4.5.GCA.1: Analyze how culture shapes individual and community perspectives and points of view (e.g., 1.1.5.C2a, RL.5.9, 6.1.5.HistoryCC.8).

| Career Readiness, Life Literacies, and Key Skills Practices | |
|---|---|
| Act as a responsible and contributing community member and employee. | Students understand the obligations and responsibilities of being a member of a community, and they demonstrate this understanding every day through their interactions with others. They are conscientious of the impacts of their decisions on others and the environment around them. They think about the near-term and long-term consequences of their actions and seek to act in ways that contribute to the betterment of their teams, families, community and workplace. They are reliable and consistent in going beyond the minimum expectation and in participating in activities that serve the greater good. |
| Attend to financial well-being. | Students take regular action to contribute to their personal financial well-being, understanding that personal financial security provides the peace of mind required to contribute more fully to their own career success. |
| Consider the environmental, social and economic impacts of decisions. | Students understand the interrelated nature of their actions and regularly make decisions that positively impact and/or mitigate negative impact on other people, organization, and the environment. They are aware of and utilize new technologies, understandings, procedures, materials, and regulations affecting the nature of their work as it relates to the impact on the social condition, the environment and the profitability of the organization. |
| Demonstrate creativity and innovation. | Students regularly think of ideas that solve problems in new and different ways, and they contribute those ideas in a useful and productive manner to improve their organization. They can consider unconventional ideas and suggestions as solutions to issues, tasks or problems, and they discern which ideas and suggestions will add greatest value. They seek new methods, practices, and ideas from a variety of sources and seek to apply those ideas to their own workplace. They take action on their ideas and understand how to bring innovation to an organization. |
| Utilize critical thinking to make | Students readily recognize problems in the workplace, understand the nature of the problem, and devise effective plans to solve the problem. They are aware of problems |

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| sense of problems and persevere in solving them. | when they occur and take action quickly to address the problem; they thoughtfully investigate the root cause of the problem prior to introducing solutions. They carefully consider the options to solve the problem. Once a solution is agreed upon, they follow through to ensure the problem is solved, whether through their own actions or the actions of others. |
| Model integrity, ethical leadership and effective management. | Students consistently act in ways that align personal and community-held ideals and principles while employing strategies to positively influence others in the workplace. They have a clear understanding of integrity and act on this understanding in every decision. They use a variety of means to positively impact the directions and actions of a team or organization, and they apply insights into human behavior to change others' actions, attitudes and/or beliefs. They recognize the near-term and long-term effects that management's actions and attitudes can have on productivity, morals and organizational culture. |
| Plan education and career paths aligned to personal goals. | Students take personal ownership of their own education and career goals, and they regularly act on a plan to attain these goals. They understand their own career interests, preferences, goals, and requirements. They have perspective regarding the pathways available to them and the time, effort, experience and other requirements to pursue each, including a path of entrepreneurship. They recognize the value of each step in the education and experiential process, and they recognize that nearly all career paths require ongoing education and experience. They seek counselors, mentors, and other experts to assist in the planning and execution of career and personal goals. |
| Use technology to enhance productivity, increase collaboration and communicate effectively. | Students find and maximize the productive value of existing and new technology to accomplish workplace tasks and solve workplace problems. They are flexible and adaptive in acquiring new technology. They are proficient with ubiquitous technology applications. They understand the inherent risks-personal and organizational-of technology applications, and they take actions to prevent or mitigate these risks. |
| Work productively in teams while using cultural/global competence. | Students positively contribute to every team, whether formal or informal. They apply an awareness of cultural differences to avoid barriers to productive and positive interaction. They find ways to increase the engagement and contribution of all team members. They plan and facilitate effective team meetings. |

| Evidence of Student Learning | |
|---|---|
| **Formative Tasks:**<br>• Oral Questioning<br>• Class work<br>• Student Conference<br>• Self-Assessment<br>• Think-Pair-Share<br>• Hand Signals<br>• Peer Reflections<br>• Constructive Response | **Alternative Assessments:**<br>• Manipulative Driven Assessment<br>• Modified/Teacher Created Assessments<br>• Visual Representation of Skills Assessed<br>• Modified Classwork Assignments<br>• Modified Benchmarks |

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| • Teacher Observation<br>• Exit Slip | |
| **Summative Assessments:**<br>• Quizzes<br>• Tests<br>• Unit Projects<br>• Presentations<br>• State Assessment | **Benchmark Assessments:**<br>• State Assessment |

| Knowledge & Skills | |
|---|---|
| **Essential Understanding:**<br>*Students will understand that…*<br>• Stars range greatly in size and distance from Earth, and this can explain their relative brightness.<br>• The Earth's orbit and rotation and the orbit of the moon round Earth cause observable patterns. | **Essential Questions:**<br>• How does the force of gravity impact life on Earth?<br>• Why does the sun appear brighter than other stars?<br>• How does Earth's position, relative to the sun, impact the length of day and night, the seasonal appearance of some stars, and the direction of shadows? |

| Core Instructional & Supplemental Materials |
|---|
| **Make a Constellation** - The students will take/find a photograph of the night sky. Then, they will create their own constellation and write a story/myth explaining its origins. They will need to describe the coordinates of at least 3 of the stars in their constellation. |
| **Star Brightness** - Students will explore the brightness of star brightness by analyzing a picture of the night sky, then replicate these concepts using a dark room flashlight. The students will be using their knowledge from the unit to complete the demonstration by describing the differences in the brightness of stars based on their respective differences. |
| **Patterns of the Moon** - Students will explore the phases of the moon and how the moon appears to change at night by watching a video and researching an online source. The students will be using their knowledge from the unit to complete the activity by describing the changes of the moon's phases and why they occur. |
| **Star Lab: Demonstration** - Students will observe the replicated night sky and identify various constellations and celestial phenomena. The students will be using their knowledge from the unit to complete the activity by describing the position of the stars in the night sky. |
| **Measurement of Shadows** - Students will explore how shadows changed by measuring their shadows outside throughout the day and investigating with a marker and flashlight. The students will be using their knowledge from the unit to complete the activity by measuring and charting the changes of their shadows over the course of one day. |
| **The Adventures of Plaid Pete**: He's going down! - The students will describe how Earth's gravitational force pull objects towards Earth's center through a reader's theater activity and an accompanying lab sheet. The |

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students will be using their knowledge from the unit to describe the gravitational forces of the Earth by recognizing and analyzing the different scenarios presented in each story.

**LITERATURE**

Wonders: When Is a Planet Not a Planet? Page 346

**WEBSITES**

- http://stem-talk.weebly.com/sample-lessons.html (STEM Space Lessons)
- https://marsed.asu.edu/solar-system-scale-and-size - (Scale of Solar System)
- http://www.kihttp://amazing-space.stsci.edu/resources/explorations/index.shtml - (Resources)
- dsastronomy.com/solar_system.htm - (Planet Resources)
- https://betterlesson.com/lesson/resource/3227528/plaid-pete-is-finding-earths-place-in-the-universe-lab-sheet-lesson-4 (Lesson plan gravitational force)

| **Unit 4:** Earth's Systems | **Duration:** 20 Days (May - June) |
|---|---|

**Suggested Accommodations**

**English Language Learners:**
- Elicit Prior Knowledge
- Rephrase
- Understand Context
- Scaffold Language
- Restate
- Cooperative Grouping

**Special Education/Students with Disabilities:**
- One on one instruction
- Adaptive devices
- Provide differentiated instruction as needed
- Follow all IEP modifications/504 plan
- Provide manipulatives or the opportunity to draw solution strategies

**504 Plans:**
- One on one instruction
- Adaptive devices
- Provide differentiated instruction as needed
- Follow all 504 plan modifications
- Provide manipulatives or the opportunity to draw solution strategies

**Gifted and Talented:**
- Problem based learning
- Enrichment Lesson
- Presentation

**Students at Risk of Failure:**
- 1:1
- Repeating Directions

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- Small Group
- Manipulatives
- Interactive Notes
- Reteach/Enrichment Pages for each lesson (RTI)

**Economically Disadvantaged:**

- 1:1
- Repeating Directions
- Small Group
- Manipulatives
- Interactive Notes
- Reteach/Enrichment Pages for each lesson (RTI)

**Culturally Diverse:**

- One on one instruction
- Adaptive devices
- Provide differentiated instruction as needed
- Provide manipulatives or the opportunity to draw solution strategies

| New Jersey Student Learning Standards | |
|---|---|
| 5-ESS2-1 | Develop a model using an example to describe ways the geosphere, biosphere, hydrosphere, and/or atmosphere interact. |
| 5-ESS2-2 | Describe and graph the amounts and percentages of water and fresh water in various reservoirs to provide evidence about the distribution of water on Earth. |
| 5-ESS3-1 | Obtain and combine information about ways individual communities use science ideas to protect the Earth's resources and environment. |
| Science and Engineering Practices Learning Progressions | Develop a model using an example to describe a scientific principle.<br>Describe and graph quantities such as area and volume to address scientific questions.<br>Obtain and combine information from books and/or other reliable media to explain phenomena or solutions to a design problem. |
| **Discipline Core Ideas**<br><br>Physical Science Learning Progressions<br><br>Earth & Space Science Learning Progressions<br><br>Life Science Learning Progressions | Earth's major systems are the geosphere (solid and molten rock, soil, and sediments), the hydrosphere (water and ice), the atmosphere (air), and the biosphere (living things, including humans). These systems interact in multiple ways to affect Earth's surface materials and processes. The ocean supports a variety of ecosystems and organisms, shapes landforms, and influences climate. Winds and clouds in the atmosphere interact with the landforms to determine patterns of weather.<br>Nearly all of Earth's available water is in the ocean. Most freshwater is in glaciers or underground; only a tiny fraction is in streams, lakes, wetlands, and the atmosphere. |

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| Crosscutting Concepts | Standard units are used to measure and describe physical quantities such as weight and volume.<br>A system can be described in terms of its components and their interactions.<br>Science findings are limited to questions that can be answered with empirical evidence. |

Engineering, Technology and the Application of Science Learning Progressions

## Interdisciplinary Connections

**Language Arts Standards**

- RI.5.1 - Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text (3-5-ETS1-2)
- RI.5.1 - Draw on information from multiple print or digital sources, demonstrating the ability to locate an answer to a question quickly or to solve a problem efficiently. (3-5-ETS1-2)
- RI.5.9 - Integrate information from several tests on the same topic in order to write or speak about the subject knowledgeably (3-5-ETS1-2)
- W.5.7 - Conduct short research projects that use several sources to build knowledge through investigation of different aspects of a topic (3-5 ETS1-1) (3-5 ETS1-3)
- W.5.8 - Recall relevant information from experiences or gather relevant information from print and digital resources; summarize or paraphrase information in notes and finished work and provide a list of sources. (3-5 ETS1-1) (3-5 ETS1-3)
- **SL.PE.5.1**. Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 5 topics and texts, building on others' ideas and expressing their own clearly.

**Mathematics**

- 5.NBT.A.3 - Read, write and compare decimals to thousandths
- 5.NBT.A.4 - Use place value understanding to round decimals to any place
- 5.NBT.B.5-7 - Perform operations with multi-digit whole numbers and with decimals to hundredths
- 5.NF.A- Use equivalent fractions as a strategy to add and subtract fractions
- 5.NF.B - Apply and extend previous understanding of multiplication and division to multiply and divide fractions
- 5M.A.1 - Convert like measurement units within a given measurement system
- 5.M.B.2-4 - Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition
- 5.DL.A.1-4 - Understand and analyze data visualizations
- 5.DL.B.5 - Represent and interpret data

## Computer Science & Design Thinking

- 8.1.5.A.3. Use a graphic organizer to organize information about a problem or issue.
- 8.1.5.E.1. Use digital tools to research and evaluate the accuracy of, relevance to, and appropriateness of using print and non-print electronic information sources to complete a variety of tasks.
- 8.1.5.DA.3: Organize and present collected data visually to communicate insights gained from different views of the data.

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- 8.1.5.DA.4: Organize and present climate change data visually to highlight relationships or support a claim.
- 8.2.5.ITH.1: Explain how societal needs and wants influence the development and function of a product and a system
- 8.2.5.EC.1: Analyze how technology has contributed to or reduced inequities in local and global communities and determine its short- and long-term effects.
- 8.2.8.ITH.1: Explain how the development and use of technology influences economic, political, social, and cultural issues.
- 8.2.8.EC.1: Explain ethical issues that may arise from the use of new technologies

**Career Readiness, Life Literacies & Key Skills**

- 9.1.5.CR.1: Compare various ways to give back and relate them to your strengths, interests, and other personal factors.
- 9.1.5.FP.3: Analyze how spending choices and decision-making can result in positive or negative consequences.
- 9.2.5.CAP.1: Evaluate personal likes and dislikes and identify careers that might be suited to personal likes.
- 9.2.5.CAP.6: Compare the characteristics of a successful entrepreneur with the traits of successful employees
- 9.4.5.CT.1: Identify and gather relevant data that will aid in the problem-solving process (e.g., 2.1.5.EH.4, 4-ESS3-1, 6.3.5.CivicsPD.2).
- 9.4.5.CT.3: Describe how digital tools and technology may be used to solve problems.
- 9.4.5.GCA.1: Analyze how culture shapes individual and community perspectives and points of view (e.g., 1.1.5.C2a, RL.5.9, 6.1.5.HistoryCC.8).

| Career Readiness, Life Literacies, and Key Skills Practices | |
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| Act as a responsible and contributing community member and employee. | Students understand the obligations and responsibilities of being a member of a community, and they demonstrate this understanding every day through their interactions with others. They are conscientious of the impacts of their decisions on others and the environment around them. They think about the near-term and long-term consequences of their actions and seek to act in ways that contribute to the betterment of their teams, families, community and workplace. They are reliable and consistent in going beyond the minimum expectation and in participating in activities that serve the greater good. |
| Attend to financial well-being. | Students take regular action to contribute to their personal financial well-being, understanding that personal financial security provides the peace of mind required to contribute more fully to their own career success. |
| Consider the environmental, social and | Students understand the interrelated nature of their actions and regularly make decisions that positively impact and/or mitigate negative impact on other people, organization, and the environment. They are aware of and utilize new technologies, understandings, procedures, materials, and regulations affecting the nature of their |

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| economic impacts of decisions. | work as it relates to the impact on the social condition, the environment and the profitability of the organization. |
| Demonstrate creativity and innovation. | Students regularly think of ideas that solve problems in new and different ways, and they contribute those ideas in a useful and productive manner to improve their organization. They can consider unconventional ideas and suggestions as solutions to issues, tasks or problems, and they discern which ideas and suggestions will add greatest value. They seek new methods, practices, and ideas from a variety of sources and seek to apply those ideas to their own workplace. They take action on their ideas and understand how to bring innovation to an organization. |
| Utilize critical thinking to make sense of problems and persevere in solving them. | Students readily recognize problems in the workplace, understand the nature of the problem, and devise effective plans to solve the problem. They are aware of problems when they occur and take action quickly to address the problem; they thoughtfully investigate the root cause of the problem prior to introducing solutions. They carefully consider the options to solve the problem. Once a solution is agreed upon, they follow through to ensure the problem is solved, whether through their own actions or the actions of others. |
| Model integrity, ethical leadership and effective management. | Students consistently act in ways that align personal and community-held ideals and principles while employing strategies to positively influence others in the workplace. They have a clear understanding of integrity and act on this understanding in every decision. They use a variety of means to positively impact the directions and actions of a team or organization, and they apply insights into human behavior to change others' actions, attitudes and/or beliefs. They recognize the near-term and long-term effects that management's actions and attitudes can have on productivity, morals and organizational culture. |
| Plan education and career paths aligned to personal goals. | Students take personal ownership of their own education and career goals, and they regularly act on a plan to attain these goals. They understand their own career interests, preferences, goals, and requirements. They have perspective regarding the pathways available to them and the time, effort, experience and other requirements to pursue each, including a path of entrepreneurship. They recognize the value of each step in the education and experiential process, and they recognize that nearly all career paths require ongoing education and experience. They seek counselors, mentors, and other experts to assist in the planning and execution of career and personal goals. |
| Use technology to enhance productivity, increase collaboration and communicate effectively. | Students find and maximize the productive value of existing and new technology to accomplish workplace tasks and solve workplace problems. They are flexible and adaptive in acquiring new technology. They are proficient with ubiquitous technology applications. They understand the inherent risks-personal and organizational-of technology applications, and they take actions to prevent or mitigate these risks. |
| Work productively in teams while using cultural/global competence. | Students positively contribute to every team, whether formal or informal. They apply an awareness of cultural differences to avoid barriers to productive and positive interaction. They find ways to increase the engagement and contribution of all team members. They plan and facilitate effective team meetings. |

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## Evidence of Student Learning

**Formative Tasks:**
- Oral Questioning
- Class work
- Student Conference
- Self-Assessment
- Think-Pair-Share
- Hand Signals
- Peer Reflections
- Constructive Response
- Teacher Observation
- Exit Slip

**Alternative Assessments:**
- Manipulative Driven Assessment
- Modified/Teacher Created Assessments
- Visual Representation of Skills Assessed
- Modified Classwork Assignments
- Modified Benchmarks

**Summative Assessments:**
- Quizzes
- Tests
- Unit Projects
- Presentations
- State Assessment

**Benchmark Assessments:**
- State Assessment

## Knowledge & Skills

*Students will understand that…*
- Some events happen very quickly; others occur very slowly over time.
- Four major Earth systems interact.
- Rainfall helps to shape the land and affects the types of living things found in a region.
- Most of Earth's water is in the ocean and much of the Earth's freshwater is in glaciers or underground.
- Social activities have had major effects on the land, ocean, atmosphere, and even outer space. Society does things to protect Earth's resources and environments.

**Essential Questions:**
- How much water can be found in different places on Earth?
- How do the geosphere, biosphere, hydrosphere, and/or atmosphere interact?
- How are saltwater and freshwater distributed on Earth?
- How do individual communities use science ideas to protect the Earth's resources and environment?

## Core Instructional & Supplemental Materials

**Systems Interlocked** - The students will design and build a model representing each system learned (geosphere, biosphere, atmosphere, and hydrosphere) and clearly demonstrate the interactions of the systems by pairing them together.

**Arbor Day Poster Contest** - Students will explore the importance and significance of trees and water in their local town and county. To show the importance, they will create poems, posters, and reports

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describing/promoting the importance of trees to the carbon/oxygen, nitrogen, and water cycles on a local level.

**Watershed Model** - Teachers will demonstrate the effects of pollution of the water cycle and how it affects their locality. Students will describe the effects of fertilizers and deforestation on the water cycle on a local level. The students will be using their knowledge from the unit to complete the activity by describing the ways to lower our impact on the water cycle.

**Rock Cycle** - Students will demonstrate and replicate the different stages of the rock cycle using clay. The students will be using their knowledge from the unit to complete the demonstration by observing the differences in the newly formed "rock" out of clay and describe what causes these differences/changes to occur.

**Water Cycle** - Students will describe the process/steps of the water cycle, then examine the cycle by analyzing changes that take place in water. The students will be using their knowledge from the unit to complete the activity by stating the specific changes that takes place in a bowl of heated water covered by plastic wrap.

**Percentage of Water Demo** - Teachers will first describe the lack of water on the planet. Students will explore the amount of water on the Earth that is usable by measuring a variety of water amounts that are analogous to the amount of water on the Earth. The students will be using their knowledge from the unit to complete the demonstration by describing the amount of fresh water on the Earth in comparison to the amount of water that is actually on the Earth.

**LITERATURE**

Wonders: "The Story of Snow" page 242
Wonders: "One Well" page 306
*The Ducks of Hilo: The Opala Hunters*.

**WEBSITES**

http://www.crscience.org/lessonplans/5_FollowtheRiver_Penny_1112.pdf (Follow the River to Clean Water)
http://www.earthsciweek.org/classroom-activities/groundwater-movement (Ground Water Movement)
http://climatekids.nasa.gov/next-generation-standards/review// (Climate Kids)
https://www.populationeducation.org/content/ngss-lesson-plan-elementary-grades-water-water-everywhere (Water, Water Everywhere)
http://www.miseagrant.umich.edu/lessons/lessons/by-broad-concept/earth-science/water-quantity (Teaching Great Lake Science)
http://water.usgs.gov/edu/earthwherewater.html - (Water Data for Earth)
http://www.ciese.org/curriculum/tempproj/ - (The Global Sun Temperature Project)

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| **Original Adoption:** 2020 NJSLS Science, Social Studies, Career Readiness, Life Literacies & Key Skills, Computer Design & Thinking, Visual & Performing Arts, World Language, Comprehensive Health and Physical Education (9-12-22); 2023 NJSLS English Language Arts (9-23-24); Math NJSLS Mathematics (9-23-24) |
| **Created By: Laurie McAvoy** |
| **Updated Date: September 17, 2026** |
| **Updated By: Megan Banach** |

Intent and Spirit

The New Jersey Student Learning Standards for Science (NJSLS-S) describe the expectations for what students should know and be able to do as well as promote three-dimensional science instruction across the three science domains (i.e., physical sciences, life science, Earth and space sciences). From the earliest grades, the expectation is that students will engage in learning experiences that enable them to investigate phenomena, design solutions to problems, make sense of evidence to construct arguments, and critique and discuss those arguments (in appropriate ways relative to their grade level).

The foundation of the NJSLS-S reflects three dimensions — science and engineering practices, disciplinary core ideas, and crosscutting concepts. The performance expectations are derived from the interplay of these three dimensions. It is essential that these three components are integrated into all learning experiences. Within each standard document, the three dimensions are intentionally presented as integrated components to foster sensemaking and designing solutions to problems. Because the NJSLS-S is built on the notions of coherence and contextuality, each of the science and engineering practices and crosscutting concepts appear multiple times across topics and at every grade level. Additionally, the three dimensions should be an integral part of every curriculum unit and should not be taught in isolation.

Mission

All students will develop an understanding of scientific concepts and processes essential for informed decision-making, meaningful participation in civic life, and readiness for postsecondary opportunities, including careers in STEM fields.

Vision

Prepare students to become scientifically literate individuals who can effectively:

- Apply scientific thinking, skills, and understanding to real-world phenomena and problems;
- Engage in systems thinking and modeling to explain phenomena and to give a context for the ideas to be learned;
- Conduct investigations, solve problems, and engage in discussions;
- Discuss open-ended questions that focus on the strength of the evidence used to generate claims;
- Read and evaluate multiple sources, including science-related magazine and journal articles and web-based resources to gain knowledge about current and past science problems and solutions and develop well-reasoned claims; and
- Communicate ideas through journal articles, reports, posters, and media presentations that explain and argue.

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| Recommended Pacing Guide | |
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| Unit 1: Introduction to Engineering and Design | 10 days (September) ongoing |
| Unit 2: Waves and Electromagnetic Radiation | 11 days (October) |
| Unit 3: Structure, Function, and Information Processing (Cells) | 14 days (November – December) |
| Unit 4: Matter and Energy in Organisms and Ecosystems | 16 days (January – February) |
| Unit 5: Weather and Climate | 15 days (February - March) |
| Unit 6: Space Systems | 24 days (April – June) |

**Alignment with State Mandates**

The following colors are used throughout this document to indicate areas in which the curriculum is aligned with the following NJSA requirements:

- Holocaust and genocides (N.J.S.A. 18A:35-28)
- History and contributions of African-Americans (Amistad Law) (N.J.S.A. 18A:35-4.43)
- Highlight and promote diversity and inclusion (Diversity & Inclusion Law) (N.J.S.A. 18A:35-4.36a)
- History of disabled and LGBT persons included in middle and high school curriculum (Section 18A:35-4.35 )
- Asian Americans and Pacific Islanders (N.J.S.A18A:34-4,44)
- Climate Change - to prepare students to understand how and why climate change happens, the impact it has on our local and global communities and to act in informed and sustainable ways. Please click here for specific examples (by subject).

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| **Unit 1:**: Introduction to Engineering and Design | **Duration:** 25 days |
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**Suggested Accommodations**

**English Language Learners:**
- Elicit Prior Knowledge
- Rephrase
- Understand Context
- Scaffold Language
- Restate
- Cooperative Grouping

**Special Education/Students with Disabilities:**
- One on one instruction
- Adaptive devices
- Provide differentiated instruction as needed
- Follow all IEP modifications/504 plan
- Provide manipulatives or the opportunity to draw solution strategies

**504 Plans:**
- One on one instruction
- Adaptive devices
- Provide differentiated instruction as needed
- Follow all 504 plan modifications
- Provide manipulatives or the opportunity to draw solution strategies

**Gifted and Talented:**
- Problem based learning
- Enrichment Lesson
- Presentation

**Students at Risk of Failure:**
- 1:1
- Repeating Directions
- Small Group
- Manipulatives
- Interactive Notes
- Reteach/Enrichment Pages for each lesson (RTI)

**Economically Disadvantaged:**
- 1:1
- Repeating Directions
- Small Group
- Manipulatives
- Interactive Notes
- Reteach/Enrichment Pages for each lesson (RTI)

**Culturally Diverse:**
- One on one instruction
- Adaptive devices
- Provide differentiated instruction as needed

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- Provide manipulatives or the opportunity to draw solution strategies

| New Jersey Student Learning Standards | |
|---|---|
| MS-ETS1-1. | Define the criteria and constraints of a design problem with sufficient precision to ensure a successful solution, taking into account relevant scientific principles and potential impacts on people and the natural environment that may limit possible solutions. |
| MS-ETS1-2. | Evaluate competing design solutions using a systematic process to determine how well they meet the criteria and constraints of the problem. |
| MS-ETS1-3. | Analyze data from tests to determine similarities and differences among several design solutions to identify the best characteristics of each that can be combined into a new solution to better meet the criteria for success. |
| MS-ETS1-4. | Develop a model to generate data for iterative testing and modification of a proposed object, tool, or process such that an optimal design can be achieved. |
| Science and Engineering Practices Learning Progressions | **Asking Questions and Defining Problems-**<br>● Define a design problem that can be solved through the development of an object, tool, process or system and includes multiple criteria and constraints, including scientific knowledge that may limit possible solutions<br>**Engaging in Argument from Evidence-**<br>● Evaluate competing design solutions based on jointly developed and agreed-upon design criteria.<br>**Analyzing and Interpreting Data**<br>● Analyze and interpret data to determine similarities and differences in findings.<br>**Developing and Using Models-**<br>● Develop a model to generate data to test ideas about designed systems, including those representing inputs and output |
| **Discipline Core Ideas**<br>Physical Science Learning Progressions<br>Earth & Space Science Learning Progressions<br>Life Science Learning Progressions | **ETS1.A: Defining and Delimiting Engineering Problems-**<br>● The more precisely a design task's criteria and constraints can be defined, the more likely it is that the designed solution will be successful. Specification of constraints includes consideration of scientific principles and other relevant knowledge that are likely to limit possible solutions.<br>**ETS1.B: Developing Possible Solutions-**<br>● There are systematic processes for evaluating solutions with respect to how well they meet the criteria and constraints of a problem.<br>**ETS1.B: Developing Possible Solutions-**<br>● There are systematic processes for evaluating solutions with respect to how well they meet the criteria and constraints of a problem. Sometimes parts of different solutions can be combined to create a solution that is better than any of its predecessors.<br>**ETS1.C: Optimizing the Design Solution-**<br>● Although one design may not perform the best across all tests, identifying the characteristics of the design that performed the best in |

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| | each test can provide useful information for the redesign process—that is, some of those characteristics may be incorporated into the new design. |
| Crosscutting Concepts | **Influence of Science, Engineering, and Technology on Society and the Natural World**<br>● All human activity draws on natural resources and has both short and long-term consequences, positive as well as negative, for the health of people and the natural environment. The uses of technologies and limitations on their use are driven by individual or societal needs, desires, and values; by the findings of scientific research; and by differences in such factors as climate, natural resources, and economic conditions.<br><br>**Cause and Effect-**<br>● Cause and effect relationships may be used to predict phenomena in natural or designed systems.<br><br>**Systems & Systems Models-**<br>● A system is an organized group of related objects or components: models can be used for understanding and predicting the behavior of systems. |
| Engineering, Technology and the Application of Science Learning Progressions | |

## Interdisciplinary Connections

**ELA/Literacy:**

- SL.8.5 Integrate multimedia and visual displays into presentations to clarify information, strengthen claims and evidence, and add interest. (MS-PS4-2)
- WHST.6-8.8 Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation. (MS-LS1-8)

Social Studies

- 6.2.8.EconG.3.a:Explain how the classical civilizations used technology and innovation to enhance agricultural/manufacturing output and commerce, to expand military capabilities, to improve life in urban areas, and to allow for greater division of labor

## Computer Science & Design Thinking

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- 8.1.8.CS.1: Recommend improvements to computing devices in order to improve the ways users interact with the devices.
- 8.1.8.CS.2: Design a system that combines hardware and software components to process data.
- 8.1.8.CS.3: Justify design decisions and explain potential system trade-offs.
- 8.1.8.NI.1: Model how information is broken down into smaller pieces, transmitted as addressed packets through multiple devices over networks and the Internet, and reassembled at the destination.
- 8.1.8.NI.4: Explain how new security measures have been created in response to key malware events.
- 8.1.8.IC.1: Compare the trade-offs associated with computing technologies that affect individual's everyday activities and career options.
- 8.1.8.IC.2: Describe issues of bias and accessibility in the design of existing technologies.
- 8.1.8.DA.4: Transform data to remove errors and improve the accuracy of the data for analysis.
- 8.1.8.DA.5: Test, analyze, and refine computational models.
- 8.1.8.AP.7: Design programs, incorporating existing code, media, and libraries, and give attribution.
- 8.1.8.AP.8: Systematically test and refine programs using a range of test cases and users.
- 8.1.8.AP.9: Document programs in order to make them easier to follow, test, and debug.
- 8.2.8.ED.1: Evaluate the function, value, and aesthetics of a technological product or system, from the perspective of the user and the producer.
- 8.2.8.ED.2: Identify the steps in the design process that could be used to solve a problem.
- 8.2.8.ED.3: Develop a proposal for a solution to a real-world problem that includes a model (e.g., physical prototype, graphical/technical sketch).
- 8.2.8.ED.4: Investigate a malfunctioning system, identify its impact, and explain the step-by-step process used to troubleshoot, evaluate, and test options to repair the product in a collaborative team.
- 8.2.8.ED.7: Design a product to address a real-world problem and document the iterative design process, including decisions made as a result of specific constraints and trade-offs (e.g., annotated sketches).
- 8.2.8.ITH.5: Compare the impacts of a given technology on different societies, noting factors that may make a technology appropriate and sustainable in one society but not in another.
- 8.2.8.ETW.1: Illustrate how a product is upcycled into a new product and analyze the short- and long-term benefits and costs.

## Career Readiness, Life Literacies & Key Skills

- 9.1.8.CR.1: Compare and contrast the role of philanthropy, volunteer service, and charities in community development and the quality of life in a variety of cultures.
- 9.1.8.FP.2: Evaluate the role of emotions, attitudes, and behavior (rational and irrational) in making financial decisions
- 9.1.8.PB.5: Identify factors that affect one's goals, including peers, culture, location, and past experiences.
- 9.2.8.CAP.3: Explain how career choices, educational choices, skills, economic conditions, and personal behavior affect income
- 9.2.12.CAP.7: Use online resources to examine licensing, certification, and credentialing requirements at the local, state, and national levels to maintain compliance with industry requirements in areas of career interest.
- 9.4.8.CI.1: Assess data gathered on varying perspectives on causes of climate change (e.g., cross cultural, gender-specific, generational), and determine how the data can best be used to design multiple potential solutions (e.g., RI.7.9, 6.SP.B.5, 7.1.NH.IPERS.6, 8.2.8.ETW.4).

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- 9.4.8.GCA.1: Model how to navigate cultural differences with sensitivity and respect (e.g., 1.5.8.C1a).
- 9.4.8.GCA.2: Demonstrate openness to diverse ideas and perspectives through active discussions to achieve a group goal.

| Career Readiness, Life Literacies, and Key Skills Practices | |
|---|---|
| Act as a responsible and contributing community member and employee. | Students understand the obligations and responsibilities of being a member of a community, and they demonstrate this understanding every day through their interactions with others. They are conscientious of the impacts of their decisions on others and the environment around them. They think about the near-term and long-term consequences of their actions and seek to act in ways that contribute to the betterment of their teams, families, community and workplace. They are reliable and consistent in going beyond the minimum expectation and in participating in activities that serve the greater good. |
| Attend to financial well-being. | Students take regular action to contribute to their personal financial well-being, understanding that personal financial security provides the peace of mind required to contribute more fully to their own career success. |
| Consider the environmental, social and economic impacts of decisions. | Students understand the interrelated nature of their actions and regularly make decisions that positively impact and/or mitigate negative impact on other people, organization, and the environment. They are aware of and utilize new technologies, understandings, procedures, materials, and regulations affecting the nature of their work as it relates to the impact on the social condition, the environment and the profitability of the organization. |
| Demonstrate creativity and innovation. | Students regularly think of ideas that solve problems in new and different ways, and they contribute those ideas in a useful and productive manner to improve their organization. They can consider unconventional ideas and suggestions as solutions to issues, tasks or problems, and they discern which ideas and suggestions will add greatest value. They seek new methods, practices, and ideas from a variety of sources and seek to apply those ideas to their own workplace. They take action on their ideas and understand how to bring innovation to an organization. |
| Utilize critical thinking to make sense of problems and persevere in solving them. | Students readily recognize problems in the workplace, understand the nature of the problem, and devise effective plans to solve the problem. They are aware of problems when they occur and take action quickly to address the problem; they thoughtfully investigate the root cause of the problem prior to introducing solutions. They carefully consider the options to solve the problem. Once a solution is agreed upon, they follow through to ensure the problem is solved, whether through their own actions or the actions of others. |
| Model integrity, ethical leadership and effective management. | Students consistently act in ways that align personal and community-held ideals and principles while employing strategies to positively influence others in the workplace. They have a clear understanding of integrity and act on this understanding in every decision. They use a variety of means to positively impact the directions and actions of a team or organization, and they apply insights into human behavior to change others' actions, attitudes and/or beliefs. They recognize the near-term and long-term effects that management's actions and attitudes can have on productivity, morals and organizational culture. |

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| Plan education and career paths aligned to personal goals. | Students take personal ownership of their own education and career goals, and they regularly act on a plan to attain these goals. They understand their own career interests, preferences, goals, and requirements. They have perspective regarding the pathways available to them and the time, effort, experience and other requirements to pursue each, including a path of entrepreneurship. They recognize the value of each step in the education and experiential process, and they recognize that nearly all career paths require ongoing education and experience. They seek counselors, mentors, and other experts to assist in the planning and execution of career and personal goals. |
| Use technology to enhance productivity, increase collaboration and communicate effectively. | Students find and maximize the productive value of existing and new technology to accomplish workplace tasks and solve workplace problems. They are flexible and adaptive in acquiring new technology. They are proficient with ubiquitous technology applications. They understand the inherent risks-personal and organizational-of technology applications, and they take actions to prevent or mitigate these risks. |
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| **Evidence of Student Learning** | |
|---|---|
| **Formative Tasks:**<br>• Oral Questioning<br>• Class work<br>• Student Conference<br>• Self-Assessment<br>• Think-Pair-Share<br>• Hand Signals<br>• Peer Reflections<br>• Constructive Response<br>• Teacher Observation<br>• Exit Slip | **Alternative Assessments:**<br>• Group Work/Class Discussion Rubric<br>• Guided Observations<br>• Questions Starters<br>• Participation Rubric<br>• Modified Tests/Quizzes/Classwork<br>• Science A-Z Activities<br>• Science Related Reading A-Z Activities<br>• Science Related Achieve3000 Articles and Activities |
| **Summative Assessments:**<br>• Quizzes<br>• Tests<br>• Unit Projects<br>• Presentations | **Benchmark Assessments:**<br>Science A-Z Benchmark Assessment<br>• |

| **Knowledge & Skills** | |
|---|---|
| **Enduring Understandings:**<br>*Students will understand that...* | **Essential Questions:**<br>• What are the steps of the Engineering Design Process? |

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| • Science helps man to understand the natural world while engineering helps man to manipulate the natural world in order to solve problems.<br>• Asking questions helps define problems and create solutions.<br>• Models can help explain natural phenomena and communicate ideas.<br>• Analyzing data and testing results can lead to improvements in engineering designs. | • How do we apply the Engineering Design Process to create solutions to real-world problems?<br>• How do we determine when solutions are effective?<br>• What careers utilize the Engineering Design Process? |
| **Content** | **Skills** |
| *Students will know...*<br>• The Engineering Design Process (EDP) is a series of five steps applied cyclically.<br>• How to safely utilize all equipment, materials, and furniture in the STEAM Lab.<br>• The various cooperative learning jobs available in the engineering teams. | *Students will be able to …*<br>• Work in teams to solve engineering challenges.<br>• Apply the Engineering Design Process to solve engineering challenges.<br>• Identify careers that utilize the Engineering Design Process. |

| **Instructional Plan** | |
|---|---|
| **Suggested Activities** | **Resources** |
| **Toothpick Bridge**: familiarize students with the design process. This activity requires students to enlist their innovation and creativity and practice making claims based on evidence. | Resources in the Science closet, in the science binder. |
| Robotics: Students will choose from multiple different robotic projects to show an understanding of the design process. | http://www.sciencebuddies.org/science-fair-projects/search.shtml?v=ia&ia=Robotics |
| **Ping Pong Catapult:** students will find the right setting to reliably launch a ping-pong ball from the catapult into a target from a certain distance away | http://www.sciencebuddies.org/science-fair-projects/project-ideas/ApMech_p008/mechanical-engineering/ping-pong-catapult |
| **Slinking Slinkiest:** Students will investigate how the angle of an inclined planes affects how a slinky can walk down an incline plane. Students will investigate different inclines and build one in a team. Each team will test their incline out with a slinky and be rated on effectiveness. | http://www.sciencebuddies.org/science-fair-projects/project_ideas/ApMech_p019.shtml |
| **LITERATURE** | |
| • *Technology: A Byte-Sized World!* by Dan Green<br>• *Hidden Worlds: Looking Through a Scientist's Microscope* by Stephen Kramer | |

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- *Hit it! History of Tools* by Donna H. Rice
- *Design Thinking* by Kristin Fontichiaro

**Inclusivity/LGBTQ and Individuals with Disabilities Resources**
BrainPop Inclusivity List

| WEBSITES | |
|---|---|
| **Websites** | |
| http://stemcollaborative.org/additionalResources.html (resource of STEM activities) This website provides many activities for the students and teachers to use. | https://www.nsf.gov/news/classroom/engineering.jsp (National Science Foundation engineering classroom resources) This website will provide the students with important information. |
| https://www.teachengineering.org/ (standards-aligned engineering lessons and hands-on activities for science, engineering, and math) | http://pbskids.org/designsquad/parentseducators/index.html (resource of STEM activities) |
| http://tryengineering.org/lesson-plans (not-for-profit organization of technology professionals dedicated to advancing technology for the benefit of humanity) | http://teachers.egfi-k12.org/category/lessons/grades-6-8-lessons/ (resource of classroom engineering projects and professional development) |
| http://stem-works.com/ (resource of STEM activities) | http://www.sciencebuddies.org/science-fair-projects/teacher_resources.shtml (resource of classroom science activities and projects) |
| **Individuals with disabilities Resources**<br>○ https://www.mentalfloss.com/article/87068/12-disabled-scientists-who-made-world-better-place<br>○ https://www.sciencenewsforstudents.org/article/disabilities-dont-stop-these-experts-science-and-tech<br>○ https://www.sciencehistory.org/science-and-disability<br>○ https://whyy.org/articles/new-philly-exhibit-celebrates-lives-contributions-of-scientists-with-disabilities/ | **LGBTQ plus Resources**<br>○ https://www.discovery.com/science/LGBT-Scientists-Who-Changed-World<br>○ https://www.osc.org/important-lgbtq-scientists-who-left-a-mark-on-stem-fields/<br>○ https://www.ideatovalue.com/insp/nickskillicorn/2019/06/14-lgbtq-innovators-inventors-and-scientists-who-changed-the-world/<br>○ https://www.pinknews.co.uk/2018/07/05/queer-scientists-history-first-lgbtstemday/ |

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| Grade: 6 | Content Area: Science |
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| Unit 2: Waves and Electromagnetic Radiation | Duration: 11 days (October) |
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## Suggested Accommodations

**English Language Learners:**
- Elicit Prior Knowledge
- Rephrase
- Understand Context
- Scaffold Language
- Restate
- Cooperative Grouping

**Special Education/Students with Disabilities:**
- One on one instruction
- Adaptive devices
- Provide differentiated instruction as needed
- Follow all IEP modifications/504 plan
- Provide manipulatives or the opportunity to draw solution strategies

**504 Plans:**
- One on one instruction
- Adaptive devices
- Provide differentiated instruction as needed
- Follow all 504 plan modifications
- Provide manipulatives or the opportunity to draw solution strategies

**Gifted and Talented:**
- Problem based learning
- Enrichment Lesson
- Presentation

**Students at Risk of Failure:**
- 1:1
- Repeating Directions
- Small Group
- Manipulatives
- Interactive Notes
- Reteach/Enrichment Pages for each lesson (RTI)

**Economically Disadvantaged:**
- 1:1
- Repeating Directions
- Small Group
- Manipulatives
- Interactive Notes
- Reteach/Enrichment Pages for each lesson (RTI)

**Culturally Diverse:**
- One on one instruction
- Adaptive devices
- Provide differentiated instruction as needed

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- Provide manipulatives or the opportunity to draw solution strategies

| New Jersey Student Learning Standards | |
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| MS-PS4-1 | Use mathematical representations to describe a simple model for waves that includes how the amplitude of a wave is related to the energy in a wave. [Clarification Statement: Emphasis is on describing waves with both qualitative and quantitative thinking.] [Assessment Boundary: Assessment does not include electromagnetic waves and is limited to standard repeating waves.] |
| PS4.B | Explain why we can see the color of an object in space but cannot hear sound. |
| PS4.B | Use ray diagrams to explain how refracted light and reflected light bring images of distant objects closer and enlarge things that are too small to be observed with an unaided eye. |
| PS4.C | Create a simple model that explains the mechanism for how wave pulses are used to save, transmit, and receive information. |
| MS-PS4-2 | Develop and use a model to describe that waves are reflected, absorbed, or transmitted through various materials. [Clarification Statement: Emphasis is on both light and mechanical waves. Examples of models could include drawings, simulations, and written descriptions.] [Assessment Boundary: Assessment is limited to qualitative applications pertaining to light and mechanical waves.] |
| MS-PS4-3 | Integrate qualitative scientific and technical information to support the claim that digitized signals are a more reliable way to encode and transmit information than analog signals. [Clarification Statement: Emphasis is on a basic understanding that waves can be used for communication purposes. Examples could include using fiber optic cable to transmit light pulses, radio wave pulses in WIFI devices, and conversion of stored binary patterns to make sound or text on a computer screen.] [Assessment Boundary: Assessment does not include binary counting. Assessment does not include the specific mechanism of any given device.] |
| Science and Engineering Practices Learning Progressions | **Planning and Carrying Out Investigations-**<br>Conduct an investigation and evaluate the experimental design to produce data to serve as the basis for evidence that can meet the goals of the investigation. |
| **Discipline Core Ideas**<br><br>Physical Science Learning Progressions<br><br>Earth & Space Science Learning Progressions | **PS2.B: Types of Interactions-**<br>Forces that act at a distance (electric, magnetic, and gravitational) can be explained by fields that extend through space and can be mapped by their effect on a test object (a charged object, or a ball, respectively). |

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| Life Science Learning Progressions | |
| Crosscutting Concepts | **Cause and Effect-**<br>Cause and effect relationships may be used to predict phenomena in natural or designed systems. |
| Engineering, Technology and the Application of Science Learning Progressions | |

## Interdisciplinary Connections

**ELA/Literacy -**

- RST.6-8.7 Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table). (MS-PS1-4)
- RST.6-8.3 Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks. (MS-PS3-3 and MS-PS3-4)
- WHST.6-8.7 Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration. (MS-PS3-3 and MS-PS3-4)
- RST.6-8.1 Cite specific textual evidence to support analysis of science and technical texts, attending to the precise details of explanations or descriptions. (MS-PS3-5)
- WHST.6-8.1 Write arguments focused on discipline content. (MS-PS3-5)
- SL.8.5 Integrate multimedia and visual displays into presentations to clarify information, strengthen claims and evidence, and add interest. (MS-PS4-2)

**Mathematics -**

- 6.NS.C.5 Understand that positive and negative numbers are used together to describe quantities having opposite directions or values (e.g., temperature above/below zero, elevation above/below sea level, credits/debits, positive/negative electric charge); use positive and negative numbers to represent quantities in real-world contexts, explaining the meaning of 0 in each situation. (MS-PS1-4)
- MP.2 Reason abstractly and quantitatively. (MS-PS3-4 and MS-PS3-5)
- 6.SP.B.5 Summarize numerical data sets in relation to their context. (MS-PS3-4)
- 6.RP.A.1 Understand the concept of ratio and use ratio language to describe a ratio relationship between two quantities. (MS-PS3-5)
- 7.RP.A.2 Recognize and represent proportional relationships between quantities. (MS-PS3-5)
- 8.F.A.3 Interpret the equation y = mx + b as defining a linear function, whose graph is a straight line; give examples of functions that are not linear. (MS-PS3-5)

Social Studies

- 6.2.8EconG.3.a:Explain how the classical civilizations used technology and innovation to enhance agricultural/manufacturing output and commerce, to expand military capabilities, to improve life in urban areas, and to allow for greater division of labor

## Computer Science & Design Thinking

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| Grade: 6 | Content Area: Science |
|---|---|

- 8.1.8.CS.1: Recommend improvements to computing devices in order to improve the ways users interact with the devices.
- 8.1.8.CS.2: Design a system that combines hardware and software components to process data.
- 8.1.8.CS.3: Justify design decisions and explain potential system trade-offs.
- 8.1.8.NI.1: Model how information is broken down into smaller pieces, transmitted as addressed packets through multiple devices over networks and the Internet, and reassembled at the destination.
- 8.1.8.NI.4: Explain how new security measures have been created in response to key malware events.
- 8.1.8.IC.1: Compare the trade-offs associated with computing technologies that affect individual's everyday activities and career options.
- 8.1.8.IC.2: Describe issues of bias and accessibility in the design of existing technologies.
- 8.1.8.DA.4: Transform data to remove errors and improve the accuracy of the data for analysis.
- 8.1.8.DA.5: Test, analyze, and refine computational models.
- 8.1.8.AP.7: Design programs, incorporating existing code, media, and libraries, and give attribution.
- 8.1.8.AP.8: Systematically test and refine programs using a range of test cases and users.
- 8.1.8.AP.9: Document programs in order to make them easier to follow, test, and debug.
- 8.2.8.ED.1: Evaluate the function, value, and aesthetics of a technological product or system, from the perspective of the user and the producer.
- 8.2.8.ED.2: Identify the steps in the design process that could be used to solve a problem.
- 8.2.8.ED.3: Develop a proposal for a solution to a real-world problem that includes a model (e.g., physical prototype, graphical/technical sketch).
- 8.2.8.ED.4: Investigate a malfunctioning system, identify its impact, and explain the step-by-step process used to troubleshoot, evaluate, and test options to repair the product in a collaborative team.
- 8.2.8.ED.7: Design a product to address a real-world problem and document the iterative design process, including decisions made as a result of specific constraints and trade-offs (e.g., annotated sketches).
- 8.2.8.ITH.5: Compare the impacts of a given technology on different societies, noting factors that may make a technology appropriate and sustainable in one society but not in another.
- 8.2.8.ETW.1: Illustrate how a product is upcycled into a new product and analyze the short- and long-term benefits and costs.

## Career Readiness, Life Literacies & Key Skills

- 9.1.8.CR.1: Compare and contrast the role of philanthropy, volunteer service, and charities in community development and the quality of life in a variety of cultures.
- 9.1.8.FP.2: Evaluate the role of emotions, attitudes, and behavior (rational and irrational) in making financial decisions
- 9.1.8.PB.5: Identify factors that affect one's goals, including peers, culture, location, and past experiences.
- 9.2.8.CAP.3: Explain how career choices, educational choices, skills, economic conditions, and personal behavior affect income
- 9.2.12.CAP.7: Use online resources to examine licensing, certification, and credentialing requirements at the local, state, and national levels to maintain compliance with industry requirements in areas of career interest.
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| Career Readiness, Life Literacies, and Key Skills Practices | |
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| **Summative Assessments:**<br>• Quizzes<br>• Tests<br>• Unit Projects<br>• Presentations | **Benchmark Assessments:**<br>Science A-Z Benchmark Assessment |

| Knowledge & Skills | |
|---|---|
| **Enduring Understandings:**<br>*Students will understand that...*<br>• *Students will understand that…* | **Essential Questions:**<br>• What is the difference between electromagnetic waves and mechanical |

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| • Mechanical waves transfer energy from particle to particle in matter.<br>• Electromagnetic waves transfer energy through either matter or empty space. | waves as they relate to the transfer of energy?<br>• Explain how knowledge of waves helps us understand our world better and improve the quality of our lives? |
| **Content** | **Skills** |
| *Students will know...*<br>• how light interacts with matter<br>• the properties of sound waves<br>• how waves are produced<br>• the ways in which waves interact with matter<br>• how light differs from other forms of electromagnetic waves.<br>• the difference between electromagnetic and mechanical waves<br>• the factors that affect the strength of electric and magnetic forces (properties of waves) | *Students will be able to …*<br>• Design an invention or model that uses two or three different kinds of electromagnetic waves.<br>• Produce sound at different pitches and investigate how changing wavelength and frequency changes pitch.<br>• Distinguish between mechanical and electromagnetic waves and their role in the transfer of energy through models.<br>• Conduct an experiment to interpret the interactions between mechanical waves.<br>• Demonstrate how waves transfer energy |

| **Instructional Plan** | |
|---|---|
| **Suggested Activities** | **Resources** |
| **Newton Ball Demo** - Swing Time -The students will see how energy changes and moves from place to place. | Resources will be in the science closet. |
| **Rubber Band Car or Airplane** -The students will see potential and kinetic energy at work by building your own rubber band-powered car! | Skill Sharpeners -Science Evan Moor - binder created - will be housed in science lab |
| **Slinky's Making Waves** - students will observe the transfer of energy - energy carried by waves, water, light and sound. | Resources will be in the science closet. |
| **Purple Swirl** - Thermal Energy Activity - The students will see the effects of heat transfer in action - thermal energy does all the work. | Skill Sharpeners -Science Evan Moor - binder created - will be housed in science lab |
| Students will construct periscopes to demonstrate refraction and reflection of light. | http://www.exploratorium.edu/science_explorer/periscope.html |
| **LITERATURE** | |
| • *The Attractive Story of Magnetism with Max Axiom, Super Scientist* by Andrea Gianopoulos<br>• *Sound Waves* by Ian Mahaney<br>• *Energy from Water: Hydroelectric, Tidal, and Wave Power* by Nancy Dickmann | |

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**Inclusivity/LGBTQ and Individuals with Disabilities Resources**
BrainPop Inclusivity List
NOGLSTP

| WEBSITES | |
|---|---|
| http://sciencenetlinks.com/lessons/light-1-making-light-of-science/ (exploration of visible light) | http://www.ducksters.com/science/light_spectrum.php (background information on light spectrum) |
| http://www.discoveryeducation.com/teachers/free-lesson-plans/the-electromagnetic-spectrum-waves-of-energy.cfm (electromagnetic spectrum lesson) | http://www.scienceinschool.org/2009/issue12/microwaves (microwave experiments) |
| https://www.teachengineering.org/view_lesson.php?url=collection/cub_/lessons/cub_soundandlight/cub_soundandlight_lesson7.xml (lesson on visible light and the electromagnetic spectrum) | http://www2.parkland.edu/planetarium/_documents/CosmicColorsTeachersGuide.pdf (color spectrum lesson) |
| **Individuals with disabilities Resources**<br>○ https://www.mentalfloss.com/article/87068/12-disabled-scientists-who-made-world-better-place<br>○ https://www.sciencenewsforstudents.org/article/disabilities-dont-stop-these-experts-science-and-tech<br>○ https://www.sciencehistory.org/science-and-disability<br>○ https://whyy.org/articles/new-philly-exhibit-celebrates-lives-contributions-of-scientists-with-disabilities/ | **LGBTQ plus Resources**<br>○ https://www.discovery.com/science/LGBT-Scientists-Who-Changed-World<br>○ https://www.osc.org/important-lgbtq-scientists-who-left-a-mark-on-stem-fields/<br>○ https://www.ideatovalue.com/insp/nickskillicorn/2019/06/14-lgbtq-innovators-inventors-and-scientists-who-changed-the-world/<br>○ https://www.pinknews.co.uk/2018/07/05/queer-scientists-history-first-lgbtstemday/ |

| Unit 3: Structure, Function, and Information Processing (Cells) | **Duration:** 14 days (November – December) |
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| Suggested Accommodations |
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| **English Language Learners:**<br>• Elicit Prior Knowledge<br>• Rephrase<br>• Understand Context<br>• Scaffold Language<br>• Restate<br>• Cooperative Grouping |

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**Special Education/Students with Disabilities:**
- One on one instruction
- Adaptive devices
- Provide differentiated instruction as needed
- Follow all IEP modifications/504 plan
- Provide manipulatives or the opportunity to draw solution strategies

**504 Plans:**
- One on one instruction
- Adaptive devices
- Provide differentiated instruction as needed
- Follow all 504 plan modifications
- Provide manipulatives or the opportunity to draw solution strategies

**Gifted and Talented:**
- Problem based learning
- Enrichment Lesson
- Presentation

**Students at Risk of Failure:**
- 1:1
- Repeating Directions
- Small Group
- Manipulatives
- Interactive Notes
- Reteach/Enrichment Pages for each lesson (RTI)

**Economically Disadvantaged:**
- 1:1
- Repeating Directions
- Small Group
- Manipulatives
- Interactive Notes
- Reteach/Enrichment Pages for each lesson (RTI)

**Culturally Diverse:**
- One on one instruction
- Adaptive devices
- Provide differentiated instruction as needed
- Provide manipulatives or the opportunity to draw solution strategies

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| New Jersey Student Learning Standards | |
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| MS-LS1-1 | Conduct an investigation to provide evidence that living things are made of cells; either one cell or many different numbers and types of cells. [Clarification Statement: Emphasis is on developing evidence that living things are made of cells, distinguishing between living and nonliving things, and understanding that living things may be made of one cell or many and varied cells.] |

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| MS-LS1-2 | Develop and use a model to describe the function of a cell as a whole and ways parts of cells contribute to the function. [Clarification Statement: Emphasis is on the cell functioning as a whole system and the primary role of identified parts of the cell, specifically the nucleus, chloroplasts, mitochondria, cell membrane, and cell wall.] [*Assessment Boundary: Assessment of organelle structure/function relationships is limited to the cell wall and cell membrane. Assessment of the function of the other organelles is limited to their relationship to the whole cell. Assessment does not include the biochemical function of cells or cell parts.*] |
| MS-LS1-3 | Use argument supported by evidence for how the body is a system of interacting subsystems composed of groups of cells. |
| LS1.D | Develop a model to explain how senses change energy coming from the environment (light, sound waves, chemicals in gases or food, heat or touch/pressure) into electrical signals in the nerves that go into the brain and spinal cord. [*Assessment Boundary: Assessment does not include mechanisms for the transmission of this information.*] |
| MS-LS1-8 | Gather and synthesize information that sensory receptors respond to stimuli by sending messages to the brain for immediate behavior or storage as memories. [*Assessment Boundary: Assessment does not include mechanisms for the transmission of this information.*] |
| Science and Engineering Practices Learning Progressions | **Developing and Using Models**<br>Modeling in 6–8 builds on K–5 experiences and progresses to developing, using, and revising models to describe, test, and predict more abstract phenomena and design systems.<br>● Develop and use a model to describe phenomena. (MS-LS1-1,2,3) (MS-PS1-2)<br>● Develop a model to describe unobservable mechanisms. (MS-LS1-2,7)<br>**Planning and Carrying Out Investigations**<br>Planning and carrying out investigations in 6-8 builds on K-5 experiences and progresses to include investigations that use multiple variables and provide evidence to support explanations or solutions.<br>● Conduct an investigation to produce data to serve as the basis for evidence that meets the goals of an investigation. (MS-LS1-3,4,5,6)<br>**Engaging in Argument from Evidence**<br>Engaging in argument from evidence in 6–8 builds on K–5 experiences and progresses to constructing a convincing argument that supports or refutes claims for either explanations or solutions about the natural and designed world(s).<br>● Use an oral and written argument supported by evidence to support or refute an explanation or a model for a phenomenon. (MS-LS1-3,4,6)<br>**Obtaining, Evaluating, and Communicating Information**<br>Obtaining, evaluating, and communicating information in 6-8 builds on K-5 experiences and progresses to evaluating the merit and validity of ideas and methods.<br><br>Gather, read, and synthesize information from multiple appropriate sources and assess the credibility, accuracy, and possible bias of each publication and methods used, and describe how they are supported or not supported by evidence. (MS-LS1-1,2,3,4,5,6,7,8) |

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| **Discipline Core Ideas**<br><br>Physical Science Learning Progressions<br><br>Earth & Space Science Learning Progressions<br><br>Life Science Learning Progressions | **LS1.A: Structure and Function**<br>● All living things are made up of cells, which is the smallest unit that can be said to be alive. An organism may consist of one single cell (unicellular) or many different numbers and types of cells (multicellular). (MS-LS1-1,2,3)<br>● Within cells, special structures are responsible for particular functions, and the cell membrane forms the boundary that controls what enters and leaves the cell. (MS-LS1-2, MS-LS1-6, MS-LS1-7) (MS-PS1-2)<br>● In multicellular organisms, the body is a system of multiple interacting subsystems. These subsystems are groups of cells that work together to form tissues and organs that are specialized for particular body functions. (MS-LS1-2,3)<br>**LS1.D: Information Processing**<br>Each sense receptor responds to different inputs (electromagnetic, mechanical, chemical), transmitting them as signals that travel along nerve cells to the brain. The signals are then processed in the brain, resulting in immediate behaviors or memories. (MS-LS1-8) |
| Crosscutting Concepts | **Cause and Effect**<br>● Cause and effect relationships may be used to predict phenomena in natural systems. (MS-LS1-6,7,8) (MS-PS1-2)<br>**Scale, Proportion, and Quantity**<br>● Phenomena that can be observed at one scale may not be observable at another scale. (MS-LS1-6,7,8)<br>**Systems and System Models**<br>● Systems may interact with other systems; they may have sub-systems and be a part of larger complex systems. (MS-LS1-3,4,6) (MS-PS1-2)<br>**Structure and Function**<br>● Complex and microscopic structures and systems can be visualized, modeled, and used to describe how their function depends on the relationships among its parts, therefore complex natural structures/systems can be analyzed to determine how they function. (MS-LS1-1,2,3)<br>**Energy and Matter**<br>● Within a natural or designed system, the transfer of energy drives the motion and/or cycling of matter. (MS-LS1-2,3,6,8)<br><br>***Connections to Engineering, Technology and Applications of Science***<br>**Interdependence of Science, Engineering, and Technology**<br>● Engineering advances have led to important discoveries in virtually every field of science, and scientific discoveries have led to the development of entire industries and engineered systems. (MS-LS1-4)<br><br>***Connections to Nature of Science***<br>**Science is a Human Endeavor**<br>Scientists and engineers are guided by habits of mind such as intellectual honesty, tolerance of ambiguity, skepticism, and openness to new ideas. (MS-LS1-4) |
| Engineering, Technology and the Application of Science Learning Progressions | |

| Interdisciplinary Connections |
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**ELA/Literacy -**

- WHST.6-8.7 Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration. (MS-LS1-1)
- SL.8.5 Integrate multimedia and visual displays into presentations to clarify information, strengthen claims and evidence, and add interest. (MS-LS1-2)
- RST.6-8.1 Cite specific textual evidence to support analysis of science and technical texts. (MS-LS1-3)
- RI.6.8 Trace and evaluate the argument and specific claims in a text, distinguishing claims that are supported by reasons and evidence from claims that are not. (MS-LS1-3)
- WHST.6-8.1 Write arguments focused on discipline content. (MS-LS1-3)
- RST.6-8.1 Cite specific textual evidence to support analysis of science and technical texts, attending to the precise details of explanations or descriptions. (MS-LS4-3)
- RST.6-8.7 Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table). (MS-LS4-3)
- RST.6-8.9 Compare and contrast the information gained from experiments, simulations, video, or multimedia sources with that gained from reading a text on the same topic. (MS-LS4-3)

**Mathematics -**

- 6.EE.C.9 Use variables to represent two quantities in a real-world problem that change in relationship to one another; write an equation to express one quantity, thought of as the dependent variable, in terms of the other quantity, thought of as the independent variable. Analyze the relationship between the dependent and independent variables using graphs and tables, and relate these to the equation. (MS-LS1-1, MS-LS1-2, and MS-LS1-3)

Social Studies

- 6.2.8EconG.3.a:Explain how the classical civilizations used technology and innovation to enhance agricultural/manufacturing output and commerce, to expand military capabilities, to improve life in urban areas, and to allow for greater division of labor

**Computer Science & Design Thinking**

- 8.1.8.CS.1: Recommend improvements to computing devices in order to improve the ways users interact with the devices.
- 8.1.8.CS.2: Design a system that combines hardware and software components to process data.
- 8.1.8.CS.3: Justify design decisions and explain potential system trade-offs.
- 8.1.8.NI.1: Model how information is broken down into smaller pieces, transmitted as addressed packets through multiple devices over networks and the Internet, and reassembled at the destination.
- 8.1.8.NI.4: Explain how new security measures have been created in response to key malware events.
- 8.1.8.IC.1: Compare the trade-offs associated with computing technologies that affect individual's everyday activities and career options.
- 8.1.8.IC.2: Describe issues of bias and accessibility in the design of existing technologies.
- 8.1.8.DA.4: Transform data to remove errors and improve the accuracy of the data for analysis.
- 8.1.8.DA.5: Test, analyze, and refine computational models.
- 8.1.8.AP.7: Design programs, incorporating existing code, media, and libraries, and give attribution.

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- 8.1.8.AP.8: Systematically test and refine programs using a range of test cases and users.
- 8.1.8.AP.9: Document programs in order to make them easier to follow, test, and debug.
- 8.2.8.ED.1: Evaluate the function, value, and aesthetics of a technological product or system, from the perspective of the user and the producer.
- 8.2.8.ED.2: Identify the steps in the design process that could be used to solve a problem.
- 8.2.8.ED.3: Develop a proposal for a solution to a real-world problem that includes a model (e.g., physical prototype, graphical/technical sketch).
- 8.2.8.ED.4: Investigate a malfunctioning system, identify its impact, and explain the step-by-step process used to troubleshoot, evaluate, and test options to repair the product in a collaborative team.
- 8.2.8.ED.7: Design a product to address a real-world problem and document the iterative design process, including decisions made as a result of specific constraints and trade-offs (e.g., annotated sketches).
- 8.2.8.ITH.5: Compare the impacts of a given technology on different societies, noting factors that may make a technology appropriate and sustainable in one society but not in another.
- 8.2.8.ETW.1: Illustrate how a product is upcycled into a new product and analyze the short- and long-term benefits and costs.

**Career Readiness, Life Literacies & Key Skills**

- 9.1.8.CR.1: Compare and contrast the role of philanthropy, volunteer service, and charities in community development and the quality of life in a variety of cultures.
- 9.1.8.FP.2: Evaluate the role of emotions, attitudes, and behavior (rational and irrational) in making financial decisions
- 9.1.8.PB.5: Identify factors that affect one's goals, including peers, culture, location, and past experiences.
- 9.2.8.CAP.3: Explain how career choices, educational choices, skills, economic conditions, and personal behavior affect income
- 9.2.12.CAP.7: Use online resources to examine licensing, certification, and credentialing requirements at the local, state, and national levels to maintain compliance with industry requirements in areas of career interest.
- 9.4.8.CI.1: Assess data gathered on varying perspectives on causes of climate change (e.g., cross cultural, gender-specific, generational), and determine how the data can best be used to design multiple potential solutions (e.g., RI.7.9, 6.SP.B.5, 7.1.NH.IPERS.6, 8.2.8.ETW.4).
- 9.4.8.GCA.1: Model how to navigate cultural differences with sensitivity and respect (e.g., 1.5.8.C1a).
- 9.4.8.GCA.2: Demonstrate openness to diverse ideas and perspectives through active discussions to achieve a group goal.

| Career Readiness, Life Literacies, and Key Skills Practices | |
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| Act as a responsible and contributing community member and employee. | Students understand the obligations and responsibilities of being a member of a community, and they demonstrate this understanding every day through their interactions with others. They are conscientious of the impacts of their decisions on others and the environment around them. They think about the near-term and long-term consequences of their actions and seek to act in ways that contribute to the betterment of their teams, families, community and workplace. They are reliable and consistent in |

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| | going beyond the minimum expectation and in participating in activities that serve the greater good. |
| Attend to financial well-being. | Students take regular action to contribute to their personal financial well-being, understanding that personal financial security provides the peace of mind required to contribute more fully to their own career success. |
| Consider the environmental, social and economic impacts of decisions. | Students understand the interrelated nature of their actions and regularly make decisions that positively impact and/or mitigate negative impact on other people, organization, and the environment. They are aware of and utilize new technologies, understandings, procedures, materials, and regulations affecting the nature of their work as it relates to the impact on the social condition, the environment and the profitability of the organization. |
| Demonstrate creativity and innovation. | Students regularly think of ideas that solve problems in new and different ways, and they contribute those ideas in a useful and productive manner to improve their organization. They can consider unconventional ideas and suggestions as solutions to issues, tasks or problems, and they discern which ideas and suggestions will add greatest value. They seek new methods, practices, and ideas from a variety of sources and seek to apply those ideas to their own workplace. They take action on their ideas and understand how to bring innovation to an organization. |
| Utilize critical thinking to make sense of problems and persevere in solving them. | Students readily recognize problems in the workplace, understand the nature of the problem, and devise effective plans to solve the problem. They are aware of problems when they occur and take action quickly to address the problem; they thoughtfully investigate the root cause of the problem prior to introducing solutions. They carefully consider the options to solve the problem. Once a solution is agreed upon, they follow through to ensure the problem is solved, whether through their own actions or the actions of others. |
| Model integrity, ethical leadership and effective management. | Students consistently act in ways that align personal and community-held ideals and principles while employing strategies to positively influence others in the workplace. They have a clear understanding of integrity and act on this understanding in every decision. They use a variety of means to positively impact the directions and actions of a team or organization, and they apply insights into human behavior to change others' actions, attitudes and/or beliefs. They recognize the near-term and long-term effects that management's actions and attitudes can have on productivity, morals and organizational culture. |
| Plan education and career paths aligned to personal goals. | Students take personal ownership of their own education and career goals, and they regularly act on a plan to attain these goals. They understand their own career interests, preferences, goals, and requirements. They have perspective regarding the pathways available to them and the time, effort, experience and other requirements to pursue each, including a path of entrepreneurship. They recognize the value of each step in the education and experiential process, and they recognize that nearly all career paths require ongoing education and experience. They seek counselors, mentors, and other experts to assist in the planning and execution of career and personal goals. |
| Use technology to enhance productivity, increase collaboration and | Students find and maximize the productive value of existing and new technology to accomplish workplace tasks and solve workplace problems. They are flexible and adaptive in acquiring new technology. They are proficient with ubiquitous technology applications. They understand the inherent risks-personal and organizational-of technology applications, and they take actions to prevent or mitigate these risks. |

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| communicate effectively. | |
| Work productively in teams while using cultural/global competence. | Students positively contribute to every team, whether formal or informal. They apply an awareness of cultural differences to avoid barriers to productive and positive interaction. They find ways to increase the engagement and contribution of all team members. They plan and facilitate effective team meetings. |

## Evidence of Student Learning

**Formative Tasks:**
- Oral Questioning
- Class work
- Student Conference
- Self-Assessment
- Think-Pair-Share
- Hand Signals
- Peer Reflections
- Constructive Response
- Teacher Observation
- Exit Slip

**Alternative Assessments:**
- Group Work/Class Discussion Rubric
- Guided Observations
- Questions Starters
- Participation Rubric
- Modified Tests/Quizzes/Classwork
- Science A-Z Activities
- Science Related Reading A-Z Activities
- Science Related Achieve3000 Articles and Activities

**Summative Assessments:**
- Quizzes
- Tests
- Unit Projects
- Presentations

**Benchmark Assessments:**
Science A-Z Benchmark Assessment
-

## Knowledge & Skills

**Enduring Understandings:**
*Students will understand that...*
- Living organisms are composed of cellular units (structures) that carry out functions required for life.
- Cellular units are composed of molecules, which also carry out biological functions.
- In multicellular organisms, the body is a system of multiple interacting subsystems. These subsystems are groups of cells that work together to form tissues and organs that are specialized for particular body functions

**Essential Questions:**
How do the structures of organisms contribute to life's functions?
- What do all living things have in common?

**Content**

**Skills**

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**Stafford Township School DIstrict Curriculum Guide**

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| *Students will know...* | *Students will be able to …* |
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| • the parts and use of a compound microscope<br>• know the major contributors to cell theory<br>• cell structure and specialized function of each organelle in a plant and animal cell<br>• Multicellular organisms begin as a single cell.<br>• Organisms grow and develop as a result of cell division.<br>• the levels of organization within an organism<br>• that each sense receptor responds to different inputs (electromagnetic, mechanical, chemical) transmitting them as signals that travel along the nerve cells to the brain resulting in immediate behaviors and memories | • Demonstrate how to correctly use the compound microscope.<br>• Describe the structure and function of each organelle in a plant and animal cell.<br>• Compare and contrast structures of different types of cells and relate the structures to the functions the different cells perform.<br>• Understand the different levels of organization within an organism. |

| **Instructional Plan** | |
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| **Suggested Activities** | **Resources** |
| **Animal Cell Activity** - The students will understand that all organisms are composed of cells that carry on the many functions needed to sustain life. Students will play a game to understand. | Models are in the science lab and the lesson is in the Science Lab Binder. http://sciencenetlinks.com/student-teacher-sheets/comparing-cell-factory-answer-key |
| **Moving Through** - The students will conduct an experiment where substances move in and out of a plastic bag by diffusion | Lab Investigation Sheet in Science Lab Binder - Student Resource A47 from the Houghton Mifflin Science Book. |
| **Cells and Disease:** Infectious Disease Activity - Students will simulate the spread of infectious disease. A simulation will show how an infectious disease can spread from one infected person to other people, who in turn infect others. | Materials and written lessons are in the Science Lab Binder. http://www.pbs.org/wgbh/nova/education/activities/3318_02_nsn.html |
| **LITERATURE** | |
| • *Decoding Genes with Max Axiom, Super Scientist* by Amber J. Keyser<br>• *The World of Genetics* by Lynn Van Gorp<br>• *Super Cool Science Experiments: Cells* by Matt Mullins<br><br>**Inclusivity/LGBTQ and Individuals with Disabilities Resources**<br>BrainPop Inclusivity List<br>NGGLSTP | |
| **WEBSITES** | |

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| http://sciencespot.net/Pages/classbiolsn.html (electronic bibliography for biology teachers) | http://ed.ted.com/lessons/the-wacky-history-of-cell-theory (history of how cell theory evolved) |
| http://www.nclark.net/Biology (biology teacher resources) | https://www.udel.edu/biology/ketcham/microscope/scope.html (virtual microscope tour) |
| http://science-class.net/archive/science-class/Biology/Cell_Division.htm (cell division lesson) | |
| **Individuals with disabilities Resources**<br>○ https://www.mentalfloss.com/article/87068/12-disabled-scientists-who-made-world-better-place<br>○ https://www.sciencenewsforstudents.org/article/disabilities-dont-stop-these-experts-science-and-tech<br>○ https://www.sciencehistory.org/science-and-disability<br>○ https://whyy.org/articles/new-philly-exhibit-celebrates-lives-contributions-of-scientists-with-disabilities/ | **LGBTQ plus Resources**<br>○ https://www.discovery.com/science/LGBT-Scientists-who-Changed-World<br>○ https://www.osc.org/important-lgbtq-scientists-who-left-a-mark-on-stem-fields/<br>○ https://www.ideatovalue.com/insp/nickskillicorn/2019/06/14-lgbtq-innovators-inventors-and-scientists-who-changed-the-world/<br>○ https://www.pinknews.co.uk/2018/07/05/queer-scientists-history-first-lgbtstemday/ |

| Unit 4: Matter and Energy in Organisms and Ecosystems | Duration: 16 days (January – February) |
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**Suggested Accommodations**

**English Language Learners:**
- Elicit Prior Knowledge
- Rephrase
- Understand Context
- Scaffold Language
- Restate
- Cooperative Grouping

**Special Education/Students with Disabilities:**
- One on one instruction
- Adaptive devices
- Provide differentiated instruction as needed
- Follow all IEP modifications/504 plan
- Provide manipulatives or the opportunity to draw solution strategies

**504 Plans:**
- One on one instruction
- Adaptive devices

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- Provide differentiated instruction as needed
- Follow all 504 plan modifications
- Provide manipulatives or the opportunity to draw solution strategies

**Gifted and Talented:**

- Problem based learning
- Enrichment Lesson
- Presentation

**Students at Risk of Failure:**

- 1:1
- Repeating Directions
- Small Group
- Manipulatives
- Interactive Notes
- Reteach/Enrichment Pages for each lesson (RTI)

**Economically Disadvantaged:**

- 1:1
- Repeating Directions
- Small Group
- Manipulatives
- Interactive Notes
- Reteach/Enrichment Pages for each lesson (RTI)

**Culturally Diverse:**

- One on one instruction
- Adaptive devices
- Provide differentiated instruction as needed
- Provide manipulatives or the opportunity to draw solution strategies

| New Jersey Student Learning Standards | |
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| LS1.C | Create a representation of the process by which plants, algae and many microorganisms use the energy from light to make sugars (food) from carbon dioxide from the atmosphere and water. |
| MS-LS1-6 | Construct a scientific explanation based on evidence for the role of photosynthesis in the cycling of matter and flow of energy into and out of organisms. [Clarification Statement: Emphasis is on tracing movement of matter and flow of energy.] [Assessment Boundary: Assessment does not include the biochemical mechanisms of photosynthesis.] |
| MS-LS1-7 | Develop a model to describe how food is rearranged through chemical reactions forming new molecules that support growth and/or release energy as this matter moves through an organism. [Clarification Statement: Emphasis is on describing that molecules are broken apart and put back together and that in this process, energy is released.] [Assessment Boundary: Assessment does not include details of the chemical reactions for photosynthesis or respiration.] |

Attachments are subject to change without notice

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| MS-LS2-1 | Analyze and interpret data to provide evidence for the effects of resource availability on organisms and populations of organisms in an ecosystem. [Clarification Statement: Emphasis is on cause and effect relationships between resources and growth of individual organisms and the numbers of organisms in ecosystems during periods of abundant and scarce resources.] |
| MS-LS2-3 | Develop a model to describe the cycling of matter and flow of energy among living and nonliving parts of an ecosystem. [Clarification Statement: Emphasis is on describing the conservation of matter and flow of energy into and out of various ecosystems, and on defining the boundaries of the system.] [Assessment Boundary: Assessment does not include the use of chemical reactions to describe the processes.] |
| MS-LS2-4 | Construct an argument supported by empirical evidence that changes to physical or biological components of an ecosystem affect populations. [Clarification Statement: Emphasis is on recognizing patterns in data and making warranted inferences about changes in populations, and on evaluating empirical evidence supporting arguments about changes to ecosystems.] |
| Science and Engineering Practices Learning Progressions | **Engaging in Argument from Evidence**<br>Engaging in argument from evidence in 3–5 builds on K–2 experiences and progresses to critiquing the scientific explanations or solutions proposed by peers by citing relevant evidence about the natural and designed world(s).<br>● Support an argument with evidence, data, or a model. (MS-LS1- 1).<br>**Developing and Using Models**<br>● Modeling in 3–5 builds on K–2 models and progresses to building and revising simple models and using models to represent events and design solutions. Develop a model to describe phenomena. (MS-LS2-1) |
| **Discipline Core Ideas**<br><br>Physical Science Learning Progressions<br><br>Earth & Space Science Learning Progressions<br><br>Life Science Learning Progression | LS1.C: Organization for Matter and Energy Flow in Organisms<br>● Plants acquire their material for growth chiefly from air and water. (MS-LS1-1)<br><br>LS2.A: Interdependent Relationships in Ecosystems<br>● The food of almost any kind of animal can be traced back to plants. Organisms are related in food webs in which some animals eat plants for food and other animals eat the animals that eat plants. Some organisms, such as fungi and bacteria, break down dead organisms (both plants or plants |

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| | parts and animals) and therefore operate as “decomposers.” Decomposition eventually restores (recycles) some materials back to the soil. Organisms can survive only in environments in which their particular needs are met. A<br><br>Energy and Matter<br>● Matter is transported into, out of, and within systems. (MS-LS1-1)<br>Systems and System Models<br>● A system can be described in terms of its components and their interactions. (MS-LS2-1)<br>Connections to Nature of Science<br>Science Models, Laws, Mechanisms, and Theories Explain Natural Phenomena<br>● Science explanations describe the mechanisms for natural events. (MS- LS2-1)<br>healthy ecosystem is one in which multiple species of different types are each able to meet their needs in a relatively stable web of life. Newly introduced species can damage the balance of an ecosystem. (MS-LS2- 1)<br>LS2.B: Cycles of Matter and Energy Transfer in Ecosystems<br>● Matter cycles between the air and soil and among plants, animals, and microbes as these organisms live and die. Organisms obtain gases, and water, from the environment, and release waste matter (gas, liquid, or solid) back into the environment. (MS-LS2-1) |
| Crosscutting Concepts | Energy and Matter<br>● Matter is transported into, out of, and within systems. (MS-LS1-1)<br>Systems and System Models<br>● A system can be described in terms of its components and their interactions. (MS-LS2-1)<br>Connections to Nature of |

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| | Science<br>Science Models, Laws, Mechanisms, and Theories Explain Natural Phenomena<br>● Science explanations describe the mechanisms for natural events. (MS- LS2-1) |
| Engineering, Technology and the Application of Science Learning Progressions | |

## Interdisciplinary Connections

**ELA/Literacy -**

- RST.6-8.7 Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table). (MS-PS1-4)
- RST.6-8.3 Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks. (MS-PS3-3 and MS-PS3-4)
- WHST.6-8.7 Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration. (MS-PS3-3 and MS-PS3-4)
- RST.6-8.1 Cite specific textual evidence to support analysis of science and technical texts, attending to the precise details of explanations or descriptions. (MS-PS3-5)
- WHST.6-8.1 Write arguments focused on discipline content. (MS-PS3-5)
- SL.8.5 Integrate multimedia and visual displays into presentations to clarify information, strengthen claims and evidence, and add interest. (MS-PS4-2)

**Mathematics -**

- 6.NS.C.5 Understand that positive and negative numbers are used together to describe quantities having opposite directions or values (e.g., temperature above/below zero, elevation above/below sea level, credits/debits, positive/negative electric charge); use positive and negative numbers to represent quantities in real-world contexts, explaining the meaning of 0 in each situation. (MS-PS1-4)
- MP.2 Reason abstractly and quantitatively. (MS-PS3-4 and MS-PS3-5)
- 6.SP.B.5 Summarize numerical data sets in relation to their context. (MS-PS3-4)
- 6.RP.A.1 Understand the concept of ratio and use ratio language to describe a ratio relationship between two quantities. (MS-PS3-5)
- 7.RP.A.2 Recognize and represent proportional relationships between quantities. (MS-PS3-5)
- 8.F.A.3 Interpret the equation y = mx + b as defining a linear function, whose graph is a straight line; give examples of functions that are not linear. (MS-PS3-5)

## Computer Science & Design Thinking

- 8.1.8.CS.1: Recommend improvements to computing devices in order to improve the ways users interact with the devices.
- 8.1.8.CS.2: Design a system that combines hardware and software components to process data.
- 8.1.8.CS.3: Justify design decisions and explain potential system trade-offs.
- 8.1.8.NI.1: Model how information is broken down into smaller pieces, transmitted as addressed

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packets through multiple devices over networks and the Internet, and reassembled at the destination.
- 8.1.8.NI.4: Explain how new security measures have been created in response to key malware events.
- 8.1.8.IC.1: Compare the trade-offs associated with computing technologies that affect individual's everyday activities and career options.
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- 8.1.8.DA.5: Test, analyze, and refine computational models.
- 8.1.8.AP.7: Design programs, incorporating existing code, media, and libraries, and give attribution.
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- 8.1.8.AP.9: Document programs in order to make them easier to follow, test, and debug.
- 8.2.8.ED.1: Evaluate the function, value, and aesthetics of a technological product or system, from the perspective of the user and the producer.
- 8.2.8.ED.2: Identify the steps in the design process that could be used to solve a problem.
- 8.2.8.ED.3: Develop a proposal for a solution to a real-world problem that includes a model (e.g., physical prototype, graphical/technical sketch).
- 8.2.8.ED.4: Investigate a malfunctioning system, identify its impact, and explain the step-by-step process used to troubleshoot, evaluate, and test options to repair the product in a collaborative team.
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- 8.2.8.ETW.1: Illustrate how a product is upcycled into a new product and analyze the short- and long-term benefits and costs.

## Career Readiness, Life Literacies & Key Skills

- 9.1.8.CR.1: Compare and contrast the role of philanthropy, volunteer service, and charities in community development and the quality of life in a variety of cultures.
- 9.1.8.FP.2: Evaluate the role of emotions, attitudes, and behavior (rational and irrational) in making financial decisions
- 9.1.8.PB.5: Identify factors that affect one's goals, including peers, culture, location, and past experiences
- 9.2.8.CAP.3: Explain how career choices, educational choices, skills, economic conditions, and personal behavior affect income
- 9.2.12.CAP.7: Use online resources to examine licensing, certification, and credentialing requirements at the local, state, and national levels to maintain compliance with industry requirements in areas of career interest.
- 9.4.8.CI.1: Assess data gathered on varying perspectives on causes of climate change (e.g., cross cultural, gender-specific, generational), and determine how the data can best be used to design multiple potential solutions (e.g., RI.7.9, 6.SP.B.5, 7.1.NH.IPERS.6, 8.2.8.ETW.4).
- 9.4.8.GCA.1: Model how to navigate cultural differences with sensitivity and respect (e.g., 1.5.8.C1a).
- 9.4.8.GCA.2: Demonstrate openness to diverse ideas and perspectives through active discussions to achieve a group goal.

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**Stafford Township School DIstrict Curriculum Guide**

| Grade: 6 | Content Area: Science |
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| Career Readiness, Life Literacies, and Key Skills Practices | |
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| Act as a responsible and contributing community member and employee. | Students understand the obligations and responsibilities of being a member of a community, and they demonstrate this understanding every day through their interactions with others. They are conscientious of the impacts of their decisions on others and the environment around them. They think about the near-term and long-term consequences of their actions and seek to act in ways that contribute to the betterment of their teams, families, community and workplace. They are reliable and consistent in going beyond the minimum expectation and in participating in activities that serve the greater good. |
| Attend to financial well-being. | Students take regular action to contribute to their personal financial well-being, understanding that personal financial security provides the peace of mind required to contribute more fully to their own career success. |
| Consider the environmental, social and economic impacts of decisions. | Students understand the interrelated nature of their actions and regularly make decisions that positively impact and/or mitigate negative impact on other people, organization, and the environment. They are aware of and utilize new technologies, understandings, procedures, materials, and regulations affecting the nature of their work as it relates to the impact on the social condition, the environment and the profitability of the organization. |
| Demonstrate creativity and innovation. | Students regularly think of ideas that solve problems in new and different ways, and they contribute those ideas in a useful and productive manner to improve their organization. They can consider unconventional ideas and suggestions as solutions to issues, tasks or problems, and they discern which ideas and suggestions will add greatest value. They seek new methods, practices, and ideas from a variety of sources and seek to apply those ideas to their own workplace. They take action on their ideas and understand how to bring innovation to an organization. |
| Utilize critical thinking to make sense of problems and persevere in solving them. | Students readily recognize problems in the workplace, understand the nature of the problem, and devise effective plans to solve the problem. They are aware of problems when they occur and take action quickly to address the problem; they thoughtfully investigate the root cause of the problem prior to introducing solutions. They carefully consider the options to solve the problem. Once a solution is agreed upon, they follow through to ensure the problem is solved, whether through their own actions or the actions of others. |
| Model integrity, ethical leadership and effective management. | Students consistently act in ways that align personal and community-held ideals and principles while employing strategies to positively influence others in the workplace. They have a clear understanding of integrity and act on this understanding in every decision. They use a variety of means to positively impact the directions and actions of a team or organization, and they apply insights into human behavior to change others' actions, attitudes and/or beliefs. They recognize the near-term and long-term effects that management's actions and attitudes can have on productivity, morals and organizational culture. |
| Plan education and career paths aligned to personal goals. | Students take personal ownership of their own education and career goals, and they regularly act on a plan to attain these goals. They understand their own career interests, preferences, goals, and requirements. They have perspective regarding the pathways available to them and the time, effort, experience and other requirements to pursue each, including a path of entrepreneurship. They recognize the value of each |

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| Grade: 6 | Content Area: Science |
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| | step in the education and experiential process, and they recognize that nearly all career paths require ongoing education and experience. They seek counselors, mentors, and other experts to assist in the planning and execution of career and personal goals. |
| Use technology to enhance productivity, increase collaboration and communicate effectively. | Students find and maximize the productive value of existing and new technology to accomplish workplace tasks and solve workplace problems. They are flexible and adaptive in acquiring new technology. They are proficient with ubiquitous technology applications. They understand the inherent risks-personal and organizational-of technology applications, and they take actions to prevent or mitigate these risks. |
| Work productively in teams while using cultural/global competence. | Students positively contribute to every team, whether formal or informal. They apply an awareness of cultural differences to avoid barriers to productive and positive interaction. They find ways to increase the engagement and contribution of all team members. They plan and facilitate effective team meetings. |

**Evidence of Student Learning**

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| **Formative Tasks:**<br>• Oral Questioning<br>• Class work<br>• Student Conference<br>• Self-Assessment<br>• Think-Pair-Share<br>• Hand Signals<br>• Peer Reflections<br>• Constructive Response<br>• Teacher Observation<br>• Exit Slip | **Alternative Assessments:**<br>• Group Work/Class Discussion Rubric<br>• Guided Observations<br>• Questions Starters<br>• Participation Rubric<br>• Modified Tests/Quizzes/Classwork<br>• Science A-Z Activities<br>• Science Related Reading A-Z Activities<br>• Science Related Achieve3000 Articles and Activities |
| **Summative Assessments:**<br>• Quizzes<br>• Tests<br>• Unit Projects<br>• Presentations | **Benchmark Assessments:**<br>Science A-Z Benchmark Assessment |

**Knowledge & Skills**

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| **Enduring Understandings:**<br>*Students will understand that...*<br>• Living things have a variety of observable features that enable them to survive and reproduce through the conversion of energy from one form to another.<br>• Organisms and their environments are interconnected. | **Essential Questions:**<br>• How is matter transformed, and energy transferred/transformed in living systems? (photosynthesis and cellular respiration)<br>• How can change in one part of the ecosystem affect change in other parts of the ecosystem? |

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**Stafford Township School DIstrict Curriculum Guide**

| Grade: 6 | Content Area: Science |
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| Content | Skills |
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| *Students will know...*<br>● the possible ecological relationships between species that coexist in an ecosystem<br>● that ecological relationships evolved over time and are integral to maintaining the balance and stability of ecosystems<br>● the living and nonliving factors that can throw ecosystems out of balance<br>● how human actions that have contributed to ecosystem imbalance and species decline<br>● how the cell uses the processes of photosynthesis, cellular respiration and protein synthesis to obtain and use energy as well as maintain and repair itself<br>● how the nutrients needed by an organism change over the organism's life span | *Students will be able to …*<br>● Illustrate and/or model the processes of photosynthesis, cellular respiration and protein synthesis to obtain and use energy.<br>● Analyze the flow of energy through an ecosystem beginning with photosynthesis. |

| Instructional Plan | |
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| **Suggested Activities** | **Resources** |
| Students will explore the cause and effect relationship between humans and plants with the Oxygen and Carbon Dioxide Cycle. They will gain an understanding of how they play a role in the two cycles. | http://texasaircomfort.com/the-airs-oxygen-cycle-for-kids |
| **Water Cycle Demo** - Students will explore the watershed model. Students will learn the water cycle in a hands-on experience. | Watershed Model is in the science lab.<br><br>http://enviroscapesinc.com/ |
| **Energy Pyramid** - Students will model how energy transfers from one trophic level to another in an ecosystem. | https://www.sciencea-z.com/main/UnitResource/unit/26/life-science/grades-5-6/food-chains<br>Into the Forest Game - in Science Lab |
| **Owl Pellets** - Students will dissect an owl pellet to see the eating habits of an owl and identify with a tangible food web. | https://www.biologycorner.com/worksheets/owlpellet.html |
| **Population Game:** Students will replicate procedures that animals use in competing for food. They will observe that some animals are better adapted and more likely to survive, and predict the carrying capacity of a habitat. | Materials and paperwork is in the Science Lab and the Science Lab Binder. |
| **LITERATURE** | |

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- *Biodiversity* by Carla Mooney
- *Life and Non-Life in an Ecosystem* by William B. Rice
- https://www.foundationsandfutures.org/- Reading Resources
- *The Pier at the End of the World* by Paul Erickson

**Inclusivity/LGBTQ and Individuals with Disabilities Resources**
BrainPop Inclusivity List
NOGLSTP

| WEBSITES | |
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| https://www.learner.org/courses/envsci/interactives/ecology/producers_1.php (simulation of a newly forming ecosystem) | https://www.learner.org/courses/envsci/unit/pdfs/unit4.pdf (ecosystems lesson) |
| http://www.nsta.org/publications/news/story.aspx?id=49206 (directions for preparing simulated fish dissection) | http://coolclassroom.org/cool_windows/home.html (food web game) |
| **Individuals with disabilities Resources**<br>○ https://www.mentalfloss.com/article/87068/12-disabled-scientists-who-made-world-better-place<br>○ https://www.sciencenewsforstudents.org/article/disabilities-dont-stop-these-experts-science-and-tech<br>○ https://www.sciencehistory.org/science-and-disability<br>○ https://whyy.org/articles/new-philly-exhibit-celebrates-lives-contributions-of-scientists-with-disabilities/ | **LGBTQ plus Resources**<br>○ https://www.discovery.com/science/LGBT-Scientists-Who-Changed-World<br>○ https://www.osc.org/important-lgbtq-scientists-who-left-a-mark-on-stem-fields/<br>○ https://www.ideatovalue.com/insp/nickskillicorn/2019/06/14-lgbtq-innovators-inventors-and-scientists-who-changed-the-world/<br>○ https://www.pinknews.co.uk/2018/07/05/queer-scientists-history-first-lgbtstemday/ |

| Unit 5: Weather and Climate | Duration: 5 days (February - March) |
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| Suggested Accommodations |
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| **English Language Learners:**<br>• Elicit Prior Knowledge<br>• Rephrase<br>• Understand Context<br>• Scaffold Language |

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| Grade: 6 | Content Area: Science |
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- Restate
- Cooperative Grouping

**Special Education/Students with Disabilities:**

- One on one instruction
- Adaptive devices
- Provide differentiated instruction as needed
- Follow all IEP modifications/504 plan
- Provide manipulatives or the opportunity to draw solution strategies

**504 Plans:**

- One on one instruction
- Adaptive devices
- Provide differentiated instruction as needed
- Follow all 504 plan modifications
- Provide manipulatives or the opportunity to draw solution strategies

**Gifted and Talented:**

- Problem based learning
- Enrichment Lesson
- Presentation

**Students at Risk of Failure:**

- 1:1
- Repeating Directions
- Small Group
- Manipulatives
- Interactive Notes
- Reteach/Enrichment Pages for each lesson (RTI)

**Economically Disadvantaged:**

- 1:1
- Repeating Directions
- Small Group
- Manipulatives
- Interactive Notes
- Reteach/Enrichment Pages for each lesson (RTI)

**Culturally Diverse:**

- One on one instruction
- Adaptive devices
- Provide differentiated instruction as needed
- Provide manipulatives or the opportunity to draw solution strategies

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| New Jersey Student Learning Standards | |
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| ESS2.C | Develop a conceptual model to explain the mechanisms for the Sun's energy to drive wind and the hydrologic cycle. |
| MS-ESS2-5 | Collect data to provide evidence for how the motions and complex interactions of air masses results in changes in weather conditions. [Clarification Statement: Emphasis is on how air masses flow from regions of |

| Grade: 6 | Content Area: Science |
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| | high pressure to low pressure, causing weather (defined by temperature, pressure, humidity, precipitation, and wind) at a fixed location to change over time, and how sudden changes in weather can result when different air masses collide. Emphasis is on how weather can be predicted within probabilistic ranges. Examples of data can be provided to students (such as weather maps, diagrams, and visualizations) or obtained through laboratory experiments (such as with condensation).] [*Assessment Boundary: Assessment does not include recalling the names of cloud types or weather symbols used on weather maps or the reported diagrams from weather stations.*] |
| ESS2.C | Explain how variations in density result from variations in temperature and salinity drive a global pattern of interconnected ocean currents. |
| ESS2.C; ESS2.D | Use a model to explain the mechanisms that cause varying daily temperature ranges in a coastal community and in a community located in the interior of the country. |
| MS-ESS2-6 | Develop and use a model to describe how unequal heating and rotation of the Earth cause patterns of atmospheric and oceanic circulation that determine regional climates. |
| MS-ESS3-5 | Ask questions to clarify evidence of the factors that have caused the rise in global temperatures over the past century. [Clarification Statement: Examples of factors include human activities (such as fossil fuel combustion, cement production, and agricultural activity) and natural processes (such as changes in incoming solar radiation or volcanic activity). Examples of evidence can include tables, graphs, and maps of global and regional temperatures, atmospheric levels of gases such as carbon dioxide and methane, and the rates of human activities. Emphasis is on the major role that human activities play in causing the rise in global temperatures.] |
| **Science and Engineering Practices Learning Progressions** | **Analyzing and Interpreting Data**<br>Analyze and interpret data to determine similarities and differences in findings.<br><br>**Developing and Using Models** Develop and use a model to describe phenomena<br><br>**Planning and Carrying Out Investigations**<br>Planning and carrying out investigations in 6-8 builds on K-5 experiences and progresses to include investigations that use multiple variables and provide evidence to support explanations or solutions. Collect data to produce data to serve as the basis for evidence to answer scientific questions or test design solutions under a range of conditions. |
| **Discipline Core Ideas**<br><br>**Physical Science Learning Progressions** | ESS2.D: Weather and Climate<br>● Weather and climate are influenced by interactions involving sunlight, the ocean, the atmosphere, ice, landforms, and living things. These interactions vary with latitude, altitude, and local and regional geography, all of which can affect oceanic and atmospheric flow patterns. (MS-ESS2-6) |

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| Earth & Space Science Learning Progressions<br><br>Life Science Learning Progressions | ● Because these patterns are so complex, weather can only be predicted probabilistically. (MS-ESS2-5)<br>●The ocean exerts a major influence on weather and climate by absorbing energy from the sun, releasing it over time, and globally redistributing it through ocean currents. (MS-ESS2-6)<br>ESS3.B: Natural Hazards and Forecasting<br>● Mapping the history of natural hazards in a region, combined with an understanding of related geologic forces can help forecast the locations and likelihoods of future events. (MS-ESS3-2) |
| Crosscutting Concepts | **Cause and Effect**<br>Cause and effect relationships may be used to predict phenomena in natural or designed systems.<br><br>**Systems and System Models** Models can be used to represent systems and their interactions—such as inputs, processes and outputs—and energy, matter, and information flows within systems.<br><br>**Patterns**<br>Graphs, charts, and images can be used to identify patterns in data<br><br>**Influence of Science, Engineering, and Technology on Society and the Natural World**<br>The uses of technologies and any limitations on their use are driven by individual or societal needs, desires, and values; by the findings of scientific research; and by differences in such factors as climate, natural resources, and economic conditions. Thus technology use varies from region to region and over time. |
| Engineering, Technology and the Application of Science Learning Progressions | |

## Interdisciplinary Connections

**ELA/Literacy**

- RST.6-8.1 Cite specific textual evidence to support analysis of science and technical texts. (MS-ESS2-5)
- RST.6-8.9 Compare and contrast the information gained from experiments, simulations, video, or multimedia sources with that gained from reading a text on the same topic. (MS-ESS2-5)
- WHST.6-8.8 Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation. (MS-ESS2-5)
- SL.8.5 Integrate multimedia and visual displays into presentations to clarify information, strengthen claims and evidence, and add interest. (MS-ESS2-6)
- RST.6-8.7 Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table). (MS-PS1-4)

**Mathematics -**

- MP.2 Reason abstractly and quantitatively. (MS-ESS2-5)
- 6.NS.C.5 Understand that positive and negative numbers are used together to describe quantities

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having opposite directions or values (e.g., temperature above/below zero, elevation above/below sea level, credits/debits, positive/negative electric charge); use positive and negative numbers to represent quantities in real-world contexts, explaining the meaning of 0 in each situation. (MS-ESS2-5 and MS-PS1-4)

Social Studies

- 6.2.8EconG.3.a:Explain how the classical civilizations used technology and innovation to enhance agricultural/manufacturing output and commerce, to expand military capabilities, to improve life in urban areas, and to allow for greater division of labor

## Computer Science & Design Thinking

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| Grade: 6 | Content Area: Science |
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| Career Readiness, Life Literacies, and Key Skills Practices | |
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| Plan education and career paths aligned to personal goals. | Students take personal ownership of their own education and career goals, and they regularly act on a plan to attain these goals. They understand their own career interests, preferences, goals, and requirements. They have perspective regarding the pathways available to them and the time, effort, experience and other requirements to pursue each, including a path of entrepreneurship. They recognize the value of each step in the education and experiential process, and they recognize that nearly all career paths require ongoing education and experience. They seek counselors, mentors, and other experts to assist in the planning and execution of career and personal goals. |
| Use technology to enhance productivity, increase collaboration and communicate effectively. | Students find and maximize the productive value of existing and new technology to accomplish workplace tasks and solve workplace problems. They are flexible and adaptive in acquiring new technology. They are proficient with ubiquitous technology applications. They understand the inherent risks-personal and organizational-of technology applications, and they take actions to prevent or mitigate these risks. |
| Work productively in teams while using cultural/global competence. | Students positively contribute to every team, whether formal or informal. They apply an awareness of cultural differences to avoid barriers to productive and positive interaction. They find ways to increase the engagement and contribution of all team members. They plan and facilitate effective team meetings. |

| Evidence of Student Learning | |
|---|---|
| **Formative Tasks:**<br>• Oral Questioning<br>• Class work<br>• Student Conference<br>• Self-Assessment<br>• Think-Pair-Share<br>• Hand Signals<br>• Peer Reflections<br>• Constructive Response<br>• Teacher Observation | **Alternative Assessments:**<br>• Group Work/Class Discussion Rubric<br>• Guided Observations<br>• Questions Starters<br>• Participation Rubric<br>• Modified Tests/Quizzes/Classwork<br>• Science A-Z Activities<br>• Science Related Reading A-Z Activities<br>• Science Related Achieve3000 Articles and Activities |

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| Grade: 6 | Content Area: Science |
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| • Exit Slip | |
| **Summative Assessments:**<br>• Quizzes<br>• Tests<br>• Unit Projects<br>• Presentations | **Benchmark Assessments:**<br>Science A-Z Benchmark Assessments |

| **Knowledge & Skills** | |
|---|---|
| **Enduring Understandings:**<br>*Students will understand that...*<br>• Earth's components form systems. These systems continually interact at different rates of time, affecting the Earth regionally and globally.<br>• Earth systems can be broken down into individual components which have observable measurable properties.<br>• Technology enables us to better understand Earth's system and the impact of Earth's systems on human activity.<br>• | **Essential Questions:**<br>• How do changes in one part of an Earth system affect other parts of the system?<br>• How does understanding the properties of Earth materials and the physical laws that govern behavior lead to predictions of Earth?<br>• How does technology extend human senses and understanding of Earth? |
| **Content** | **Skills** |
| *Students will know...*<br>• interactions of air masses as they relate to weather<br>• the impact that air pressure systems have on the weather<br>• how hurricanes develop<br>• compare different types of winter storms<br>• how thunderstorms develop and the effects of thunderstorms on weather<br>• the effects of tornadoes as well as the mechanisms involved in their formation<br>• the various instruments used by meteorologist to forecast weather<br>• isobars, recognize them on a weather map and determine the type of weather each represents and differentiate weather from climate<br>• the geographic factors that affect climate as well as the six major climate zones<br>• how oceans affect climate | *Students will be able to …*<br>• Infer from an experiment how density affects colliding air masses.<br>• Read a weather map to answer a series of questions.<br>• Observe through a demonstration two air masses with different densities.<br>• Create a model of the hydrologic cycle that focuses on the transfer of water in and out of the atmosphere.<br>• Apply the model to different climates around the world. |

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**Stafford Township School DIstrict Curriculum Guide**

| Grade: 6 | Content Area: Science |
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| Instructional Plan | |
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| **Suggested Activities** | **Resources** |
| **Egg in a Bottle:** Students will see the effects of changing air pressure. The teacher will demonstrate how to use the physics of air pressure. | The materials and supplies will be in the science lab and the lab sheet will be in the Science Binder in the Science Lab. The lab sheet will come from Skill Sharpeners - Science by Evan-Moor Corp |
| **Too Cold to Snow:** Students will research the weather conditions and temperatures during a winter month in multiple locations. Students will use the internet to research different areas. | The materials and supplies will be in the science lab and the lab sheet will be in the Science Binder in the Science Lab. The lab sheet will come from Skill Sharpeners - Science by Evan-Moor Corp http://www.noaa.gov/ |
| **May the Force Be with You:** Students will investigate the Coriolis Force. They will work in partners to perform this activity. | The materials and supplies will be in the science lab and the lab sheet will be in the Science Binder in the Science Lab. The lab sheet will come from Skill Sharpeners - Science by Evan-Moor Corp |
| **Current Events**: Students will track warm and cold ocean currents and their overall effect on the climate. The students will use laminated world desktop maps. | The table maps are located in the science closet. |

**LITERATURE**

- *Natural Disasters: Violent Weather* by Steve Parker and David West
- *Superstorm Sandy* by Lynn Peppas
- *Weather* by Seymour Simon

**Inclusivity/LGBTQ and Individuals with Disabilities Resources**
BrainPop Inclusivity List
NOGLSTP

| WEBSITES | |
|---|---|
| http://www.ciese.org/curriculum/weatherproj2/en/lesson1.shtml (make a weather station lesson) | http://teachers.egfi-k12.org/lesson-tornado-proof-design/ (engineering challenge - designing a tornado-proof house) |
| http://www.projectsharetexas.org/resource-index?field_resource_keywords_tid=&sort_by=title&sort_order=ASC&items_per_page=50&page=1 (online resources from the Texas Education Agency) | http://www.education.noaa.gov/tweather.html (weather and atmosphere education resources) |

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| http://climatekids.nasa.gov/science-standards/ (climate education resources) | https://www.teachengineering.org/view_curricularunit.php?url=collection/cub_/curricular_units/cub_weather/cub_weather_curricularunit.xml (weather and atmosphere unit) |
| http://www.earthsciweek.org/classroom-activities/ngss (resource of NGSS classroom activities) | |
| **Individuals with disabilities Resources**<br>○ https://www.mentalfloss.com/article/87068/12-disabled-scientists-who-made-world-better-place<br>○ https://www.sciencenewsforstudents.org/article/disabilities-dont-stop-these-experts-science-and-tech<br>○ https://www.sciencehistory.org/science-and-disability<br>○ https://whyy.org/articles/new-philly-exhibit-celebrates-lives-contributions-of-scientists-with-disabilities/ | **LGBTQ plus Resources**<br>○ https://www.discovery.com/science/LGBT-Scientists-Who-Changed-World<br>○ https://www.osc.org/important-lgbtq-scientists-who-left-a-mark-on-stem-fields/<br>○ https://www.ideatovalue.com/insp/nickskillicorn/2019/06/14-lgbtq-innovators-inventors-and-scientists-who-changed-the-world/<br>○ https://www.pinknews.co.uk/2018/07/05/queer-scientists-history-first-lgbtstemday/ |

| Unit 6: Space Systems | **Duration:** 24 days (April – June) |
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**Suggested Accommodations**

**English Language Learners:**
- Elicit Prior Knowledge
- Rephrase
- Understand Context
- Scaffold Language
- Restate
- Cooperative Grouping

**Special Education/Students with Disabilities:**
- One on one instruction
- Adaptive devices
- Provide differentiated instruction as needed
- Follow all IEP modifications/504 plan
- Provide manipulatives or the opportunity to draw solution strategies

**504 Plans:**
- One on one instruction
- Adaptive devices

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- Provide differentiated instruction as needed
- Follow all 504 plan modifications
- Provide manipulatives or the opportunity to draw solution strategies

**Gifted and Talented:**

- Problem based learning
- Enrichment Lesson
- Presentation

**Students at Risk of Failure:**

- 1:1
- Repeating Directions
- Small Group
- Manipulatives
- Interactive Notes
- Reteach/Enrichment Pages for each lesson (RTI)

**Economically Disadvantaged:**

- 1:1
- Repeating Directions
- Small Group
- Manipulatives
- Interactive Notes
- Reteach/Enrichment Pages for each lesson (RTI)

**Culturally Diverse:**

- One on one instruction
- Adaptive devices
- Provide differentiated instruction as needed
- Provide manipulatives or the opportunity to draw solution strategies

| New Jersey Student Learning Standards | |
|---|---|
| ESS1.B | Generate and analyze evidence (through simulations or long-term investigations) to explain why the Sun's apparent motion across the sky changes over the course of a year. |
| MS-ESS1-1 | Develop and use a model of the Earth-sun-moon system to describe the cyclic patterns of lunar phases, eclipses of the sun and moon, and seasons. [Clarification Statement: Examples of models can be physical, graphical, or conceptual.] |
| ESS1.A; ESS1.B | Develop and use a model that shows how gravity causes smaller objects to orbit around larger objects at increasing scales, including the gravitational force of the sun causes the planets and other bodies to orbit around it holding together the solar system. |
| MS-ESS1-3 | Analyze and interpret data to determine scale properties of objects in the solar system. [Clarification Statement: Emphasis is on the analysis of data from Earth-based instruments, space-based telescopes, and spacecraft to |

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| Grade: 6 | Content Area: Science |
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| | determine similarities and differences among solar system objects. Examples of scale properties include the sizes of an object's layers (such as crust and atmosphere), surface features (such as volcanoes), and orbital radius. Examples of data include statistical information, drawings and photographs, and models.] [*Assessment Boundary: Assessment does not include recalling facts about properties of the planets and other solar system bodies.*] |
| MS-ESS1-2 | Develop and use a model to describe the role of gravity in the motions within galaxies and the solar system. [Clarification Statement: Emphasis for the model is on gravity as the force that holds together the solar system and Milky Way galaxy and controls orbital motions within them. Examples of models can be physical (such as the analogy of distance along a football field or computer visualizations of elliptical orbits) or conceptual (such as mathematical proportions relative to the size of familiar objects such as students' school or state).] [*Assessment Boundary: Assessment does not include Kepler's Laws of orbital motion or the apparent retrograde motion of the planets as viewed from Earth.*] |
| **Science and Engineering Practices Learning Progressions** | **Developing and Using Models**<br>Modeling in 6–8 builds on K–5 experiences and progresses to developing, using, and revising models to describe, test, and predict more abstract phenomena and design systems.<br>• Develop and use a model to describe phenomena. (MS-ESS1-1),(MS-ESS1-2), (MS-ESS1-3)<br>**Analyzing and Interpreting Data**<br>Analyzing data in 6–8 builds on K–5 experiences and progresses to extending quantitative analysis to investigations, distinguishing between correlation and causation, and basic statistical techniques of data and error analysis.<br>• Analyze and interpret data to determine similarities and differences in findings. (MS-ESS1-1),(MS-ESS1-2), (MS-ESS1-3) |
| **Discipline Core Ideas**<br><br>**Physical Science Learning Progressions**<br><br>**Earth & Space Science Learning Progressions**<br><br>**Life Science Learning Progressions** | **ESS1.A: The Universe and Its Stars**<br>• Patterns of the apparent motion of the sun, the moon, and stars in the sky can be observed, described, predicted, and explained with models. (MS-ESS1-1),(MS-ESS1-2), (MS-ESS1-3)<br>• Earth and its solar system are part of the Milky Way galaxy, which is one of many galaxies in the universe. (MS-ESS1-2)<br>**ESS1.B: Earth and the Solar System**<br>• The solar system consists of the sun and a collection of objects, including planets, their moons, and asteroids that are held in orbit around the sun by its gravitational pull on them. (MS-ESS1-1),(MS-ESS1-2), (MS-ESS1-3)<br>• This model of the solar system can explain eclipses of the sun and the moon. Earth's spin axis is fixed in direction over the short-term but tilted relative to its orbit around the sun. The seasons are a result of that tilt and are caused by the differential intensity of sunlight on different areas of Earth across the year. (MS-ESS1-1),(MS-ESS1-2), (MS-ESS1-3)<br>The solar system appears to have formed from a disk of dust and gas, drawn together by gravity. (MS-ESS1-2) |

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| Crosscutting Concepts | **Cause and Effect**<br>● Cause and effect relationships may be used to predict phenomena in natural or designed systems.(MS-ESS1-1),(MS-ESS1-2), (MS-ESS1-3)<br>**Systems and System Models**<br>● Systems may interact with other systems; they may have sub-systems and be a part of larger complex systems. (MS-ESS1-1),(MS-ESS1-2), (MS-ESS1-3)<br>**Structure and Function**<br>● Complex and microscopic structures and systems can be visualized, modeled, and used to describe how their function depends on the relationships among its parts, therefore complex natural structures/systems can be analyzed to determine how they function. (MS-ESS1-1),(MS-ESS1-2), (MS-ESS1-3)<br>**Patterns**<br>● Patterns in rates of change and other numerical relationships can provide information about natural systems. (MS-ESS1-1),(MS-ESS1-2), (MS-ESS1-3)<br>**Scale Proportion and Quantity**<br>● Time, space, and energy phenomena can be observed at various scales using models to study systems that are too large or too small. (MS-ESS1-1),(MS-ESS1-2), (MS-ESS1-3)<br>**Energy and Matter**<br>● Within a natural or designed system, the transfer of energy drives the motion and/or cycling of matter. (MS-ESS1-1),(MS-ESS1-2), (MS-ESS1-3)<br>**Stability and Change**<br>● Explanations of stability and change in natural or designed systems can be constructed by examining the changes over time and processes at different scales, including the atomic scale.(MS-ESS1-1),(MS-ESS1-2), (MS-ESS1-3)<br>***Connections to Engineering, Technology and Applications of Science***<br>**Interdependence of Science, Engineering, and Technology**<br>● Engineering advances have led to important discoveries in virtually every field of science, and scientific discoveries have led to the development of entire industries and engineered systems. (MS-ESS1-1),(MS-ESS1-2), (MS-ESS1-3)<br>***Connections to Nature of Science***<br>**Science is a Human Endeavor**<br>● Scientists and engineers are guided by habits of mind such as intellectual honesty, tolerance of ambiguity, skepticism, and openness to new ideas. (MS-ESS1-1),(MS-ESS1-2), (MS-ESS1-3) |
| Engineering, Technology and the Application of Science Learning Progressions | |

## Interdisciplinary Connections

**ELA/Literacy:**

- SL.8.5 Integrate multimedia and visual displays into presentations to clarify information, strengthen claims and evidence, and add interest. (MS-PS4-2)
- WHST.6-8.8 Gather relevant information from multiple print and digital sources, using search terms

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effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation. (MS-LS1-8)

Social Studies

- 6.2.8EconG.3.a:Explain how the classical civilizations used technology and innovation to enhance agricultural/manufacturing output and commerce, to expand military capabilities, to improve life in urban areas, and to allow for greater division of labor

## Computer Science & Design Thinking

- 8.1.8.CS.1: Recommend improvements to computing devices in order to improve the ways users interact with the devices.
- 8.1.8.CS.2: Design a system that combines hardware and software components to process data.
- 8.1.8.CS.3: Justify design decisions and explain potential system trade-offs.
- 8.1.8.NI.1: Model how information is broken down into smaller pieces, transmitted as addressed packets through multiple devices over networks and the Internet, and reassembled at the destination.
- 8.1.8.NI.4: Explain how new security measures have been created in response to key malware events.
- 8.1.8.IC.1: Compare the trade-offs associated with computing technologies that affect individual's everyday activities and career options.
- 8.1.8.IC.2: Describe issues of bias and accessibility in the design of existing technologies.
- 8.1.8.DA.4: Transform data to remove errors and improve the accuracy of the data for analysis.
- 8.1.8.DA.5: Test, analyze, and refine computational models.
- 8.1.8.AP.7: Design programs, incorporating existing code, media, and libraries, and give attribution.
- 8.1.8.AP.8: Systematically test and refine programs using a range of test cases and users.
- 8.1.8.AP.9: Document programs in order to make them easier to follow, test, and debug.
- 8.2.8.ED.1: Evaluate the function, value, and aesthetics of a technological product or system, from the perspective of the user and the producer.
- 8.2.8.ED.2: Identify the steps in the design process that could be used to solve a problem.
- 8.2.8.ED.3: Develop a proposal for a solution to a real-world problem that includes a model (e.g., physical prototype, graphical/technical sketch).
- 8.2.8.ED.4: Investigate a malfunctioning system, identify its impact, and explain the step-by-step process used to troubleshoot, evaluate, and test options to repair the product in a collaborative team.
- 8.2.8.ED.7: Design a product to address a real-world problem and document the iterative design process, including decisions made as a result of specific constraints and trade-offs (e.g., annotated sketches).
- 8.2.8.ITH.5: Compare the impacts of a given technology on different societies, noting factors that may make a technology appropriate and sustainable in one society but not in another.
- 8.2.8.ETW.1: Illustrate how a product is upcycled into a new product and analyze the short- and long-term benefits and costs.

## Career Readiness, Life Literacies & Key Skills

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- 9.1.8.CR.1: Compare and contrast the role of philanthropy, volunteer service, and charities in community development and the quality of life in a variety of cultures.
- 9.1.8.FP.2: Evaluate the role of emotions, attitudes, and behavior (rational and irrational) in making financial decisions
- 9.1.8.PB.5: Identify factors that affect one's goals, including peers, culture, location, and past experiences.
- 9.2.8.CAP.3: Explain how career choices, educational choices, skills, economic conditions, and personal behavior affect income
- 9.2.12.CAP.7: Use online resources to examine licensing, certification, and credentialing requirements at the local, state, and national levels to maintain compliance with industry requirements in areas of career interest.
- 9.4.8.CI.1: Assess data gathered on varying perspectives on causes of climate change (e.g., cross cultural, gender-specific, generational), and determine how the data can best be used to design multiple potential solutions (e.g., RI.7.9, 6.SP.B.5, 7.1.NH.IPERS.6, 8.2.8.ETW.4).
- 9.4.8.GCA.1: Model how to navigate cultural differences with sensitivity and respect (e.g., 1.5.8.C1a).
- 9.4.8.GCA.2: Demonstrate openness to diverse ideas and perspectives through active discussions to achieve a group goal.

| Career Readiness, Life Literacies, and Key Skills Practices | |
|---|---|
| Act as a responsible and contributing community member and employee. | Students understand the obligations and responsibilities of being a member of a community, and they demonstrate this understanding every day through their interactions with others. They are conscientious of the impacts of their decisions on others and the environment around them. They think about the near-term and long-term consequences of their actions and seek to act in ways that contribute to the betterment of their teams, families, community and workplace. They are reliable and consistent in going beyond the minimum expectation and in participating in activities that serve the greater good. |
| Attend to financial well-being. | Students take regular action to contribute to their personal financial well-being, understanding that personal financial security provides the peace of mind required to contribute more fully to their own career success. |
| Consider the environmental, social and economic impacts of decisions. | Students understand the interrelated nature of their actions and regularly make decisions that positively impact and/or mitigate negative impact on other people, organization, and the environment. They are aware of and utilize new technologies, understandings, procedures, materials, and regulations affecting the nature of their work as it relates to the impact on the social condition, the environment and the profitability of the organization. |
| Demonstrate creativity and innovation. | Students regularly think of ideas that solve problems in new and different ways, and they contribute those ideas in a useful and productive manner to improve their organization. They can consider unconventional ideas and suggestions as solutions to issues, tasks or problems, and they discern which ideas and suggestions will add greatest value. They seek new methods, practices, and ideas from a variety of sources and seek to apply those ideas to their own workplace. They take action on their ideas and understand how to bring innovation to an organization. |
| Utilize critical thinking to make | Students readily recognize problems in the workplace, understand the nature of the problem, and devise effective plans to solve the problem. They are aware of problems |

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| sense of problems and persevere in solving them. | when they occur and take action quickly to address the problem; they thoughtfully investigate the root cause of the problem prior to introducing solutions. They carefully consider the options to solve the problem. Once a solution is agreed upon, they follow through to ensure the problem is solved, whether through their own actions or the actions of others. |
| Model integrity, ethical leadership and effective management. | Students consistently act in ways that align personal and community-held ideals and principles while employing strategies to positively influence others in the workplace. They have a clear understanding of integrity and act on this understanding in every decision. They use a variety of means to positively impact the directions and actions of a team or organization, and they apply insights into human behavior to change others' actions, attitudes and/or beliefs. They recognize the near-term and long-term effects that management's actions and attitudes can have on productivity, morals and organizational culture. |
| Plan education and career paths aligned to personal goals. | Students take personal ownership of their own education and career goals, and they regularly act on a plan to attain these goals. They understand their own career interests, preferences, goals, and requirements. They have perspective regarding the pathways available to them and the time, effort, experience and other requirements to pursue each, including a path of entrepreneurship. They recognize the value of each step in the education and experiential process, and they recognize that nearly all career paths require ongoing education and experience. They seek counselors, mentors, and other experts to assist in the planning and execution of career and personal goals. |
| Use technology to enhance productivity, increase collaboration and communicate effectively. | Students find and maximize the productive value of existing and new technology to accomplish workplace tasks and solve workplace problems. They are flexible and adaptive in acquiring new technology. They are proficient with ubiquitous technology applications. They understand the inherent risks-personal and organizational-of technology applications, and they take actions to prevent or mitigate these risks. |
| Work productively in teams while using cultural/global competence. | Students positively contribute to every team, whether formal or informal. They apply an awareness of cultural differences to avoid barriers to productive and positive interaction. They find ways to increase the engagement and contribution of all team members. They plan and facilitate effective team meetings. |

| Evidence of Student Learning | |
|---|---|
| **Formative Tasks:**<br>• Oral Questioning<br>• Class work<br>• Student Conference<br>• Self-Assessment<br>• Think-Pair-Share<br>• Hand Signals<br>• Peer Reflections<br>• Constructive Response<br>• Teacher Observation | **Alternative Assessments:**<br>• Group Work/Class Discussion Rubric<br>• Guided Observations<br>• Questions Starters<br>• Participation Rubric<br>• Modified Tests/Quizzes/Classwork<br>• Science A-Z Activities<br>• Science Related Reading A-Z Activities<br>• Science Related Achieve3000 Articles and Activities |

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| Grade: 6 | Content Area: Science |
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| • Exit Slip | |
| **Summative Assessments:**<br>• Quizzes<br>• Tests<br>• Unit Projects<br>• Presentations | **Benchmark Assessments:**<br>Science A-Z Benchmark Assessment<br>• |

| **Knowledge & Skills** | |
|---|---|
| **Enduring Understandings:**<br>*Students will understand that...*<br>• Observable, predictable patterns of movement in the Sun, Earth, Moon system occur because of gravitational interaction and energy from the Sun.<br>• The Universe is made up of galaxies, each of which is composed of solar systems, having the same elements and governed by the same laws | **Essential Questions:**<br>• What predictable, observable patterns occur as a result of the interaction between the Earth, Moon and Sun?<br>• What types of celestial bodies encompass our Universe? |
| **Content** | **Skills** |
| *Students will know...*<br>• how distance and mass affect gravitational attraction<br>• the difference between rotation and revolution<br>• the 3 laws for planetary motion.<br>• the current theory of the origin of the Earth's moon<br>• the causes of the phases of the Earth's moon, eclipses, daily and monthly tides<br>• the factors that combine to explain the changes in the length of the day and seasons | *Students will be able to …*<br>• Distinguish between Earth's rotation and Earth's revolution<br>• Model how the Sun strikes Earth's surface.<br>• Model how solar energy spreads out over Earth's surface throughout the year.<br>• Simulate how the Moon moves around the Earth.<br>• Illustrate and demonstrate a solar eclipse and lunar eclipse.<br>• Design and use a model of the Earth-sun-moon system to describe the cyclic patterns of lunar phases, eclipses of the sun and moon, and seasons.<br>• Model the different phases of the moon.<br>• Demonstrate the gravitational pull between the Sun and a planet.<br>• Develop and use a model to describe the role of gravity in the motions within galaxies and the solar system.<br>• Construct a scale model of our solar system.<br>• Analyze and interpret data to determine scale properties of objects in the solar system.<br>• Differentiate the sun as it relates to other stars in the universe. |

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| | • Determine one's own individual responsibility from personal actions and contributions to group activities.<br>• Demonstrate leadership skills, cooperative learning strategies, and community building strategies when participating in classroom laboratory activities.<br>• Demonstrate the ability to understand inferences. |

| Instructional Plan | |
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| **Suggested Activities** | **Resources** |
| **Scaling the Solar System**: Students will model the solar system to scale using the scale model educational insight. | The materials and supplies will be in the science lab and the lab sheet will be in the Science Binder in the Science Lab. |
| **Inflatable/ Portable Planetarium** - Star Lab - Students will observe the constellations of the night sky. | Star Lab will be ordered from Gloria Villabros |
| Impact Craters: Students will evaluate and interpret the physical characteristics of a crater. | Teacher's guide will be in the Science Closet with the Science Binder. |
| **Star Finder:** Students will construct a simple star field to identify the constellations in the night sky for the 12 months in the northern hemisphere. | Teacher's guide and supplies will be in the Science closet with the Science Binder. |
| Which Stars Can You Use for Navigation in Different Parts of the World? In this experiment, the students will determine which stars to use to navigate in each hemisphere of the globe. | http://www.sciencebuddies.org/science-fair-projects/project_ideas/Astro_p008.shtml |

**LITERATURE**

- *12 Things to Know about Space Exploration* by Rebecca Felix
- *Solar and Lunar Eclipses* by Ruth Owen
- *21st Century: Mysteries of Deep Space* by Stephanie Paris

**Inclusivity/LGBTQ and Individuals with Disabilities Resources**
BrainPop Inclusivity List
NOGLSTP

**WEBSITES**

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| http://astro.unl.edu/ (resources for astronomy education from the University of Nebraska-Lincoln) | http://www.nasa.gov/pdf/630754main_NASAsBESTActivityGuide6-8.pdf (NASA's best beginning engineering challenges) |
| http://astro.unl.edu/naap/lps/animations/lps.html (lunar phase simulator) | http://www.bbc.co.uk/bitesize/ks3/science/energy_electricity_forces/forces/activity/ (short clips on various subjects) |
| http://pbs.panda-prod.cdn.s3.amazonaws.com/media/assets/wgbh/ess05/ess05_int_seasonsgame/index.html (Earth movement simulation) | http://www.sciencecourseware.org/eec/GlobalWarming/Tutorials/Seasons/ (seasons tutorial) |
| http://www-tc.pbskids.org/designsquad/pdf/parentseducators/DSN_NASA_MissionSolarSystem_SoftLanding.pdf (engineering challenge - air bag protection for an egg drop) | https://www.brainpop.com/games/flytomars/ (flight to Mars game) |
| http://highered.mheducation.com/olcweb/cgi/pluginpop.cgi?it=swf::800::600::/sites/dl/free/0072482621/78778/Eclipses_Nav.swf::Eclipse%20Interactive (solar eclipse simulation) | |
| **Individuals with disabilities Resources**<br>○ https://www.mentalfloss.com/article/87069/12-disabled-scientists-who-made-world-better-place<br>○ https://www.sciencenewsforstudents.org/article/disabilities-dont-stop-these-experts-science-and-tech<br>○ https://www.sciencehistory.org/science-and-disability<br>○ https://whyy.org/articles/new-philly-exhibit-celebrates-lives-contributions-of-scientists-with-disabilities/ | **LGBTQ plus Resources**<br>○ https://www.discovery.com/science/LGBT-Scientists-Who-Changed-World<br>○ https://www.osc.org/important-lgbtq-scientists-who-left-a-mark-on-stem-fields/<br>○ https://www.ideatovalue.com/insp/nickskillicorn/2019/06/14-lgbtq-innovators-inventors-and-scientists-who-changed-the-world/<br>○ https://www.pinknews.co.uk/2018/07/05/queer-scientists-history-first-lgbtstemday/ |

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**Stafford Township School DIstrict Curriculum Guide**

| Grade: Kindergarten | Content Area: Science |
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| **Original Adoption:** 2020 NJSLS Science, Social Studies, Career Readiness, Life Literacies & Key Skills, Computer Design & Thinking, Visual & Performing Arts, World Language, Comprehensive Health and Physical Education (9-12-22); 2023 NJSLS English Language Arts (9-23-24); Math NJSLS Mathematics (9-23-24) |
| **Created By: Cori Ruiz and Marissa Ross** |
| **Updated Date: September 17, 2026** |
| **Updated By: Megan Banach** |

Intent and Spirit

The New Jersey Student Learning Standards for Science (NJSLS-S) describe the expectations for what students should know and be able to do as well as promote three-dimensional science instruction across the three science domains (i.e., physical sciences, life science, Earth and space sciences). From the earliest grades, the expectation is that students will engage in learning experiences that enable them to investigate phenomena, design solutions to problems, make sense of evidence to construct arguments, and critique and discuss those arguments (in appropriate ways relative to their grade level).

The foundation of the NJSLS-S reflects three dimensions — science and engineering practices, disciplinary core ideas, and crosscutting concepts. The performance expectations are derived from the interplay of these three dimensions. It is essential that these three components are integrated into all learning experiences. Within each standard document, the three dimensions are intentionally presented as integrated components to foster sensemaking and designing solutions to problems. Because the NJSLS-S is built on the notions of coherence and contextuality, each of the science and engineering practices and crosscutting concepts appear multiple times across topics and at every grade level. Additionally, the three dimensions should be an integral part of every curriculum unit and should not be taught in isolation.

Mission

All students will develop an understanding of scientific concepts and processes essential for informed decision-making, meaningful participation in civic life, and readiness for postsecondary opportunities, including careers in STEM fields.

Vision

Prepare students to become scientifically literate individuals who can effectively:

- Apply scientific thinking, skills, and understanding to real-world phenomena and problems;
- Engage in systems thinking and modeling to explain phenomena and to give a context for the ideas to be learned;
- Conduct investigations, solve problems, and engage in discussions;
- Discuss open-ended questions that focus on the strength of the evidence used to generate claims;
- Read and evaluate multiple sources, including science-related magazine and journal articles and web-based resources to gain knowledge about current and past science problems and solutions and develop well-reasoned claims; and
- Communicate ideas through journal articles, reports, posters, and media presentations that explain and argue.

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| **Recommended Pacing Guide** | |
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| **Unit 1:** Motion and Stability: Forces and Interactions | 80 days (September - January) |
| **Unit 2:** Energy | 30 days (January - February) |
| **Unit 3:** From Molecules to Organisms: Structures and Processes | 15 days (March) ongoing |
| **Unit 4:** Earth Systems | 20 days (April) ongoing |
| **Unit 5:** Earth and Human Activity | 35 days (May - June) |
| Engineering Design | 180 days (September - June) ongoing |

**Alignment with State Mandates**

The following colors are used throughout this document to indicate areas in which the curriculum is aligned with the following NJSA requirements:

- Holocaust and genocides (N.J.S.A. 18A:35-28)
- History and contributions of African-Americans (Amistad Law) (N.J.S.A. 18A:35-4.43)
- Highlight and promote diversity and inclusion (Diversity & Inclusion Law) (N.J.S.A. 18A:35-4.36a)
- History of disabled and LGBT persons included in middle and high school curriculum (Section 18A:35-4.35 )
- Asian Americans and Pacific Islanders (N.J.S.A18A:34-4,44)
- Climate Change - to prepare students to understand how and why climate change happens, the impact it has on our local and global communities and to act in informed and sustainable ways. Please click here for specific examples (by subject).

Students are expected to develop understanding of patterns and variations in local weather and the purpose of weather forecasting to prepare for, and respond to, severe weather. Students are able to apply an understanding of the effects of different strengths or different directions of pushes and pulls on the motion of an object to analyze a design solution. Students are also expected to develop understanding of what plants and animals (including humans) need to survive and the relationship between their needs and where they live. Students use their understanding of sunlight warming Earth's surface to design a structure to keep their playground cool.

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| Grade: Kindergarten | Content Area: Science |
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| Unit 1: Motion and Stability: Forces and Interactions | Duration: 80 days (September - January) |
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## Suggested Accommodations

**English Language Learners:**
- Small group instruction-guided reading and guided writing
- Use books on tape
- Allow extra time to complete assignments or tests
- Work in a small group
- Allow answers to be given orally or dictated
- Assign a picture or movement to vocabulary words
- Pre Teach vocabulary
- Label items in classroom

**Basic Skills**
- Preview lessons
- Preview vocabulary words
- Summarize as you go

**Special Education/Students with Disabilities:**
- Use visuals
- Introduce key vocabulary before lesson
- Teacher reads aloud daily
- Provide peer tutoring
- Use a strong student as a “buddy” (does not necessarily have to speak the primary language)
- Choral reading
- Chants, songs
- Preferential seating
- Assign a picture or movement to vocabulary words
- Small group instruction-guided reading and guided writing
- Use books on tape
- Allow extra time to complete assignments or tests
- Work in a small group
- Allow answers to be given orally or dictated
- Use large print books, braille, or books on CD (digital text)
- Follow all IEP modifications
- Scriber for students who can’t write
- Augmentative communication system

**504 Plans:**
- Use visuals
- Introduce key vocabulary before lesson
- Teacher reads aloud daily
- Provide peer tutoring
- Use a strong student as a “buddy” (does not necessarily have to speak the primary language)
- Choral reading
- Chants, songs
- Preferential seating
- Assign a picture or movement to vocabulary words
- Small group instruction-guided reading and guided writing
- Use books on tape
- Allow extra time to complete assignments or tests

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| Grade: Kindergarten | Content Area: Science |
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- Work in a small group
- Allow answers to be given orally or dictated
- Follow all 504 plan modifications

**Gifted and Talented:**

- Ask open-ended questions
- Encourage upper level intellectual behavior based on Bloom's Taxonomy (analyzing, evaluating, creating)
- Do not always be explicit, allow for discovery
- Use centers and group students according to ability or interest
- Propose interest-based extension activities
- Use leveled texts and offer an advanced reader reading list
- Ask "why" and "what if" questions
- Use varied modes of pre-assessment and assessment
- Create an enhanced set of introductory activities (e.g. advance organizers, concept maps, concept puzzles)
- Provide options, alternatives and choices to differentiate and broaden the curriculum
- Organize and offer flexible small group learning activities
- Provide whole group enrichment explorations
- Teach cognitive and methodological skills
- Use center, stations, or contracts
- Organize integrated problem-solving simulations
- Debrief students
- Propose interest-based extension activities

**Students at Risk of Failure:**

- Work toward longer passages as skills in English increase
- Use visuals
- Introduce key vocabulary before lesson
- Teacher reads aloud daily
- Provide peer tutoring
- Use a strong student as a "buddy" (does not necessarily have to speak the primary language)
- Choral reading
- Chants, songs
- Preferential seating

**Economically Disadvantaged:**

- Extra Materials
- Books for Home
- Study Guides
- "Take Home" Kit

**Culturally Diverse:**

- Involve families in student learning
- Provide social/emotional support
- Respect cultural traditions
- Build in more group work to encourage interaction with peers
- Show photos, videos, and definitions when possible for culturally unique vocabulary
- Teach study skills
- Provided students with necessary academic resources and materials
- Provide visuals
- Support verbal explanations with non verbal cues: Gestures/ facial expressions Props, realia, manipulatives, concrete materials Visuals, graphs, pictures, maps
- Provide positive praise to increase motivation
- Provide real world connections and emphasize the value of education

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- Communicate high expectations for the success of all students
- Integrate the arts into learning activities

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| New Jersey Student Learning Standards |
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| K-PS2-1 Plan and conduct an investigation to compare the effects of different strengths or different directions of pushes and pulls on the motion of an object.<br><br>K-PS2-2 Analyze data to determine if a design solution works as intended to change the speed or direction of an object with a push or a pull. |

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| Science and Engineering Practices Learning Progressions | **Planning and Carrying Out Investigations**<br>Planning and carrying out investigations to answer questions or test solutions to problems in K–2 builds on prior experiences and progresses to simple investigations, based on fair tests, which provide data to support explanations or design solutions.<br>• With guidance, plan and conduct an investigation in collaboration with peers. (K-PS2-1)<br>**Analyzing and Interpreting Data**<br>• Analyzing data in K–2 builds on prior experiences and progresses to collecting, recording, and sharing observations.<br>• Analyze data from tests of an object or tool to determine if it works as intended. (K-PS2-2) |
| **Discipline Core Ideas**<br><br>Physical Science Learning Progressions<br><br>Earth & Space Science Learning Progressions<br><br>Life Science Learning Progressions | **PS2.A: Forces and Motion**<br>• Pushes and pulls can have different strengths and directions. (K-PS2-1),(K-PS2-2)<br>• Pushing or pulling on an object can change the speed or direction of its motion and can start or stop it. (K-PS2-1),(K-PS2-2)<br><br>**PS2.B: Types of Interactions**<br>• When objects touch or collide, they push on one another and can change motion. (K-PS2-1)<br><br>**PS3.C: Relationship Between Energy and Forces**<br>• A bigger push or pull makes things speed up or slow down more quickly. *(secondary to K-PS2-1)*<br><br>**ETS1.A: Defining and Delimiting Engineering Problems**<br>• A situation that people want to change or create can be approached as a problem to be solved through engineering. |

| Grade: Kindergarten | Content Area: Science |
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| | Such problems may have many acceptable solutions. *(secondary to K-PS2-2)* |
| Crosscutting Concepts | **Cause and Effect**<br>• Simple tests can be designed to gather evidence to support or refute student ideas about causes. (K-PS2-1),(K-PS2-2)<br><br>***Connections to Nature of Science***<br>**Scientific Investigations Use a Variety of Methods**<br>• Scientists use different ways to study the world. (K-PS2-1) |
| Engineering, Technology and the Application of Science Learning Progressions | |

## Interdisciplinary Connections

**Reading**
- **RI.CI.K.2** With prompting and support, identify the main topic and key details of an informational text (e.g. who, what, where, when, why, how).

**Speaking and Listening**
- **SL.ES.K.3** Ask and answer questions in order to seek help, get information, or clarify something that is not understood. (K-PS2-2)

**Writing**
- **W.RW.K.7** With prompting and support, engage in brief but regular writing and drawing tasks.

**Mathematics**
- **K.M.A.1** Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object. (K-PS2-1)
- **K.M.A.2** Directly compare two objects with a measurable attribute in common, to see which object has "more of/less of" the attribute, and describe the difference. (K-PS2-1)

**Social Studies**

6.1.2.CivicsCM.3: Explain how diversity, tolerance, fairness, and respect for others can contribute to individuals feeling accepted.

6.1.12.CivicsDP.5.a: Analyze the effectiveness of governmental policies and of actions by groups and individuals to address discrimination against new immigrants, Native Americans, and African Americans.

***Connections to other DCIs in Kindergarten:***
- **K.ETS1.A** Defining and delimiting engineering problems (K-PS2-2)
- **K.ETS1.B** Developing Possible Solutions- engineering design (K-PS2-2)

***Articulation of DCIs across grade levels:***
- **2.ETS1.B** Engineering Design (K-PS2-2)
- **2.PS2.A** Forces and Motion (K-PS2-1), (K-PS2-2)
- **3.PS2.B** Types of Interactions (K-PS2-1)
- **4.PS3.A** Definitions of Energy (K-PS2-1)
- **4.ETS1.A** Defining and Delimiting Engineering Problems (K-PS2-2)

## Computer Science & Design Thinking

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- 8.1.2.CS.1: Select and operate computing devices that perform a variety of tasks accurately and quickly based on user needs and preferences.
- 8.1.2.CS.2: Explain functions of common software and hardware components of computing systems.
- 8.1.2.IC.1: Compare how individuals live and work before and after the implementation of new computing technology.
- 8.1.2.DA.4: Make predictions based on data using charts or graphs.
- 8.2.2.ITH.3: Identify how technology impacts or improves life
- 8.2.2.EC.1: Identify and compare technology used in different schools, communities, regions, and parts of the world.

**Career Readiness, Life Literacies, and Key Skills**

- 9.1.2.CR.1: Recognize ways to volunteer in the classroom, school and community.
- 9.1.2.RM.1: Describe how valuable items might be damaged or lost and ways to protect them
- 9.2.2.CAP.1: Make a list of different types of jobs and describe the skills associated with each job
- 9.4.2.CI.1: Demonstrate openness to new ideas and perspectives (e.g., 1.1.2.CR1a, 2.1.2.EH.1, 6.1.2.CivicsCM.2).
- 9.4.2.DC.7: Describe actions peers can take to positively impact climate change.
- 9.4.2.DC.6: Identify respectful and responsible ways to communicate in digital environments.
- 9.4.2.CT.3: Use a variety of types of thinking to solve problems (e.g., inductive, deductive)

| Career Readiness, Life Literacies, and Key Skills Practices | |
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| Act as a responsible and contributing community member and employee. | Students understand the obligations and responsibilities of being a member of a community, and they demonstrate this understanding every day through their interactions with others. They are conscientious of the impacts of their decisions on others and the environment around them. They think about the near-term and long-term consequences of their actions and seek to act in ways that contribute to the betterment of their teams, families, community and workplace. They are reliable and consistent in going beyond the minimum expectation and in participating in activities that serve the greater good. |
| Attend to financial well-being. | Students take regular action to contribute to their personal financial well-being, understanding that personal financial security provides the peace of mind required to contribute more fully to their own career success. |
| Consider the environmental, social and economic impacts of decisions. | Students understand the interrelated nature of their actions and regularly make decisions that positively impact and/or mitigate negative impact on other people, organization, and the environment. They are aware of and utilize new technologies, understandings, procedures, materials, and regulations affecting the nature of their work as it relates to the impact on the social condition, the environment and the profitability of the organization. |
| Demonstrate creativity and innovation. | Students regularly think of ideas that solve problems in new and different ways, and they contribute those ideas in a useful and productive manner to improve their organization. They can consider unconventional ideas and suggestions as solutions to issues, tasks or problems, and they discern which ideas and suggestions will add |

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| | greatest value. They seek new methods, practices, and ideas from a variety of sources and seek to apply those ideas to their own workplace. They take action on their ideas and understand how to bring innovation to an organization. |
| Utilize critical thinking to make sense of problems and persevere in solving them. | Students readily recognize problems in the workplace, understand the nature of the problem, and devise effective plans to solve the problem. They are aware of problems when they occur and take action quickly to address the problem; they thoughtfully investigate the root cause of the problem prior to introducing solutions. They carefully consider the options to solve the problem. Once a solution is agreed upon, they follow through to ensure the problem is solved, whether through their own actions or the actions of others. |
| Model integrity, ethical leadership and effective management. | Students consistently act in ways that align personal and community-held ideals and principles while employing strategies to positively influence others in the workplace. They have a clear understanding of integrity and act on this understanding in every decision. They use a variety of means to positively impact the directions and actions of a team or organization, and they apply insights into human behavior to change others' actions, attitudes and/or beliefs. They recognize the near-term and long-term effects that management's actions and attitudes can have on productivity, morals and organizational culture. |
| Plan education and career paths aligned to personal goals. | Students take personal ownership of their own education and career goals, and they regularly act on a plan to attain these goals. They understand their own career interests, preferences, goals, and requirements. They have perspective regarding the pathways available to them and the time, effort, experience and other requirements to pursue each, including a path of entrepreneurship. They recognize the value of each step in the education and experiential process, and they recognize that nearly all career paths require ongoing education and experience. They seek counselors, mentors, and other experts to assist in the planning and execution of career and personal goals. |
| Use technology to enhance productivity, increase collaboration and communicate effectively. | Students find and maximize the productive value of existing and new technology to accomplish workplace tasks and solve workplace problems. They are flexible and adaptive in acquiring new technology. They are proficient with ubiquitous technology applications. They understand the inherent risks-personal and organizational-of technology applications, and they take actions to prevent or mitigate these risks. |
| Work productively in teams while using cultural/global competence. | Students positively contribute to every team, whether formal or informal. They apply an awareness of cultural differences to avoid barriers to productive and positive interaction. They find ways to increase the engagement and contribution of all team members. They plan and facilitate effective team meetings. |

| Evidence of Student Learning | |
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| **Formative Tasks:**<br>● Teacher Observations<br>● Anecdotal Notes<br>● Directed Reading | **Alternative Assessments:**<br>● Performance Tasks: Activities to provide evidence for student learning of content and cognitive skills. x |

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| • Cooperative Group Learning<br>• Labeling | |
| **Summative Assessments:**<br>• Portfolio Assessment<br>• Benchmark Assessment<br>• Alternative Assessments<br>• Group Work/Class Discussion Rubric<br>• Guided Observations<br>• Questions Starters<br>• Participation Rubric<br>• Modified Tests/Quizzes/Classwork<br>• Mystery Science Activities<br>• Fundamentals Unlimited Books and Assessments | **Benchmark Assessments:**<br>• Student Assessment Booklet |

| **Vocabulary** |
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| **gravity, push, pull, magnets, force, motion, dominoes, runs, ramps, pulleys, levers, friction** |

| **Knowledge & Skills** | |
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| **Enduring Understandings:**<br>• Students will understand that…<br>• Pushes and pulls can have different strengths and directions<br>• Pushing or pulling on an object can change the speed or direction of its motion and can start or stop it.<br>• When objects touch or collide, they push on one another and can change motion.<br>• A bigger push or pull makes things speed up or slow down more quickly.<br>• A situation that people want to change or create can be approached as a problem to be solved through engineering. Such problems may have many acceptable solutions | **Essential Questions:**<br>• How does friction affect movement?<br>• What kinds of forces act by touching?<br>• What kinds of forces act without touching?<br>• How can a force act upon an object without touching it?<br>• What happens if you push or pull an object harder |
| **Content:**<br><br>Students will know...<br>• Pushes and pulls can have different strengths | **Skills:**<br>Students will be able to …<br>• Analyze data and develop an understanding of the effects of different directions of pushes and pulls on the motion of an object to determine if a design |

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| and directions.<br>● Pushing or pulling on an object can change the speed or direction of its motion and can start and stop it.<br>● When objects touch or collide, they push one another and can change motion.<br>● A bigger push or pull makes things speed up or slow down more quickly. | solution works as intended to change the speed or direction of an object with a push or pull.<br>● Plan and conduct an investigation to compare the effects of different strengths or different directions of pushes and pulls on the motion of an object.<br>● Analyze data from tests of two objects designed to solve the same problem to compare the strengths and weaknesses of how each performs.<br>● Analyze data to determine whether a design solution works as intended to change the speed or direction of an object with a push or a pull. |

| Core Instructional & Supplemental Materials | |
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| **Suggested Activities/Resources:**<br>● ”Domino Runs”- Students construct a Domino run of at least 10 Dominoes and discuss structures in motion.<br>Resources: Dominoes<br>Website: https://www.youtube.com/user/Hevesh5<br>● “Ramps with Paper Towel Tubes”-Students use a half of paper towel roll and blocks to build a working ramp.<br>Resources: Paper Towel Rolls, Blocks<br>Website: http://kodokids.com/outdoor-ramps<br>● “Cup Stacking”-Students use plastic cups to create a cup structure and discuss the force of gravity.<br>Resources: Cups<br>Website: YouTube video “Amazing 4-year-old cup stacker”<br>● Students identify and sort objects that only move one way and others that may move in many ways such as roll/slide.<br>Resources: Different Objects<br>● Students explore, predict and observe which objects magnets will/will not attract. Share findings with a group or partner.<br>Resources: Different Objects, magnets<br>● With guidance, students collaboratively plan and conduct simple investigations to discover and compare the effects of pushes and pulls on the motion of an object. Students will have opportunities to push and pull a variety of objects. Students should push/pull these objects first with varying strengths, and then in a variety of directions. Students should record their observations using pictures and words, and should participate in class discussions on the effects of varying the | **Varied Levels of Text:**<br>● Experiments with Magnets by Helen J. Challand<br>● What Magnets Can Do by Allan Fowler |

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| strength or direction of a push or pull on an object.<br>Resources: journals, balls, toy cars, pull toys, cans, tops, boxes<br>● Students investigate the interactions between colliding objects using pushes and pulls. Students play a game of kickball and observe how the ball is pushed, pulled, started, stopped, or collides with other objects and how it changes position and speed. As a group, students will then brainstorm about other objects being pushed, pulled or colliding and then choose one of those objects to investigate.<br>Resources: Push-Pull Changing Direction, ball<br>● Students design, build, and test their own ramps. Students are introduced to a variety of materials and explore putting them together. Students create plans for ramps by evaluating a variety of materials provided to them.<br>Resources: Ramps 2: Ramp Builder | |

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| **Unit 2:** Energy | **Duration:** 30 days (January - February) |

| Suggested Accommodations |
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| **English Language Learners:**<br>● Small group instruction-guided reading and guided writing<br>● Use books on tape<br>● Allow extra time to complete assignments or tests<br>● Work in a small group<br>● Allow answers to be given orally or dictated<br>● Assign a picture or movement to vocabulary words<br>● Pre Teach vocabulary<br>● Label items in classroom<br>**Basic Skills**<br>● Preview lessons<br>● Preview vocabulary words<br>● Summarize as you go<br>**Special Education/Students with Disabilities:**<br>● Use visuals<br>● Introduce key vocabulary before lesson<br>● Teacher reads aloud daily<br>● Provide peer tutoring<br>● Use a strong student as a “buddy” (does not necessarily have to speak the primary language)<br>● Choral reading<br>● Chants, songs |

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- Preferential seating
- Assign a picture or movement to vocabulary words
- Small group instruction-guided reading and guided writing
- Use books on tape
- Allow extra time to complete assignments or tests
- Work in a small group
- Allow answers to be given orally or dictated
- Use large print books, Braille, or books on CD (digital text)
- Follow all IEP modifications
- Scriber for students who can't write
- Augmentative communication system

**504 Plans:**

- Use visuals
- Introduce key vocabulary before lesson
- Teacher reads aloud daily
- Provide peer tutoring
- Use a strong student as a "buddy" (does not necessarily have to speak the primary language)
- Choral reading
- Chants, songs
- Preferential seating
- Assign a picture or movement to vocabulary words
- Small group instruction-guided reading and guided writing
- Use books on tape
- Allow extra time to complete assignments or tests
- Work in a small group
- Allow answers to be given orally or dictated
- Follow all 504 plan modifications

**Gifted and Talented:**

- Ask open-ended questions
- Encourage upper level intellectual behavior based on Bloom's Taxonomy (analyzing, evaluating, creating)
- Do not always be explicit, allow for discovery
- Use centers and group students according to ability or interest
- Propose interest-based extension activities
- Use leveled texts and offer an advanced reader reading list
- Ask "why" and "what if" questions
- Use varied modes of pre-assessment and assessment
- Create an enhanced set of introductory activities (e.g. advance organizers, concept maps, concept puzzles)
- Provide options, alternatives and choices to differentiate and broaden the curriculum
- Organize and offer flexible small group learning activities
- Provide whole group enrichment explorations
- Teach cognitive and methodological skills
- Use center, stations, or contracts
- Organize integrated problem-solving simulations
- Debrief students
- Propose interest-based extension activities

**Students at Risk of Failure:**

- Work toward longer passages as skills in English increase
- Use visuals
- Introduce key vocabulary before lesson

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- Teacher reads aloud daily
- Provide peer tutoring
- Use a strong student as a “buddy” (does not necessarily have to speak the primary language)
- Choral reading
- Chants, songs
- Preferential seating

**Economically Disadvantaged:**

- Extra Materials
- Books for Home
- Study Guides
- “Take Home” Kit

**Culturally Diverse:**

- Involve families in student learning
- Provide social/emotional support
- Respect cultural traditions
- Build in more group work to encourage interaction with peers
- Show photos, videos, and definitions when possible for culturally unique vocabulary
- Teach study skills
- Provided students with necessary academic resources and materials
- Provide visuals
- Support verbal explanations with non verbal cues: Gestures/ facial expressions Props, realia, manipulatives, concrete materials Visuals, graphs, pictures, maps
- Provide positive praise to increase motivation
- Provide real world connections and emphasize the value of education
- Communicate high expectations for the success of all students
- Integrate the arts into learning activities

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| New Jersey Student Learning Standards | |
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| K-PS3-1 Make observations to determine the effect of sunlight on Earth’s surface.<br><br>K-PS3-2 Use tools and materials to design and build a structure that will reduce the warming effect of sunlight on an area. | |
| Science and Engineering Practices Learning Progressions | **Planning and Carrying Out Investigations**<br>Planning and carrying out investigations to answer questions or test solutions to problems in K–2 builds on prior experiences and progresses to simple investigations, based on fair tests, which provide data to support explanations or design solutions.<br>• Make observations (firsthand or from media) to collect data that can be used to make comparisons. (KPS3-1)<br><br>**Constructing Explanations and Designing Solutions**<br>Constructing explanations and designing solutions in K–2 builds on prior experiences and progresses to the use of evidence and ideas in |

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| | constructing evidence-base accounts of natural phenomena and designing solutions.<br>● Use tools and materials provided to design and build a device that solves a specific problem or a solution to a specific problem. (K-PS3-2) |
| **Discipline Core Ideas**<br><br>**Physical Science Learning Progressions**<br><br>**Earth & Space Science Learning Progressions**<br><br>**Life Science Learning Progressions** | **PS3.B: Conservation of Energy and Energy Transfer**<br>● Sunlight warms Earth's surface. (K-PS3-1), (K-PS3-2) |
| **Crosscutting Concepts** | **Cause and Effect**<br>● Events have causes that generate observable patterns. (K-PS3-1), (K-PS3-2)<br>***Connections to Nature of Science***<br>**Scientific Investigations Use Variety of Methods**<br>● Scientists use different ways to study the world. (K-PS3-1) |
| Engineering, Technology and the Application of Science Learning Progressions | |

**Interdisciplinary Connections**

**Reading**
- **RI.CI.K.2** With prompting and support, identify the main topic and key details of an informational text (e.g. who, what, where, when, why, how). (K-PS3-2)

**Speaking and Listening**
- **SL.ES.K.3** Ask and answer questions in order to seek help, get information, or clarify something that is not understood. (K-PS3-1), (K-PS3-2)

**Writing**
- **W.RW.K.7** With prompting and support, engage in brief but regular writing and drawing tasks. (K-PS3-1), (K-PS3-2)

**Mathematics**
- **K.M.A.1** Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object. (K-PS3-1), (K-PS3-2)
- **K.M.A.2** Directly compare two objects with a measurable attribute in common, to see which object has "more of/less of" the attribute, and describe the difference. (K-PS3-1), (K-PS3-2)
- **K.DL.A.1** Classify objects into given categories; count the number of objects in each category and sort the categories by count. (K-PS3-1), (K-PS3-2)

**Social Studies**

6.1.2.CivicsCM.3: Explain how diversity, tolerance, fairness, and respect for others can contribute to individuals feeling accepted.

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6.1.12.CivicsDP.5.a: Analyze the effectiveness of governmental policies and of actions by groups and individuals to address discrimination against new immigrants, Native Americans, and African Americans.

***Connections to other DCIs in Kindergarten:***

- **K.ETS1.A** Defining and Delimiting Engineering Problems (K-PS3-2)
- **K.ETS1.B** Developing Possible Solutions- Engineering Design (K-PS3-2)

***Articulation of DCIs across grade levels:***

- **1.PS4.B** Electromagnetic Radiation (K-PS3-1), (K-PS3-2)
- **2.ETS1.B** Developing Possible Solutions - Engineering Design (K-PS3-2)
- **3.ESS2.D** Weather and Climate - Earth's Systems(K-PS3-1)
- **4.ETS1.A** Defining and Delimiting Engineering Problems (K-PS3-2)

## Computer Science & Design Thinking

- 8.1.2.CS.1: Select and operate computing devices that perform a variety of tasks accurately and quickly based on user needs and preferences.
- 8.1.2.CS.2: Explain functions of common software and hardware components of computing systems.
- 8.1.2.IC.1: Compare how individuals live and work before and after the implementation of new computing technology.
- 8.1.2.DA.4: Make predictions based on data using charts or graphs.
- 8.2.2.ITH.3: Identify how technology impacts or improves life
- 8.2.2.EC.1: Identify and compare technology used in different schools, communities, regions, and parts of the world.

## Career Readiness, Life Literacies, and Key Skills

- 9.1.2.CR.1: Recognize ways to volunteer in the classroom, school and community.
- 9.1.2.RM.1: Describe how valuable items might be damaged or lost and ways to protect them
- 9.2.2.CAP.1: Make a list of different types of jobs and describe the skills associated with each job
- 9.4.2.CI.1: Demonstrate openness to new ideas and perspectives (e.g., 1.1.2.CR1a, 2.1.2.EH.1, 6.1.2.CivicsCM.2).
- 9.4.2.DC.7: Describe actions peers can take to positively impact climate change.
- 9.4.2.DC.6: Identify respectful and responsible ways to communicate in digital environments.
- 9.4.2.CT.3: Use a variety of types of thinking to solve problems (e.g., inductive, deductive)

| Career Readiness, Life Literacies, and Key Skills Practices | |
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| Act as a responsible and contributing community member and employee. | Students understand the obligations and responsibilities of being a member of a community, and they demonstrate this understanding every day through their interactions with others. They are conscientious of the impacts of their decisions on others and the environment around them. They think about the near-term and long-term consequences of their actions and seek to act in ways that contribute to the betterment of their teams, families, community and workplace. They are reliable and consistent in |

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| | going beyond the minimum expectation and in participating in activities that serve the greater good. |
| Attend to financial well-being. | Students take regular action to contribute to their personal financial well-being, understanding that personal financial security provides the peace of mind required to contribute more fully to their own career success. |
| Consider the environmental, social and economic impacts of decisions. | Students understand the interrelated nature of their actions and regularly make decisions that positively impact and/or mitigate negative impact on other people, organization, and the environment. They are aware of and utilize new technologies, understandings, procedures, materials, and regulations affecting the nature of their work as it relates to the impact on the social condition, the environment and the profitability of the organization. |
| Demonstrate creativity and innovation. | Students regularly think of ideas that solve problems in new and different ways, and they contribute those ideas in a useful and productive manner to improve their organization. They can consider unconventional ideas and suggestions as solutions to issues, tasks or problems, and they discern which ideas and suggestions will add greatest value. They seek new methods, practices, and ideas from a variety of sources and seek to apply those ideas to their own workplace. They take action on their ideas and understand how to bring innovation to an organization. |
| Utilize critical thinking to make sense of problems and persevere in solving them. | Students readily recognize problems in the workplace, understand the nature of the problem, and devise effective plans to solve the problem. They are aware of problems when they occur and take action quickly to address the problem; they thoughtfully investigate the root cause of the problem prior to introducing solutions. They carefully consider the options to solve the problem. Once a solution is agreed upon, they follow through to ensure the problem is solved, whether through their own actions or the actions of others. |
| Model integrity, ethical leadership and effective management. | Students consistently act in ways that align personal and community-held ideals and principles while employing strategies to positively influence others in the workplace. They have a clear understanding of integrity and act on this understanding in every decision. They use a variety of means to positively impact the directions and actions of a team or organization, and they apply insights into human behavior to change others' actions, attitudes and/or beliefs. They recognize the near-term and long-term effects that management's actions and attitudes can have on productivity, morals and organizational culture. |
| Plan education and career paths aligned to personal goals. | Students take personal ownership of their own education and career goals, and they regularly act on a plan to attain these goals. They understand their own career interests, preferences, goals, and requirements. They have perspective regarding the pathways available to them and the time, effort, experience and other requirements to pursue each, including a path of entrepreneurship. They recognize the value of each step in the education and experiential process, and they recognize that nearly all career paths require ongoing education and experience. They seek counselors, mentors, and other experts to assist in the planning and execution of career and personal goals. |
| Use technology to enhance productivity, increase | Students find and maximize the productive value of existing and new technology to accomplish workplace tasks and solve workplace problems. They are flexible and adaptive in acquiring new technology. They are proficient with ubiquitous technology |

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| collaboration and communicate effectively. | applications. They understand the inherent risks-personal and organizational-of technology applications, and they take actions to prevent or mitigate these risks. |
| Work productively in teams while using cultural/global competence. | Students positively contribute to every team, whether formal or informal. They apply an awareness of cultural differences to avoid barriers to productive and positive interaction. They find ways to increase the engagement and contribution of all team members. They plan and facilitate effective team meetings. |

| Evidence of Student Learning | |
|---|---|
| **Formative Tasks:**<br>● Teacher Observations<br>● Anecdotal Notes<br>● Directed Reading<br>● Cooperative Group Learning<br>● Labeling | **Alternative Assessments:**<br>● Performance Tasks: Activities to provide evidence for student learning of content and cognitive skills. x |
| **Summative Assessments:**<br>● Portfolio Assessment<br>● Benchmark Assessment<br>● Alternative Assessments<br>● Group Work/Class Discussion Rubric<br>● Guided Observations<br>● Questions Starters<br>● Participation Rubric<br>● Modified Tests/Quizzes/Classwork<br>● Mystery Science Activities<br>● Fundamentals Unlimited Books and Assessments | **Benchmark Assessments:**<br>● Student Assessment Booklet |

| Vocabulary |
|---|
| **Climate, light, shadows, meteorologist, thermometer, change, patterns** |

| Knowledge & Skills | |
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| **Enduring Understandings: From Wonders**<br>Students will understand that…<br>● We dress and wear clothing based on the changing temperatures of each season. | **Essential Questions: From Wonders**<br>● How are the seasons different? **U6W1**<br>● What happens in different kinds of weather? **U6W2** |

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| • Trees change throughout the seasons.<br>• Animal's behaviors change throughout the seasons.<br>• Each season presents different activities we can engage in.<br>• When there is stormy weather, we can stay safe inside.<br>• There are ways to make outside safe to enjoy after storms: ex shovel snow to create pathways. | • How can you stay safe in bad weather? **U6W3** |
| **Content:**<br><br>Students will know…<br>• Sunlight warms Earth's surface<br>• Weather is the combination of sunlight, wind, snow or rain and temperature at a particular time.<br>• People measure weather conditions to describe and record the weather and to notice patterns over time.<br>• Some kinds of severe weather are more likely than others in a given region.<br>• Weather scientists forecast severe weather so that the communities can prepare for and respond to these events.<br>• Global warming can affect the environment. | **Skills:**<br>Students will be able to …<br>• Ask questions based on observations to find more information about the designed world.<br>• Make observations (firsthand or from media) to collect data that can be used to make comparisons.<br>• Use observations (firsthand or from media) to describe patterns in the natural world in order to answer scientific questions.<br>• Use tools and materials provided to design and build a device that solves a specific problem or a solution to a specific problem, such as, global warming.<br>• Read grade-appropriate texts and/or use media to obtain scientific information to describe patterns in the natural world.<br>• Use and share observations of sunlight and its effect on Earth.<br>• Look for patterns and order when making observations about the world. |

**Core Instructional & Supplemental Materials**

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| **Suggested Activities/Resources:**<br>**From Wonders:**<br>Use the Topic Intro videos, ask/answer the essential question throughout the week, Read/Discuss the…<br>Big Books<br>• Mama Is It Summer Yet? **U6W1**<br>• Rain **U6W2**<br>• Waiting out the Storm **U6W3**<br>Paired Texts<br>• "New Snow" "Rain Song" "Covers" "Honey, I Love You" **U6W1**<br>• "Cloud Watch" **U6W2**<br>• "Be Safe in Bad Weather **U6W3**<br>Interactive Read Alouds | **Varied Levels of Text:**<br>• Thunder Cake by Patricia Polacco<br>• Cloudy with a Chance of Meatballs by Judi Barrett<br>• Sunshine A Book About Sunlight by Josephia Sherman<br>• Sun Up Sun Down by Gail Gibbons<br>• Weather Words and What They Mean" by Gail Gibbons<br>• What makes Day and Night? by Franklyn Branley and Arthur Dorros<br>• What Will the Weather Be? by Paul Rogers<br>• Weather Words and What They Mean by Gail Gibbons |

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- A Tour of the Seasons **U6W1**
- The Battle of Wind and Rain **U6W2**
- The Storm That Shook the Signs **U6W3**

Reading/Writing Companion

- Is It Hot? **U6W1**
- Kim and Nan **U6W2**
- Mack and Ben **U6W3**

Introduce Cumulus, Cirrus and Stratus clouds. Bring the class outside on various days to view different types of clouds.
Resources/Websites:

- YouTube video-" How are clouds form, types of clouds"
- Various non-fiction books

Record daily weather using a graph to notice patterns over time. Discuss weather changes for each season of the year.
Resources/Websites:

- Various non-fiction books
- BrainPOP jr Video-" Temperature"
- Read Alouds-" Weather Words and What They Mean" by Gail Gibbons;" Thunder Cake" by Patricia Polacco; "Cloudy with a Chance of Meatballs' by Judi Barrett

Sunlight's effect on the Earth's surface activities. Take the class on a walk outside on a sunny day. Students will stand in sunny and shady areas and compare the feel and effect on their bodies. Make "Sun Prints" as a whole group-put a penny on a dark, bright colored piece of construction paper, put it on a sunny windowsill.
Resources/Websites:

- Read Alouds-" Sunshine A Book About Sunlight" by Josephia Sherman; "Sun Up Sun Down" by Gail Gibbons

Students keep track of weather by discussing and recording weather on a daily bar or pictograph.
Resources/Websites:

- Journals

Students interpret data from a weather graph and answer questions such as which weather have we had the most of? Least of? How many more than/less than? Equal to? Students will be able to discuss the warming of the Earth.
Resources/Websites:

- Calendar

- The Lonely Polar Bear by Khoa Le

Additional Websites:

http://www.weatherwizkids.com/

http://extension.illinois.edu/treehouse/index.cfm

https://www.sciencea-z.com/marketing-content/science-a-z-and-ngss-grade-k.pdf

http://www.education.com/activity/kindergarten/science/

https://www.youtube.com/watch?v=UbfsQgiqD9M

http://www.sciencekids.co.nz/videos/weather.html

**Weather and Climate Basics**

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| Read the local weather forecast from an online or print resource. Make a list of the words that they use to describe weather (cloudy, sunny, partly cloudy, temperature, and wind). As a class, create symbols that the students can use to record the weather each day.<br>Resources/Websites:<br>• Examples can be found at http://tinyurl.com/hhhg299.<br><br>Use the local weather to make observations, measure, collect, and record data to describe patterns over time. Students will count types of outdoor clothing worn by classmates and use the data to look for patterns in weather over months and seasons.<br>Resources/Websites:<br>• About the Weather<br>• Calendar<br>• Pictures of Clothing<br>Students will make their own weather station consisting of actual and simplified versions of real weather equipment. The weather station will consist of a thermometer and a student-made weather vane. They will use that equipment to make observations about the local weather.<br>Resources/Websites:<br>• Watching Weather<br>• Thermometer | |

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| **Unit 3: Energy K-LS1: From Molecules to Organisms: Structures and Processes** | **Duration:** 15 days (March) ongoing |

| Suggested Accommodations |
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| **English Language Learners:**<br>• Small group instruction-guided reading and guided writing<br>• Use books on tape<br>• Allow extra time to complete assignments or tests<br>• Work in a small group<br>• Allow answers to be given orally or dictated<br>• Assign a picture or movement to vocabulary words<br>• Pre Teach vocabulary<br>• Label items in classroom<br>**Basic Skills**<br>• Preview lessons<br>• Preview vocabulary words<br>• Summarize as you go |

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**Special Education/Students with Disabilities:**

- Use visuals
- Introduce key vocabulary before lesson
- Teacher reads aloud daily
- Provide peer tutoring
- Use a strong student as a “buddy” (does not necessarily have to speak the primary language)
- Choral reading
- Chants, songs
- Preferential seating
- Assign a picture or movement to vocabulary words
- Small group instruction-guided reading and guided writing
- Use books on tape
- Allow extra time to complete assignments or tests
- Work in a small group
- Allow answers to be given orally or dictated
- Use large print books, Braille, or books on CD (digital text)
- Follow all IEP modifications
- Scriber for students who can’t write
- Augmentative communication system

**504 Plans:**

- Use visuals
- Introduce key vocabulary before lesson
- Teacher reads aloud daily
- Provide peer tutoring
- Use a strong student as a “buddy” (does not necessarily have to speak the primary language)
- Choral reading
- Chants, songs
- Preferential seating
- Assign a picture or movement to vocabulary words
- Small group instruction-guided reading and guided writing
- Use books on tape
- Allow extra time to complete assignments or tests
- Work in a small group
- Allow answers to be given orally or dictated
- Follow all 504 plan modifications

**Gifted and Talented:**

- Ask open-ended questions
- Encourage upper level intellectual behavior based on Bloom’s Taxonomy (analyzing, evaluating, creating)
- Do not always be explicit, allow for discovery
- Use centers and group students according to ability or interest
- Propose interest-based extension activities
- Use leveled texts and offer an advanced reader reading list
- Ask “why” and “what if” questions
- Use varied modes of pre-assessment and assessment
- Create an enhanced set of introductory activities (e.g. advance organizers, concept maps, concept puzzles)
- Provide options, alternatives and choices to differentiate and broaden the curriculum
- Organize and offer flexible small group learning activities
- Provide whole group enrichment explorations
- Teach cognitive and methodological skills

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- Use center, stations, or contracts
- Organize integrated problem-solving simulations
- Debrief students
- Propose interest-based extension activities

**Students at Risk of Failure:**

- Work toward longer passages as skills in English increase
- Use visuals
- Introduce key vocabulary before lesson
- Teacher reads aloud daily
- Provide peer tutoring
- Use a strong student as a "buddy" (does not necessarily have to speak the primary language)
- Choral reading
- Chants, songs
- Preferential seating

**Economically Disadvantaged:**

- Extra Materials
- Books for Home
- Study Guides
- "Take Home" Kit

**Culturally Diverse:**

- Involve families in student learning
- Provide social/emotional support
- Respect cultural traditions
- Build in more group work to encourage interaction with peers
- Show photos, videos, and definitions when possible for culturally unique vocabulary
- Teach study skills
- Provided students with necessary academic resources and materials
- Provide visuals
- Support verbal explanations with non verbal cues: Gestures/ facial expressions Props, realia, manipulatives, concrete materials, visuals, graphs, pictures, maps
- Provide positive praise to increase motivation
- Provide real world connections and emphasize the value of education
- Communicate high expectations for the success of all students
- Integrate the arts into learning activities

| New Jersey Student Learning Standards | |
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| K-LS1-1 Use observations to describe patterns of what plants and animals (including humans) need to survive. | |
| Science and Engineering Practices Learning Progressions | Analyzing and Interpreting Data<br>Analyzing data in K–2 builds on prior experiences and progresses to collecting, recording, and sharing observations.<br>• Use observations (firsthand or from the media) to describe patterns in the natural world in order to answer scientific questions. (KLS1-1) |

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| | |
| **Discipline Core Ideas**<br><br>**Physical Science Learning Progressions**<br><br>**Earth & Space Science Learning Progressions**<br><br>**Life Science Learning Progressions** | LS1.C: Organization for Matter and Energy Flow in Organisms<br>● All animals need food in order to live and grow. They obtain their food from plants or from other animals. Plants need water and light to live and grow. (K-LS1-1) |
| **Crosscutting Concepts** | Patterns<br>● Patterns in the natural and human designed world can be observed and used as evidence. (K-LS1-1)<br><br>Connections to Nature of Science<br>Scientific Knowledge is Based on Empirical Evidence<br>● Scientists look for patterns and order when making observations about the world. (K-LS1-1) |
| Engineering, Technology and the Application of Science Learning Progressions | |

**Interdisciplinary Connections**

**Reading**
- **RI.CI.K.2** With prompting and support, identify the main topic and key details of an informational text (e.g. who, what, where, when, why, how). (K-PS3-2)

**Speaking and Listening**
- **SL.UM.K.5** Add drawings or other visual displays to descriptions as desired to provide additional detail. (K-LS-1)

**Writing**
- **W.AW.K.1** Use a combination of drawing, dictating, and writing to compose opinion pieces on topics or texts. (K-LS-1)
- **W.IWK.2** Use a combination of drawing, dictating, and writing to compose informative/explanatory texts to convey ideas. (K-LS-1)
- **W.RW.K.7** With prompting and support, engage in brief but regular writing and drawing tasks. (K-LS-1)

**Mathematics**
- **K.M.A.2** Directly compare two objects with a measurable attribute in common, to see which object has "more of/less of" the attribute, and describe the difference. (K-LS-1)

**Social Studies**

6.1.12.CivicsCM.3: Explain how diversity, tolerance, fairness, and respect for others can contribute to individuals feeling accepted.

6.1.12.CivicsDP.5.a: Analyze the effectiveness of governmental policies and of actions by groups and individuals to address discrimination against new immigrants, Native Americans, and African Americans.

***Connections to other DCIs in Kindergarten:***

**N/A**

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***Articulation of DCIs across grade levels:***

- LS1.A Structure and Function (K-LS1-1)
- 2.LS2.A Ecosystems: Interactions, Energy, and Dynamics (K-LS1-1)
- 3.LS2.C Ecosystems: Interactions, Energy, and Dynamics (K-LS1-1)
- 3.LS4.B Biological Evolution: Unity and Diversity (K-LS1-1)
- 5.LS1.C Core Ideas In Life Sciences (K-LS1-1)
- 5.LS2.A Ecosystems: Interactions, Energy, and Dynamics (K-LS1-1)

**Computer Science & Design Thinking**

- 8.1.2.CS.1: Select and operate computing devices that perform a variety of tasks accurately and quickly based on user needs and preferences.
- 8.1.2.CS.2: Explain functions of common software and hardware components of computing systems.
- 8.1.2.IC.1: Compare how individuals live and work before and after the implementation of new computing technology.
- 8.1.2.DA.4: Make predictions based on data using charts or graphs.
- 8.2.2.ITH.3: Identify how technology impacts or improves life.
- 8.2.2.EC.1: Identify and compare technology used in different schools, communities, regions, and parts of the world.

**Career Readiness, Life Literacies, and Key Skills**

- 9.1.2.CR.1: Recognize ways to volunteer in the classroom, school and community.
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- 9.2.2.CAP.1: Make a list of different types of jobs and describe the skills associated with each job
- 9.4.2.CI.1: Demonstrate openness to new ideas and perspectives (e.g., 1.1.2.CR1a, 2.1.2.EH.1, 6.1.2.CivicsCM.2).
- 9.4.2.DC.7: Describe actions peers can take to positively impact climate change.
- 9.4.2.DC.6: Identify respectful and responsible ways to communicate in digital environments.
- 9.4.2.CT.3: Use a variety of types of thinking to solve problems (e.g., inductive, deductive)

| Career Readiness, Life Literacies, and Key Skills Practices | |
|---|---|
| Act as a responsible and contributing community member and employee. | Students understand the obligations and responsibilities of being a member of a community, and they demonstrate this understanding every day through their interactions with others. They are conscientious of the impacts of their decisions on others and the environment around them. They think about the near-term and long-term consequences of their actions and seek to act in ways that contribute to the betterment of their teams, families, community and workplace. They are reliable and consistent in going beyond the minimum expectation and in participating in activities that serve the greater good. |

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| Grade: Kindergarten | Content Area: Science |
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|---|---|
| Attend to financial well-being. | Students take regular action to contribute to their personal financial well-being, understanding that personal financial security provides the peace of mind required to contribute more fully to their own career success. |
| Consider the environmental, social and economic impacts of decisions. | Students understand the interrelated nature of their actions and regularly make decisions that positively impact and/or mitigate negative impact on other people, organization, and the environment. They are aware of and utilize new technologies, understandings, procedures, materials, and regulations affecting the nature of their work as it relates to the impact on the social condition, the environment and the profitability of the organization. |
| Demonstrate creativity and innovation. | Students regularly think of ideas that solve problems in new and different ways, and they contribute those ideas in a useful and productive manner to improve their organization. They can consider unconventional ideas and suggestions as solutions to issues, tasks or problems, and they discern which ideas and suggestions will add greatest value. They seek new methods, practices, and ideas from a variety of sources and seek to apply those ideas to their own workplace. They take action on their ideas and understand how to bring innovation to an organization. |
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| Model integrity, ethical leadership and effective management. | Students consistently act in ways that align personal and community-held ideals and principles while employing strategies to positively influence others in the workplace. They have a clear understanding of integrity and act on this understanding in every decision. They use a variety of means to positively impact the directions and actions of a team or organization, and they apply insights into human behavior to change others' actions, attitudes and/or beliefs. They recognize the near-term and long-term effects that management's actions and attitudes can have on productivity, morals and organizational culture. |
| Plan education and career paths aligned to personal goals. | Students take personal ownership of their own education and career goals, and they regularly act on a plan to attain these goals. They understand their own career interests, preferences, goals, and requirements. They have perspective regarding the pathways available to them and the time, effort, experience and other requirements to pursue each, including a path of entrepreneurship. They recognize the value of each step in the education and experiential process, and they recognize that nearly all career paths require ongoing education and experience. They seek counselors, mentors, and other experts to assist in the planning and execution of career and personal goals. |
| Use technology to enhance productivity, increase collaboration and communicate effectively. | Students find and maximize the productive value of existing and new technology to accomplish workplace tasks and solve workplace problems. They are flexible and adaptive in acquiring new technology. They are proficient with ubiquitous technology applications. They understand the inherent risks-personal and organizational-of technology applications, and they take actions to prevent or mitigate these risks. |

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| Work productively in teams while using cultural/global competence. | Students positively contribute to every team, whether formal or informal. They apply an awareness of cultural differences to avoid barriers to productive and positive interaction. They find ways to increase the engagement and contribution of all team members. They plan and facilitate effective team meetings. |

**Evidence of Student Learning**

| | |
|---|---|
| **Formative Tasks:**<br>• Teacher Observations<br>• Anecdotal Notes<br>• Directed Reading<br>• Cooperative Group Learning<br>• Labeling | **Alternative Assessments:**<br>• Performance Tasks: Activities to provide evidence for student learning of content and cognitive skills. x |
| **Summative Assessments:**<br>• Portfolio Assessment<br>• Benchmark Assessment<br>• Alternative Assessments<br>• Group Work/Class Discussion Rubric<br>• Guided Observations<br>• Questions Starters<br>• Participation Rubric<br>• Modified Tests/Quizzes/Classwork<br>• Mystery Science Activities<br>• Fundamentals Unlimited Books and Assessments | **Benchmark Assessments:**<br>• Student Assessment Booklet |

**Vocabulary**

**Patterns, plants, animals, recycle, habitat, resource, want, needs, hypothesis**

**Knowledge & Skills**

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| **Enduring Understandings: From Wonders**<br>• All living things need help to grow- they need soil, water and sunlight.<br>• Plants use sunlight to make food.<br>• A tree begins as a tiny seed. The seed grows into a sapling. Buds grow in the branches as the tree grows. The bud grows into flowers.<br>• Trees change during each season. | **Essential Questions: From Wonders**<br>• How does your garden grow? **U5W1**<br>• How do living things change and grow? **U5W2**<br>• What kinds of things grow on a farm? **U5W3**<br>• How are some animals alike and how are they different? **U7W1** |

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| • Some of our favorite foods might grow on a farm.<br>• When fruits and vegetables are ripe, they are sold in grocery stores.<br>• Baby animals and their parents can be alike and different.<br>• Different types of animals have different traits.<br>• All pets need our love and care. Some pets need to be bathed, some need exercise, etc.<br>• Animals have homes just like people do.<br>• Animal homes have different names: foxes live in a den, clown fish live in sea anemone, meerkats live in a burrow underground. | • How do you take care of different kinds of pets? **U7W2**<br>• Where do animals live? **U7W3** |
| **Content:**<br><br>Students will know…<br><br>• Patterns in the natural and human designed world can be observed and used as evidence<br>• Events have causes that generate observable patterns.<br>• Systems in the natural and designed world have parts that work together.<br>• Scientists look for patterns and order when making observations about the world.<br>• Living things need water, air, and resources from the land, and they live in places that have the things they need. | **Skills:**<br>Students will be able to …<br>• Construct an argument with evidence to support a claim<br>• Communicate solutions with others in oral and/or written forms using models and/or drawings that provide detail about scientific ideas<br>• Observe and use patterns in the natural world as evidence<br>• Use observations (firsthand or from media) to describe patterns in the natural world in order to answer scientific questions<br>• Use observations to describe patterns in what plants need to survive<br>• Use a model to represent the relationships between the needs of different animals and the places they live in the natural world. |

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| Core Instructional & Supplemental Materials | |
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| **Suggested Activities/Resources:**<br>**From Wonders:**<br>Use the Topic Intro videos, ask/answer the essential question throughout the week, Read/Discuss the…<br>Big Books<br>• My Garden **U5W1**<br>• A Grand Old Tree **U5W2**<br>• An Orange in January **U5W3**<br>• Zooborns! **U7W1**<br>• The Birthday Pet **U7W2**<br>• Bear Snores On **U7W3** | **Varied Levels of Text:**<br>• What's Alive? by Kathleen Weidner Zoefeld<br>• Are You Living? A Song About Living and Nonliving Things by Laura Purdie Salas<br>• Living and Nonliving by Lindeen and Carol K.<br>• Living and Nonliving (My World of Science) by Angela Royston<br>• The Tiny Seed by Eric Carle<br>• Bear Snores on by Karma Wilson<br>• Over and Under the Snow by Kate Messner |

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Paired Texts
- "Tommy" "Maytime Magic" "The Seed" "Garden" **U5W1**
- From a Seed to a Tree **U5W2**
- Farmer's Market **U5W3**
- "Mischievous Goat" "Over in the Meadow" "A Kitty Caught a Caterpillar" **U7W1**
- Lola and Bella **U7W2**
- Animal Homes **U7W3**

Interactive Read Alouds
- Growing Plants **U5W1**
- The Pine Tree **U5W2**
- Farms Around the World **U5W3**
- Baby Farm Animals **U7W1**
- The Family Pet **U7W2**
- Aunt Nancy **U7W3**

Reading/Writing Companion
- Hop can Hop! **U5W1**
- Ed and Ned **U5W2**
- Ron with Red **U5W3**
- A Pup and a Cub **U7W1**
- I Hug Gus **U7W2**
- A Vet in a Van **U7W3**

Students will make a diagram of a plant and label the parts. Discuss the life cycle of a plant and its needs to survive.
Resources/Websites:
- BrainPOP. Video-Parts of a plant
- Read Aloud-" The Tiny Seed" by Eric Carle

Hibernation Activity- Students will chart and discuss animals that hibernate and animals that do not. Students will create an art project that shows an animal in its habitat during hibernation.
Resources/Websites:
www.SciShowkids.com
- Videos- "Animals with Winter Coats" and "Brr! Winter Videos"
- Read Alouds- " Bear Snores On" by Karma Wilson, "Over and Under the Snow" by Kate Messner, "Time to Sleep" by Denise Fleming

Introduce "Arbor Day." Discuss importance of trees and the interdependency between trees, insects, animals and humans. The students will create a tree to show these interdependencies.
Resources/Websites:
- Read Alouds- "The Great Kapok Tree" by Lynne Cherry; "The Tree Lady" by Joseph Hopkins & Jill McElmurry
- Time to Sleep by Denise Fleming
- The Great Kapok Tree by Lynne Cherry
- The Tree Lady by Joseph Hopkins & Jill McElmurry
- Compost Stew by Mary McKenna Siddals

Additional Websites:

http://www.education.com/activity/kindergarten/science/

http://smlevinson.wix.com/ocngss

https://www.youtube.com/watch?v=WDLC9igcfQw

https://www.sciencea-z.com/marketing-content/science-a-z-and-ngss-grade-k.pdf

http://www.teachersdomain.org/resource/tdc02.sci.life.colt.nonliving/
http://www.teachersdomain.org/resource/tdc02.sci.life.colt.lb_living/

http://www.hsdvl.org/video.php?record_serial=1113

The Needs of Living Things

Living Things and Their Needs

How do living things Interact

**https://youtu.be/1WcB101gi2c?si=j3ydKC4v4MjuePSg**

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Introduce “Earth Day.” Discuss REDUCE, REUSE & RECYCLE. Go on a group walk outside to pick up trash. Use the items collected to make a class recycled project.
Resources/Websites:

- Video-SciShowkids.com-” Recycling”
- YouTube video-” Reading Rainbow: How trash is recycled with LeVar Burton”
- Read Aloud-” Compost Stew” by Mary McKenna Siddals

Teacher reads Big Book What’s Alive? Take a nature walk and invite students to name /draw/record living and nonliving things observed in nature
Resources/Websites:

- Big Book- What’s Alive?
- Nature Walk Sheet/Clipboard

Students observe and sort (animals and plants) by one attribute at a time. Use picture cards to sort according to body covering, movement, number of legs.
Resources/Websites:

- Picture Cards

Students sequence life cycles through dramatization, music, and movement.
Resources/Websites:

- Picture Cards
- Books

Students observe and record parts of organisms through drawing and labeling.
Resources/Websites:

- Picture Cards
- Books

Students observe a variety of plants and animals (in natural settings or using digital/video) and identify the patterns of basic needs that are common to plants or animals of the same group. Students keep a journal to record how plants/animals live and grow.
Resources/Websites:

- Plants
- Animals
- Journal

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| Unit 4: K-ESS2: Earth Systems | Duration: 20 days (April) ongoing |
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## Suggested Accommodations

**English Language Learners:**
- Small group instruction-guided reading and guided writing
- Use books on tape
- Allow extra time to complete assignments or tests
- Work in a small group
- Allow answers to be given orally or dictated
- Assign a picture or movement to vocabulary words
- Pre Teach vocabulary
- Label items in classroom

**Basic Skills**
- Preview lessons
- Preview vocabulary words
- Summarize as you go

**Special Education/Students with Disabilities:**
- Use visuals
- Introduce key vocabulary before lesson
- Teacher reads aloud daily
- Provide peer tutoring
- Use a strong student as a “buddy” (does not necessarily have to speak the primary language)
- Choral reading
- Chants, songs
- Preferential seating
- Assign a picture or movement to vocabulary words
- Small group instruction-guided reading and guided writing
- Use books on tape
- Allow extra time to complete assignments or tests
- Work in a small group
- Allow answers to be given orally or dictated
- Use large print books, Braille, or books on CD (digital text)
- Follow all IEP modifications
- Scriber for students who can't write
- Augmentative communication system

**504 Plans:**
- Use visuals
- Introduce key vocabulary before lesson
- Teacher reads aloud daily
- Provide peer tutoring
- Use a strong student as a “buddy” (does not necessarily have to speak the primary language)
- Choral reading
- Chants, songs
- Preferential seating
- Assign a picture or movement to vocabulary words
- Small group instruction-guided reading and guided writing
- Use books on tape
- Allow extra time to complete assignments or tests
- Work in a small group
- Allow answers to be given orally or dictated
- Follow all 504 plan modifications

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**Gifted and Talented:**

- Ask open-ended questions
- Encourage upper level intellectual behavior based on Bloom's Taxonomy (analyzing, evaluating, creating)
- Do not always be explicit, allow for discovery
- Use centers and group students according to ability or interest
- Propose interest-based extension activities
- Use leveled texts and offer an advanced reader reading list
- Ask "why" and "what if" questions
- Use varied modes of pre-assessment and assessment
- Create an enhanced set of introductory activities (e.g. advance organizers, concept maps, concept puzzles)
- Provide options, alternatives and choices to differentiate and broaden the curriculum
- Organize and offer flexible small group learning activities
- Provide whole group enrichment explorations
- Teach cognitive and methodological skills
- Use center, stations, or contracts
- Organize integrated problem-solving simulations
- Debrief students
- Propose interest-based extension activities

**Students at Risk of Failure:**

- Work toward longer passages as skills in English increase
- Use visuals
- Introduce key vocabulary before lesson
- Teacher reads aloud daily
- Provide peer tutoring
- Use a strong student as a "buddy" (does not necessarily have to speak the primary language)
- Choral reading
- Chants, songs
- Preferential seating

**Economically Disadvantaged:**

- Extra Materials
- Books for Home
- Study Guides
- "Take Home" Kit

**Culturally Diverse:**

- Involve families in student learning
- Provide social/emotional support
- Respect cultural traditions
- Build in more group work to encourage interaction with peers
- Show photos, videos, and definitions when possible for culturally unique vocabulary
- Teach study skills
- Provided students with necessary academic resources and materials
- Provide visuals
- Support verbal explanations with non verbal cues: Gestures/ facial expressions Props, realia, manipulatives, concrete materials Visuals, graphs, pictures, maps
- Provide positive praise to increase motivation
- Provide real world connections and emphasize the value of education
- Communicate high expectations for the success of all students
- Integrate the arts into learning activities

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| New Jersey Student Learning Standards | |
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| **K-ESS2-1** Use and share observations of local weather conditions to describe patterns over time.<br><br>**K-ESS2-2** Construct an argument supported by evidence for how plants and animals (including humans) can change the environment to meet their needs. | |
| Science and Engineering Practices Learning Progressions | Analyzing and Interpreting Data<br>Analyzing data in K–2 builds on prior experiences and progresses to collecting, recording, and sharing observations.<br>• Use observations (firsthand or from the media) to describe patterns in the natural world in order to answer scientific questions. (K-ESS2-1)<br><br>**Engaging in Argument from Evidence**<br>Engaging in argument from evidence in K–2 builds on prior experiences and progresses to comparing ideas and representations about the natural and designed world(s).<br>• Construct an argument with evidence to support a claim. (K ESS2-2) |
| **Discipline Core Ideas**<br><br>Physical Science Learning Progressions<br><br>Earth & Space Science Learning Progressions<br><br>Life Science Learning Progressions | **ESS2.D: Weather and Climate**<br>• Weather is the combination of sunlight, wind, snow or rain, and temperature in a particular region at a particular time. People measure these conditions to describe and record the weather and to notice patterns over time. (K-ESS2-1)<br><br>**ESS2.E: Biogeology**<br>• Plants and animals can change their environment. (K-ESS2-2) |
| Crosscutting Concepts | Patterns<br>• Patterns in the natural and human designed world can be observed and used as evidence. (K-ESS2-1)<br><br>Systems and System Models<br>• Systems in the natural and designed world have parts that work together. (K-ESS2-2)<br><br>Connections to Nature of Science<br><br>Science Knowledge is Based on Empirical Evidence<br>• Scientists look for patterns and order when making observations about the world. (K-ESS2-1) |

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Engineering, Technology and the Application of Science Learning Progressions

## Interdisciplinary Connections

**Reading**

- **RL.CR.K.1** With prompting and support, ask and answer questions about key details in a literary text (e.g., who, what, where, when, why, how). (K-ESS2-2)

**Speaking and Listening**

- **SL.UM.K.3** Ask and answer questions in order to seek help, get information, or clarify something that is not understood. (K-ESS2-1), (K-ESS2-2)

**Writing**

- **W.AW.K.1** Use a combination of drawing, dictating, and writing to compose opinion pieces on topics or texts. (K-ESS2-2) (K-LS-1)
- **W.IWK.2** Use a combination of drawing, dictating, and writing to compose informative/explanatory texts to convey ideas.
- **W.RW.K.7** With prompting and support, engage in brief but regular writing and drawing tasks. (K-ESS2-2)

**Mathematics**

- **K.CC.A** Know number names and the count sequence. (K-ESS2-1)
- **K.M.A.1** Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object. (K-ESS2-1)
- **K.DL.A.1** Classify objects into given categories; count the number of objects in each category and sort the categories by count. (K-ESS2-1)

**Social Studies**

6.1.2.CivicsCM.3: Explain how diversity, tolerance, fairness, and respect for others can contribute to individuals feeling accepted.

6.1.12.CivicsDP.5.a: Analyze the effectiveness of governmental policies and of actions by groups and individuals to address discrimination against new immigrants, Native Americans, and African Americans.

***Connections to other DCIs in Kindergarten:***

**N/A**

***Articulation of DCIs across grade levels:***

- **2.ESS2.A** Earth Materials and Systems (K-ESS2-1)
- **3.ESS2.D** Weather and Climate (K-ESS2-1)
- **4.ESS2.A** Earth Materials and Systems (K-ESS2-1)
- **4.ESS2.E** Biogeology (K-ESS2-2)
- **5.ESS2.A** Earth Materials and Systems (K-ESS2-2)

## Computer Science & Design Thinking

- 8.1.2.CS.1: Select and operate computing devices that perform a variety of tasks accurately and quickly based on user needs and preferences.
- 8.1.2.CS.2: Explain functions of common software and hardware components of computing systems.
- 8.1.2.IC.1: Compare how individuals live and work before and after the implementation of new computing technology.

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- 8.1.2.DA.4: Make predictions based on data using charts or graphs.
- 8.2.2.ITH.3: Identify how technology impacts or improves life
- 8.2.2.EC.1: Identify and compare technology used in different schools, communities, regions, and parts of the world.

## Career Readiness, Life Literacies & Key Skills

- 9.1.2.CR.1: Recognize ways to volunteer in the classroom, school and community.
- 9.1.2.RM.1: Describe how valuable items might be damaged or lost and ways to protect them
- 9.2.2.CAP.1: Make a list of different types of jobs and describe the skills associated with each job
- 9.4.2.CI.1: Demonstrate openness to new ideas and perspectives (e.g., 1.1.2.CR1a, 2.1.2.EH.1, 6.1.2.CivicsCM.2).
- 9.4.2.DC.7: Describe actions peers can take to positively impact climate change.
- 9.4.2.DC.6: Identify respectful and responsible ways to communicate in digital environments.
- 9.4.2.CT.3: Use a variety of types of thinking to solve problems (e.g., inductive, deductive)

| Career Readiness, Life Literacies, and Key Skills Practices | |
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| Act as a responsible and contributing community member and employee. | Students understand the obligations and responsibilities of being a member of a community, and they demonstrate this understanding every day through their interactions with others. They are conscientious of the impacts of their decisions on others and the environment around them. They think about the near-term and long-term consequences of their actions and seek to act in ways that contribute to the betterment of their teams, families, community and workplace. They are reliable and consistent in going beyond the minimum expectation and in participating in activities that serve the greater good. |
| Attend to financial well-being. | Students take regular action to contribute to their personal financial well-being, understanding that personal financial security provides the peace of mind required to contribute more fully to their own career success. |
| Consider the environmental, social and economic impacts of decisions. | Students understand the interrelated nature of their actions and regularly make decisions that positively impact and/or mitigate negative impact on other people, organization, and the environment. They are aware of and utilize new technologies, understandings, procedures, materials, and regulations affecting the nature of their work as it relates to the impact on the social condition, the environment and the profitability of the organization. |
| Demonstrate creativity and innovation. | Students regularly think of ideas that solve problems in new and different ways, and they contribute those ideas in a useful and productive manner to improve their organization. They can consider unconventional ideas and suggestions as solutions to issues, tasks or problems, and they discern which ideas and suggestions will add greatest value. They seek new methods, practices, and ideas from a variety of sources and seek to apply those ideas to their own workplace. They take action on their ideas and understand how to bring innovation to an organization. |

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| Utilize critical thinking to make sense of problems and persevere in solving them. | Students readily recognize problems in the workplace, understand the nature of the problem, and devise effective plans to solve the problem. They are aware of problems when they occur and take action quickly to address the problem; they thoughtfully investigate the root cause of the problem prior to introducing solutions. They carefully consider the options to solve the problem. Once a solution is agreed upon, they follow through to ensure the problem is solved, whether through their own actions or the actions of others. |
| Model integrity, ethical leadership and effective management. | Students consistently act in ways that align personal and community-held ideals and principles while employing strategies to positively influence others in the workplace. They have a clear understanding of integrity and act on this understanding in every decision. They use a variety of means to positively impact the directions and actions of a team or organization, and they apply insights into human behavior to change others' actions, attitudes and/or beliefs. They recognize the near-term and long-term effects that management's actions and attitudes can have on productivity, morals and organizational culture. |
| Plan education and career paths aligned to personal goals. | Students take personal ownership of their own education and career goals, and they regularly act on a plan to attain these goals. They understand their own career interests, preferences, goals, and requirements. They have perspective regarding the pathways available to them and the time, effort, experience and other requirements to pursue each, including a path of entrepreneurship. They recognize the value of each step in the education and experiential process, and they recognize that nearly all career paths require ongoing education and experience. They seek counselors, mentors, and other experts to assist in the planning and execution of career and personal goals. |
| Use technology to enhance productivity, increase collaboration and communicate effectively. | Students find and maximize the productive value of existing and new technology to accomplish workplace tasks and solve workplace problems. They are flexible and adaptive in acquiring new technology. They are proficient with ubiquitous technology applications. They understand the inherent risks-personal and organizational-of technology applications, and they take actions to prevent or mitigate these risks. |
| Work productively in teams while using cultural/global competence. | Students positively contribute to every team, whether formal or informal. They apply an awareness of cultural differences to avoid barriers to productive and positive interaction. They find ways to increase the engagement and contribution of all team members. They plan and facilitate effective team meetings. |

| Evidence of Student Learning | |
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| **Formative Tasks:**<br>• Teacher Observations<br>• Anecdotal Notes<br>• Directed Reading<br>• Cooperative Group Learning<br>• Labeling | **Alternative Assessments:**<br>• Performance Tasks: Activities to provide evidence for student learning of content and cognitive skills. |

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| **Summative Assessments:** | **Benchmark Assessments:** |
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| • Portfolio Assessment<br>• Benchmark Assessment<br>• Alternative Assessments<br>• Group Work/Class Discussion Rubric<br>• Guided Observations<br>• Questions Starters<br>• Participation Rubric<br>• Modified Tests/Quizzes/Classwork<br>• Mystery Science Activities<br>• Fundamentals Unlimited Books and Assessments | • Student Assessment Booklet |

**Vocabulary**

**Patterns, plants, animals, habitat, resource, want, needs, climate, meteorologist, thermometer, change, weather**

**Knowledge & Skills**

**Enduring Understandings**

Students will understand that…

- Living things need water, air, and resources from the land, and they live in places that have the things they need. Humans use natural resources for everything they do.
- Things that people do to live comfortably can affect the world around them. But they can make choices that reduce their impacts on them.
- Weather forecasting is important to prepare for and respond to severe weather.
- Weather has different patterns.
- The temperature of the Earth's surface (sand, soil, rocks, and water) can be warmer or cooler in relation to the sun's effect.

***Wonders Units 5,6,7 are reinforced.***

**Essential Questions:**

- What do plants and animals need to survive?
- What impact do animals and humans have on the environment?
- How are the needs of plants and animals alike or different?
- What predictable, observable patterns occur as a result of the effects of rain, sun, wind, and clouds?
- What is the purpose of weather forecasting?
- How do you protect yourself in different types of weather?
- How is the weather yesterday different from today?

***Wonders Units 5,6,7 are reinforced.***

- How does your garden grow? **U5W1**
- How do living things change and grow? **U5W2**
- What kinds of things grow on a farm? **U5W3**
- How are the seasons different? **U6W1**

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| | • What happens in different kinds of weather? **U6W2**<br>• How can you stay safe in bad weather? **U6W3**<br>• How are some animals alike and how are they different? **U7W1**<br>• How do you take care of different kinds of pets? **U7W2**<br>• Where do animals live? **U7W3**<br><br>• Use a model to represent the relationships between the needs of different animals and the places they live in the natural world. |
| **Content:**<br><br>Students will know…<br><br>• Patterns in the natural and human designed world can be observed and used as evidence<br>• Events have causes that generate observable patterns.<br>• Systems in the natural and designed world have parts that work together.<br>• Living things need water, air, and resources from the land, and they live in places that have the things they need.<br>• Weather is the combination of sunlight, wind, snow or rain and temperature at a particular time.<br>• People measure weather conditions to describe and record the weather and to notice patterns over time.<br>• Some kinds of severe weather are more likely than others in a given region.<br>• Weather scientists forecast severe weather so that the communities can prepare for and respond to these events. | **Skills:**<br>Students will be able to …<br>• Observe and use patterns in the natural world as evidence.<br>• Use observations (firsthand or from media) to describe patterns in the natural world in order to answer scientific questions<br>• Use observations to describe patterns in what plants need to survive<br>• Use a model to represent the relationships between the needs of different animals and the places they live in the natural world.<br>• Ask questions based on observations to find more information about the designed world.<br>• Make observations (firsthand or from media) to collect data that can be used to make comparisons.<br>• Use tools and materials provided to design and build a device that solves a specific problem or a solution to a specific problem.<br>• Read grade-appropriate texts and/or use media to obtain scientific information to describe patterns in the natural world.<br>• Use and share observations of local weather conditions to describe patterns over time. |

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| Core Instructional & Supplemental Materials | |
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| **Suggested Activities/Resources:**<br><br>**From Wonders:**<br>Use the Topic Intro videos, ask/answer the essential question throughout the week, Read/Discuss the… | **Varied Levels of Text:**<br>• Over and Under the Snow by Kate Messner<br>• Time to Sleep by Denise Fleming<br>• The Great Kapok Tree by Lynne Cherry |

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Big Books, Paired Texts, Interactive Read Alouds, Reading/Writing Companions (Units 5, 6, 7)

Students will make a diagram of a plant and label the parts. Discuss the life cycle of a plant and its needs to survive.
Resources/Websites:

- BrainPOP. Video-Parts of a plant
- Read Aloud-" The Tiny Seed" by Eric Carle

Hibernation Activity- Students will chart and discuss animals that hibernate and animals that do not. Students will create an art project that shows an animal in its habitat during hibernation.
Resources/Websites:
www.SciShowkids.com

- Videos- "Animals with Winter Coats" and "Brr! Winter Videos"
- Read Alouds-" Bear Snores On" by Karma Wilson, "Over and Under the Snow" by Kate Messner, "Time to Sleep" by Denise Fleming

Introduce "Arbor Day." Discuss importance of trees and the interdependency between trees, insects, animals and humans. The students will create a tree to show these interdependencies.
Resources/Websites:

- Read Alouds- "The Great Kapok Tree" by Lynne Cherry; "The Tree Lady" by Joseph Hopkins & Jill McElmurry

Introduce "Earth Day." Discuss REDUCE, REUSE & RECYCLE. Go on a group walk outside to pick up trash. Use the items collected to make a class recycled project.
Resources/Websites:

- Video-SciShowkids.com " Recycling"
- YouTube video-" Reading Rainbow: How trash is recycled with LeVar Burton"
- Read Aloud-" Compost Stew" by Mary McKenna Siddals

Students interpret data from weather graph and answer questions such as which weather have we had the most of? Least of? How many more than/less than? Equal to?
Resources/Websites:

- Calendar

Students observe and sort (animals, humans, and plants) by one attribute at a time. Use picture cards to sort according to body covering, movement,

- The Tree Lady by Joseph Hopkins & Jill McElmurry
- Compost Stew by Mary McKenna Siddals
- Thunder Cake by Patricia Polacco
- Cloudy with a Chance of Meatballs by Judi Barrett
- Weather Words and What They Mean" by Gail Gibbons
- What Will the Weather Be? by Paul Rogers
- The Tiny Seed by Eric Carle
- Bear Snores on by Karma Wilson

Additional Websites:

http://www.education.com/activity/kindergarten/science/

https://www.youtube.com/watch?v=UbfsQgiqD9M

http://www.sciencekids.co.nz/videos/weather.html

http://www.weatherwizkids.com/

http://extension.illinois.edu/treehouse/index.cfm

**Weather and Climate Basics**

The Needs of Living Things

Living Things and Their Needs

How do living things Interact

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| number of legs.<br><br>• Picture Cards<br><br>Introduce Cumulus, Cirrus and Stratus clouds. Bring the class outside on various days to view different types of clouds<br><br>Resources/Websites:<br><br>• YouTube video-" How are clouds form, types of clouds"<br><br>Record daily weather using a graph to notice patterns over time. Discuss weather changes for each season of the year.<br>Resources/Websites:<br>• BrainPOP jr Video-" Temperature"<br>• Read Alouds-" Weather Words and What They Mean" by Gail Gibbons;" Thunder Cake" by Patricia Polacco; "Cloudy with a Chance of Meatballs' by Judi Barrett<br><br>Students observe a variety of plants, humans, and animals (in natural settings or using digital/video) and identify the basic needs that are common to plants or animals of the same group. Students keep a journal to record how plants/animals live and grow.<br>Resources/Websites:<br>• Plants<br>• Animals<br>• Journal | |

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| **Unit 5:** Earth and Human Activity | Duration: 35 days (May - June) |

| Suggested Accommodations |
|---|
| **English Language Learners:**<br>• Small group instruction-guided reading and guided writing<br>• Use books on tape<br>• Allow extra time to complete assignments or tests<br>• Work in a small group<br>• Allow answers to be given orally or dictated<br>• Assign a picture or movement to vocabulary words<br>• Pre Teach vocabulary<br>• Label items in classroom |

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**Basic Skills**
- Preview lessons
- Preview vocabulary words
- Summarize as you go

**Special Education/Students with Disabilities:**
- Use visuals
- Introduce key vocabulary before lesson
- Teacher reads aloud daily
- Provide peer tutoring
- Use a strong student as a “buddy” (does not necessarily have to speak the primary language)
- Choral reading
- Chants, songs
- Preferential seating
- Assign a picture or movement to vocabulary words
- Small group instruction-guided reading and guided writing
- Use books on tape
- Allow extra time to complete assignments or tests
- Work in a small group
- Allow answers to be given orally or dictated
- Use large print books, Braille, or books on CD (digital text)
- Follow all IEP modifications
- Scriber for students who can’t write
- Augmentative communication system

**504 Plans:**
- Use visuals
- Introduce key vocabulary before lesson
- Teacher reads aloud daily
- Provide peer tutoring
- Use a strong student as a “buddy” (does not necessarily have to speak the primary language)
- Choral reading
- Chants, songs
- Preferential seating
- Assign a picture or movement to vocabulary words
- Small group instruction-guided reading and guided writing
- Use books on tape
- Allow extra time to complete assignments or tests
- Work in a small group
- Allow answers to be given orally or dictated
- Follow all 504 plan modifications

**Gifted and Talented:**
- Ask open ended questions
- Encourage upper level intellectual behavior based on Bloom’s Taxonomy (analyzing, evaluating, creating)
- Do not always be explicit, allow for discovery
- Use centers and group students according to ability or interest
- Propose interest-based extension activities
- Use leveled texts and offer an advanced reader reading list
- Ask “why” and “what if” questions
- Use varied modes of pre-assessment and assessment
- Create an enhanced set of introductory activities (e.g. advance organizers, concept maps, concept puzzles)

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- Provide options, alternatives and choices to differentiate and broaden the curriculum
- Organize and offer flexible small group learning activities
- Provide whole group enrichment explorations
- Teach cognitive and methodological skills
- Use center, stations, or contracts
- Organize integrated problem-solving simulations
- Debrief students
- Propose interest-based extension activities

**Students at Risk of Failure:**

- Work toward longer passages as skills in English increase
- Use visuals
- Introduce key vocabulary before lesson
- Teacher reads aloud daily
- Provide peer tutoring
- Use a strong student as a “buddy” (does not necessarily have to speak the primary language)
- Choral reading
- Chants, songs
- Preferential seating

**Economically Disadvantaged:**

- Extra Materials
- Books for Home
- Study Guides
- “Take Home” Kit

**Culturally Diverse:**

- Involve families in student learning
- Provide social/emotional support
- Respect cultural traditions
- Build in more group work to encourage interaction with peers
- Show photos, videos, and definitions when possible for culturally unique vocabulary
- Teach study skills
- Provided students with necessary academic resources and materials
- Provide visuals
- Support verbal explanations with non verbal cues: Gestures/ facial expressions Props, realia, manipulatives, concrete materials Visuals, graphs, pictures, maps
- Provide positive praise to increase motivation
- Provide real world connections and emphasize the value of education
- Communicate high expectations for the success of all students
- Integrate the arts into learning activities

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## New Jersey Student Learning Standards

K-ESS3-1 Use a model to represent the relationship between the needs of different plants or animals (including humans) and the places they live.

K-ESS3-2 Ask questions to obtain information about the purpose of weather forecasting to prepare for, and respond to, severe weather.

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K-ESS3-3 Communicate solutions that will reduce the impact of humans on the land, water, air, and/or other iving things in the local environment.

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| Science and Engineering Practices Learning Progressions | **Asking Questions and Defining Problems**<br>Asking questions and defining problems in grades K–2 builds on prior experiences and progresses to simple descriptive questions that can be tested.<br>● Ask questions based on observations to find more information about the designed world. (K-ESS3-2)<br><br>**Developing and Using Models**<br>Modeling in K–2 builds on prior experiences and progresses to include using and developing models (i.e., diagram, drawing, physical replica, diorama, dramatization, storyboard) that represent concrete events or design solutions.<br>● Use a model to represent relationships in the natural world. (K-ESS3-1)<br><br>**Obtaining, Evaluating, and Communicating Information**<br>Obtaining, evaluating, and communicating information in K–2 builds on prior experiences and uses observations and texts to communicate new information.<br>● Read grade-appropriate texts and/or use media to obtain scientific information to describe patterns in the natural world. (K-ESS3-2)<br>● Communicate solutions with others in oral and/or written forms using models and/or drawings that provide detail about scientific ideas. (K-ESS3-3) |
| **Discipline Core Ideas**<br><br>Physical Science Learning Progressions<br><br>Earth & Space Science Learning Progressions<br><br>Life Science Learning Progressions | **ESS3.A: Natural Resources**<br>● Living things need water, air, and resources from the land, and they live in places that have the things they need. Humans use natural resources for everything they do. (K-ESS3-1)<br><br>**ESS3.B: Natural Hazards**<br>● Some kinds of severe weather are more likely than others in a given region. Weather scientists forecast |

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| | severe weather so that the communities can prepare for and respond to these events. (K-ESS3-2)<br><br>**ESS3.C: Human Impacts on Earth Systems**<br>● Things that people do to live comfortably can affect the world around them. But they can make choices that reduce their impacts on the land, water, air, and other living things. (K-ESS3-3)<br><br>**ETS1.A: Defining and Delimiting Engineering Problems**<br>● Asking questions, making observations, and gathering information are helpful in thinking about problems. (secondary to K-ESS3-2)<br><br>**ETS1.B: Developing Possible Solutions**<br>● Designs can be conveyed through sketches, drawings, or physical models. These representations are useful in communicating ideas for a problem's solutions to other people. (secondary to K-ESS3-3) |
| Crosscutting Concepts | **Cause and Effect**<br>● Events have causes that generate observable patterns. (K-ESS3-2),<br>(K-ESS3-3)<br><br>**Systems and System Models**<br>● Systems in the natural and designed world have parts that work together. (K-ESS3-1)<br><br>***Connections to Engineering, Technology, and Applications of Science***<br><br>**Interdependence of Science, Engineering, and Technology**<br>● People encounter questions about the natural world every day. (K-ESS3-2**)**<br><br>**Influence of Engineering, Technology, and Science on Society and the Natural World**<br>● People depend on various technologies in their lives; human life would be very different without technology.(K-ESS3-2) |

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Engineering, Technology and the Application of Science Learning Progressions

## Interdisciplinary Connections

**Reading**

- **RI.CI.K.2** With prompting and support, identify the main topic and key details of an informational text (e.g. who, what, where, when, why, how). (K-PS3-2)

**Speaking and Listening**

- **SL.ES.K.3** Ask and answer questions in order to seek help, get information, or clarify something that is not understood. (K-PS3-1), (K-PS3-2)

**Writing**

- **W.RW.K.7** With prompting and support, engage in brief but regular writing and drawing tasks. (K-PS3-1), (K-PS3-2)

**Mathematics**

- **K.M.A.1** Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object. (K-PS3-1), (K-PS3-2)
- **K.M.A.2** Directly compare two objects with a measurable attribute in common, to see which object has "more of/less of" the attribute, and describe the difference. (K-PS3-1), (K-PS3-2)
- **K.DL.A.1** Classify objects into given categories; count the number of objects in each category and sort the categories by count. (K-PS3-1), (K-PS3-2)

**Social Studies**

6.1.2.CivicsCM.3: Explain how diversity, tolerance, fairness, and respect for others can contribute to individuals feeling accepted.

6.1.12.CivicsDP.5.a: Analyze the effectiveness of governmental policies and of actions by groups and individuals to address discrimination against new immigrants, Native Americans, and African Americans.

***Connections to other DCIs in Kindergarten:***

- **K.ETS1.A** Defining and Delimiting Engineering Problems (K-PS3-2)
- **K.ETS1.B** Developing Possible Solutions- Engineering Design (K-PS3-2)

***Articulation of DCIs across grade levels:***

- **1.PS4.B** Electromagnetic Radiation (K-PS3-1), (K-PS3-2)
- **2.ETS1.B** Developing Possible Solutions - Engineering Design (K-PS3-2)
- **3.ESS2.D** Weather and Climate - Earth's Systems(K-PS3-1)
- **4.ETS1.A** Defining and Delimiting Engineering Problems (K-PS3-2)

## Computer Science & Design Thinking

- 8.1.2.CS.1: Select and operate computing devices that perform a variety of tasks accurately and quickly based on user needs and preferences.
- 8.1.2.CS.2: Explain functions of common software and hardware components of computing systems.
- 8.1.2.IC.1: Compare how individuals live and work before and after the implementation of new computing technology.
- 8.1.2.DA.4: Make predictions based on data using charts or graphs.
- 8.2.2.ITH.3: Identify how technology impacts or improves life

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- 8.2.2.EC.1: Identify and compare technology used in different schools, communities, regions, and parts of the world.

## Career Readiness, Life Literacies & Key Skills

- 9.1.2.CR.1: Recognize ways to volunteer in the classroom, school and community.
- 9.1.2.RM.1: Describe how valuable items might be damaged or lost and ways to protect them
- 9.2.2.CAP.1: Make a list of different types of jobs and describe the skills associated with each job
- 9.4.2.CI.1: Demonstrate openness to new ideas and perspectives (e.g., 1.1.2.CR1a, 2.1.2.EH.1, 6.1.2.CivicsCM.2).
- 9.4.2.DC.7: Describe actions peers can take to positively impact climate change.
- 9.4.2.DC.6: Identify respectful and responsible ways to communicate in digital environments.
- 9.4.2.CT.3: Use a variety of types of thinking to solve problems (e.g., inductive, deductive)

| Career Readiness, Life Literacies, and Key Skills Practices | |
|---|---|
| Act as a responsible and contributing community member and employee. | Students understand the obligations and responsibilities of being a member of a community, and they demonstrate this understanding every day through their interactions with others. They are conscientious of the impacts of their decisions on others and the environment around them. They think about the near-term and long-term consequences of their actions and seek to act in ways that contribute to the betterment of their teams, families, community and workplace. They are reliable and consistent in going beyond the minimum expectation and in participating in activities that serve the greater good. |
| Attend to financial well-being. | Students take regular action to contribute to their personal financial well-being, understanding that personal financial security provides the peace of mind required to contribute more fully to their own career success. |
| Consider the environmental, social and economic impacts of decisions. | Students understand the interrelated nature of their actions and regularly make decisions that positively impact and/or mitigate negative impact on other people, organization, and the environment. They are aware of and utilize new technologies, understandings, procedures, materials, and regulations affecting the nature of their work as it relates to the impact on the social condition, the environment and the profitability of the organization. |
| Demonstrate creativity and innovation | Students regularly think of ideas that solve problems in new and different ways, and they contribute those ideas in a useful and productive manner to improve their organization. They can consider unconventional ideas and suggestions as solutions to issues, tasks or problems, and they discern which ideas and suggestions will add greatest value. They seek new methods, practices, and ideas from a variety of sources and seek to apply those ideas to their own workplace. They take action on their ideas and understand how to bring innovation to an organization. |
| Utilize critical thinking to make sense of problems | Students readily recognize problems in the workplace, understand the nature of the problem, and devise effective plans to solve the problem. They are aware of problems when they occur and take action quickly to address the problem; they thoughtfully |

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| and persevere in solving them. | investigate the root cause of the problem prior to introducing solutions. They carefully consider the options to solve the problem. Once a solution is agreed upon, they follow through to ensure the problem is solved, whether through their own actions or the actions of others. |
| Model integrity, ethical leadership and effective management. | Students consistently act in ways that align personal and community-held ideals and principles while employing strategies to positively influence others in the workplace. They have a clear understanding of integrity and act on this understanding in every decision. They use a variety of means to positively impact the directions and actions of a team or organization, and they apply insights into human behavior to change others' actions, attitudes and/or beliefs. They recognize the near-term and long-term effects that management's actions and attitudes can have on productivity, morale and organizational culture. |
| Plan education and career paths aligned to personal goals. | Students take personal ownership of their own education and career goals, and they regularly act on a plan to attain these goals. They understand their own career interests, preferences, goals, and requirements. They have perspective regarding the pathways available to them and the time, effort, experience and other requirements to pursue each, including a path of entrepreneurship. They recognize the value of each step in the education and experiential process, and they recognize that nearly all career paths require ongoing education and experience. They seek counselors, mentors, and other experts to assist in the planning and execution of career and personal goals. |
| Use technology to enhance productivity, increase collaboration and communicate effectively. | Students find and maximize the productive value of existing and new technology to accomplish workplace tasks and solve workplace problems. They are flexible and adaptive in acquiring new technology. They are proficient with ubiquitous technology applications. They understand the inherent risks-personal and organizational-of technology applications, and they take actions to prevent or mitigate these risks. |
| Work productively in teams while using cultural/global competence. | Students positively contribute to every team, whether formal or informal. They apply an awareness of cultural differences to avoid barriers to productive and positive interaction. They find ways to increase the engagement and contribution of all team members' They plan and facilitate effective team meetings. |

| Evidence of Student Learning | |
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| **Formative Tasks:**<br>● Teacher Observations<br>● Anecdotal Notes<br>● Directed Reading<br>● Cooperative Group Learning<br>● Labeling | **Alternative Assessments:**<br>● Performance Tasks: Activities to provide evidence for student learning of content and cognitive skills. x |
| **Summative Assessments:**<br>● Portfolio Assessment<br>● Benchmark Assessment | **Benchmark Assessments:**<br>● Student Assessment Booklet |

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| • Alternative Assessments<br>• Group Work/Class Discussion Rubric<br>• Guided Observations<br>• Questions Starters<br>• Participation Rubric<br>• Modified Tests/Quizzes/Classwork<br>• Mystery Science Activities<br>• Fundamentals Unlimited Books and Assessments | |

| Vocabulary |
|---|
| **Patterns, plants, animals, habitat, resource, wants, needs, climate, meteorologist, thermometer, change** |

| Knowledge & Skills | |
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| **Content:**<br><br>Students will know…<br><br>• Patterns in the natural and human designed world can be observed and used as evidence<br>• Events have causes that generate observable patterns.<br>• Systems in the natural and designed world have parts that work together.<br>• Living things need water, air, and resources from the land, and they live in places that have the things they need.<br>• Weather is the combination of sunlight, wind, snow or rain and temperature at a particular time.<br>• People measure weather conditions to describe and record the weather and to notice patterns over time.<br>• Some kinds of severe weather are more likely than others in a given region<br>• Weather scientists forecast severe weather so that the communities can prepare for and respond to these events.<br>• Climate change and humans impact land, water, air, and/or other living things in the local environment. | **Skills:**<br>Students will be able to …<br>● Observe and use patterns in the natural world as evidence<br>● Use observations (firsthand or from media) to describe patterns in the natural world in order to answer scientific questions<br>● Use observations to describe patterns in what plants, animals, and humans need to survive ● Use a model to represent the relationships between the needs of different animals and the places they live in the natural world.<br>● Ask questions based on observations to find more information about the impact of climate change and humans on the environment<br>● Make observations (firsthand or from media) to collect data that can be used to make comparisons.<br>● Use tools and materials provided to design and build a device that solves a specific problem or a solution to a specific problem.<br>● Use and share observations of local weather conditions to prepare and respond to severe weather. |

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## Core Instructional & Supplemental Materials

**Suggested Activities/Resources:**

**From Wonders:**
Use the Topic Intro videos, ask/answer the essential question throughout the week, Read/Discuss the…
Big Books
- Mama Is It Summer Yet? **U6W1**
- Rain **U6W2**
- Waiting out the Storm **U6W3**

Paired Texts
- "New Snow" "Rain Song" "Covers" "Honey, I Love You" **U6W1**
- "Cloud Watch" **U6W2**
- "Be Safe in Bad Weather **U6W3**

Interactive Read Alouds
- A Tour of the Seasons **U6W1**
- The Battle of Wind and Rain **U6W2**
- The Storm That Shook the Signs **U6W3**

Reading/Writing Companion
- Is It Hot? **U6W1**
- Kim and Nan **U6W2**
- Mack and Ben **U6W3**

Introduce Cumulus, Cirrus and Stratus clouds. Bring the class outside on various days to view different types of clouds.

Resources/Websites:
- YouTube video-" How are clouds form, types of clouds"
- Various non-fiction book's

Record daily weather using a graph to notice patterns over time. Discuss weather changes for each season of the year.

Resources/Websites:
- Various non-fiction books
- BrainPOP jr Video-" Temperature"
- Read Alouds-" Weather Words and What They Mean" by Gail Gibbons;" Thunder Cake" by Patricia Polacco; "Cloudy with a Chance of Meatballs' by Judi Barrett

Sunlight's effect on the Earth's surface activities. Take the class on a walk outside on a sunny day. Students will stand in sunny and shady areas and compare the feel and effect on their bodies. Make

**Varied Levels of Text:**
- The Lorax by Dr. Seuss
- Fever at the Poles by Stephen Aitken
- Our House Is On Fire by Jeanette Winter
- What Is Climate Change? By Gail Herman
- The Kids Book of Weather Forecasting by Williamson Kids Can Series
- Weather by National Geographics Readers
- The Weather Girls by Aki
- Cloudy with a Chance of Meatballs by Judi Barrett
- Weather Words and What They Mean" by Gail Gibbons
- What Will the Weather Be? by Paul Rogers
- The Home Builders by Varsha Baja
- Walk This Wild World by Sam Brewster
- Nature's Patchwork Quilt by Mary Miche
- Listen To Our World by Bill Martin, Jr. & Michael Sampson

Additional Websites:

http://www.weatherwizkids.com/

http://extension.illinois.edu/treehouse/index.cfm

https://www.sciencea-z.com/marketing-content/science-a-z-and-ngss-grade-k.pdf

http://www.education.com/activity/kindergarten/science/

https://www.youtube.com/watch?v=UbfsQgiqD9M

http://www.sciencekids.co.nz/videos/weather.html

**Weather and Climate Basics**

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“Sun Prints” as a whole group-put a penny on a dark, bright colored piece of construction paper, put it on a sunny windowsill.
Resources/Websites:

- Read Alouds-” Sunshine A Book About Sunlight” by Josephia Sherman; “Sun Up Sun Down” by Gail Gibbons

Students keep track of weather by discussing and recording weather on a daily bar or pictograph.

Resources/Websites:

- Journals

Students interpret data from a weather graph and answer questions such as which weather have we had the most of? Least of? How many more than/less than? Equal to? Students will be able to discuss the warming of the Earth.

Resources/Websites:

- Calendar

Read the local weather forecast from an online or print resource. Make a list of the words that they use to describe weather (cloudy, sunny, partly cloudy, temperature, and wind). As a class, create symbols that the students can use to record the weather each day.

Resources/Websites:

- Examples can be found at http://tinyurl.com/hhhg299

Use the local weather to make observations, measure, collect, and record data to describe patterns over time. Students will count types of outdoor clothing worn by classmates and use the data to look for patterns in weather over months and seasons.

Resources/Websites:

- About the Weather
- Calendar
- Pictures of Clothing

Students will make their own weather station consisting of actual and simplified versions of real weather equipment. The weather station will consist of a thermometer and a student-made weather vane. They will use that equipment to make observations

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| about the local weather.<br><br>Resources/Websites:<br>• Watching Weather<br>• Thermometer | |

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| **Unit 6:** Engineering Design | **Duration:** 35 days (May - June) |

**Suggested Accommodations**

**English Language Learners:**
- Small group instruction-guided reading and guided writing
- Use books on tape
- Allow extra time to complete assignments or tests
- Work in a small group
- Allow answers to be given orally or dictated
- Assign a picture or movement to vocabulary words
- Pre Teach vocabulary
- Label items in classroom

**Basic Skills**
- Preview lessons
- Preview vocabulary words
- Summarize as you go

**Special Education/Students with Disabilities:**
- Use visuals
- Introduce key vocabulary before lesson
- Teacher reads aloud daily
- Provide peer tutoring
- Use a strong student as a “buddy” (does not necessarily have to speak the primary language)
- Choral reading
- Chants, songs
- Preferential seating
- Assign a picture or movement to vocabulary words
- Small group instruction-guided reading and guided writing
- Use books on tape
- Allow extra time to complete assignments or tests
- Work in a small group
- Allow answers to be given orally or dictated
- Use large print books, Braille, or books on CD (digital text)
- Follow all IEP modifications
- Scriber for students who can’t write
- Augmentative communication system

**504 Plans:**
- Use visuals
- Introduce key vocabulary before lesson
- Teacher reads aloud daily
- Provide peer tutoring
- Use a strong student as a “buddy” (does not necessarily have to speak the primary language)

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- Choral reading
- Chants, songs
- Preferential seating
- Assign a picture or movement to vocabulary words
- Small group instruction-guided reading and guided writing
- Use books on tape
- Allow extra time to complete assignments or tests
- Work in a small group
- Allow answers to be given orally or dictated
- Follow all 504 plan modifications

**Gifted and Talented:**

- Ask open-ended questions
- Encourage upper level intellectual behavior based on Bloom's Taxonomy (analyzing, evaluating, creating)
- Do not always be explicit, allow for discovery
- Use centers and group students according to ability or interest
- Propose interest-based extension activities
- Use leveled texts and offer an advanced reader reading list
- Ask "why" and "what if" questions
- Use varied modes of pre-assessment and assessment
- Create an enhanced set of introductory activities (e.g. advance organizers, concept maps, concept puzzles)
- Provide options, alternatives and choices to differentiate and broaden the curriculum
- Organize and offer flexible small group learning activities
- Provide whole group enrichment explorations
- Teach cognitive and methodological skills
- Use center, stations, or contracts
- Organize integrated problem-solving simulations
- Debrief students
- Propose interest-based extension activities

**Students at Risk of Failure:**

- Work toward longer passages as skills in English increase
- Use visuals
- Introduce key vocabulary before lesson
- Teacher reads aloud daily
- Provide peer tutoring
- Use a strong student as a "buddy" (does not necessarily have to speak the primary language)
- Choral reading
- Chants, songs
- Preferential seating

**Economically Disadvantaged:**

- Extra Materials
- Books for Home
- Study Guides
- "Take Home" Kit

**Culturally Diverse:**

- Involve families in student learning
- Provide social/emotional support
- Respect cultural traditions
- Build in more group work to encourage interaction with peers
- Show photos, videos, and definitions when possible for culturally unique vocabulary

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- Teach study skills
- Provided students with necessary academic resources and materials
- Provide visuals
- Support verbal explanations with non verbal cues: Gestures/ facial expressions Props, realia, manipulatives, concrete materials Visuals, graphs, pictures, maps
- Provide positive praise to increase motivation
- Provide real world connections and emphasize the value of education
- Communicate high expectations for the success of all students
- Integrate the arts into learning activities

## New Jersey Student Learning Standards

K-2-ETS1-1 Ask questions, make observations, and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool.

K-2-ETS1-2 Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem.

K-2-ETS1-3 Analyze data from tests of two objects designed to solve the same problem to compare the strengths and weaknesses of how each performs.

**Science and Engineering Practices Learning Progressions**

**Asking Questions and Defining Problems**
Asking questions and defining problems in grades K–2 builds on prior experiences and progresses to simple descriptive questions that can be tested.

- Ask questions based on observations to find more information about the designed world. (K-2-ETS1-1)

**Developing and Using Models**
Modeling in K–2 builds on prior experiences and progresses to include using and developing models (i.e., diagram, drawing, physical replica, diorama, dramatization, storyboard) that represent concrete events or design solutions.

- Use a model to represent relationships in the natural world. (K-ESS3-1)

Analyzing and Interpreting Data
Analyzing data in K–2 builds on prior experiences and progresses to

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| | collecting, recording, and sharing observations.<br><br>Analyze data from tests of an object or tool to determine if it works as intended. (K-2-ETS1-3) |
| **Discipline Core Ideas**<br><br>**Physical Science Learning Progressions**<br><br>**Earth & Space Science Learning Progressions**<br><br>**Life Science Learning Progressions** | ETS1.A: Defining and Delimiting Engineering Problems<br>● A situation that people want to change or create can be approached as a problem to be solved through engineering. (K-2- ETS1-1)<br>● Ask questions, make observations, and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool. (K-2- ETS1-1)<br>● Before beginning to design a solution, it is important to clearly understand the problem. (K-2- ETS1-1)<br><br>ETS1.B: Developing Possible Solutions<br>● Designs can be conveyed through sketches, drawings, or physical models. These representations are useful in communicating ideas for a problem's solutions, such as climate change, to other people. (K-2-ETS1-2)<br><br>ETS1.C: Optimizing the Design Solution<br>● Because there is always more than one possible solution to a problem, it is useful to compare and test designs. (K-2-ETS1-3) |
| **Crosscutting Concepts** | Structure and Function<br>● The shape and stability of structures of natural and designed objects are related to their function(s). (K-2-ETS1-2) |
| Engineering, Technology and the Application of Science Learning Progressions | |

**Interdisciplinary Connections**

**Reading**
- **RI.CI.K.2** With prompting and support, identify the main topic and key details of an informational text (e.g. who, what, where, when, why, how). (K-2-ETS1-1)

**Speaking and Listening**
- **SL.ES.K.3** Ask and answer questions in order to seek help, get information, or clarify something that is not understood. (K-PS3-1), (K-PS3-2)

**Writing**
- **W.RW.K.7** With prompting and support, engage in brief but regular writing and drawing tasks. (K-PS3-1), (K-PS3-2)

**Mathematics**
- **MP.2** Reason abstractly and quantitatively. (K-2-ETS1-1), (K-2-ETS1-3)
- **MP.4** Model with mathematics. (K-2-ETS1-1), (K-2-ETS1-3)
- **MP.5** Use appropriate tools strategically. (K-2-ETS1-1), (K-2-ETS1-3)
- **2.MD.D.10** Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems using information presented in a bar graph. (K-2-ETS1-1), (K-2-ETS1-3)

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| Grade: Kindergarten | Content Area: Science |
|---|---|

**Social Studies**

6.1.2.CivicsCM.3: Explain how diversity, tolerance, fairness, and respect for others can contribute to individuals feeling accepted.

6.1.12.CivicsDP.5.a: Analyze the effectiveness of governmental policies and of actions by groups and individuals to address discrimination against new immigrants, Native Americans, and African Americans.

***Connections to other DCIs in Kindergarten:***

- **K.ETS1.A** Defining and Delimiting Engineering Problems (K-PS3-2)
- **K.ETS1.B** Developing Possible Solutions- Engineering Design (K-PS3-2)

***Articulation of DCIs across grade levels:***

- **K-2-ETS1.A** Defining and Delimiting Engineering Problems (K-PS2-2), (K-ESS3-2)
- **K-2-ETS1.B** Developing Possible Solutions (K-ESS3-3), (1-PS4-4), (2-LS2-2), (K-ESS3-3)
- **K-2-ETS1.C** Optimizing the Design Solution (2-ESS2-1)

## Computer Science & Design Thinking

- 8.1.2.CS.1: Select and operate computing devices that perform a variety of tasks accurately and quickly based on user needs and preferences.
- 8.1.2.CS.2: Explain functions of common software and hardware components of computing systems.
- 8.1.2.IC.1: Compare how individuals live and work before and after the implementation of new computing technology.
- 8.1.2.DA.4: Make predictions based on data using charts or graphs.
- 8.2.2.ITH.3: Identify how technology impacts or improves life
- 8.2.2.EC.1: Identify and compare technology used in different schools, communities, regions, and parts of the world.

## Career Readiness, Life Literacies & Key Skills

- 9.1.2.CR.1: Recognize ways to volunteer in the classroom, school and community.
- 9.1.2.RM.1: Describe how valuable items might be damaged or lost and ways to protect them
- 9.2.2.CAP.1: Make a list of different types of jobs and describe the skills associated with each job
- 9.4.2.CI.1: Demonstrate openness to new ideas and perspectives (e.g., 1.1.2.CR1a, 2.1.2.EH.1, 6.1.2.CivicsCM.2).
- 9.4.2.DC.7: Describe actions peers can take to positively impact climate change.
- 9.4.2.DC.6: Identify respectful and responsible ways to communicate in digital environments.
- 9.4.2.CT.3: Use a variety of types of thinking to solve problems (e.g., inductive, deductive)

| Career Readiness, Life Literacies, and Key Skills Practices | |
|---|---|
| Act as a responsible and contributing community | Students understand the obligations and responsibilities of being a member of a community, and they demonstrate this understanding every day through their interactions with others. They are conscientious of the impacts of their decisions on others and the environment around them. They think about the near-term and long-term |

Attachments are subject to change without notice

| Grade: Kindergarten | Content Area: Science |
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|---|---|
| member and employee. | consequences of their actions and seek to act in ways that contribute to the betterment of their teams, families, community and workplace. They are reliable and consistent in going beyond the minimum expectation and in participating in activities that serve the greater good. |
| Attend to financial well-being. | Students take regular action to contribute to their personal financial well-being, understanding that personal financial security provides the peace of mind required to contribute more fully to their own career success. |
| Consider the environmental, social and economic impacts of decisions. | Students understand the interrelated nature of their actions and regularly make decisions that positively impact and/or mitigate negative impact on other people, organization, and the environment. They are aware of and utilize new technologies, understandings, procedures, materials, and regulations affecting the nature of their work as it relates to the impact on the social condition, the environment and the profitability of the organization. |
| Demonstrate creativity and innovation. | Students regularly think of ideas that solve problems in new and different ways, and they contribute those ideas in a useful and productive manner to improve their organization. They can consider unconventional ideas and suggestions as solutions to issues, tasks or problems, and they discern which ideas and suggestions will add greatest value. They seek new methods, practices, and ideas from a variety of sources and seek to apply those ideas to their own workplace. They take action on their ideas and understand how to bring innovation to an organization. |
| Utilize critical thinking to make sense of problems and persevere in solving them. | Students readily recognize problems in the workplace, understand the nature of the problem, and devise effective plans to solve the problem. They are aware of problems when they occur and take action quickly to address the problem; they thoughtfully investigate the root cause of the problem prior to introducing solutions. They carefully consider the options to solve the problem. Once a solution is agreed upon, they follow through to ensure the problem is solved, whether through their own actions or the actions of others. |
| Model integrity, ethical leadership and effective management. | Students consistently act in ways that align personal and community-held ideals and principles while employing strategies to positively influence others in the workplace. They have a clear understanding of integrity and act on this understanding in every decision. They use a variety of means to positively impact the directions and actions of a team or organization, and they apply insights into human behavior to change others' actions, attitudes and/or beliefs. They recognize the near-term and long-term effects that management's actions and attitudes can have on productivity, morals and organizational culture. |
| Plan education and career paths aligned to personal goals. | Students take personal ownership of their own education and career goals, and they regularly act on a plan to attain these goals. They understand their own career interests, preferences, goals, and requirements. They have perspective regarding the pathways available to them and the time, effort, experience and other requirements to pursue each, including a path of entrepreneurship. They recognize the value of each step in the education and experiential process, and they recognize that nearly all career paths require ongoing education and experience. They seek counselors, mentors, and other experts to assist in the planning and execution of career and personal goals. |
| Use technology to enhance | Students find and maximize the productive value of existing and new technology to accomplish workplace tasks and solve workplace problems. They are flexible and |

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| Grade: Kindergarten | Content Area: Science |
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| productivity, increase collaboration and communicate effectively. | adaptive in acquiring new technology. They are proficient with ubiquitous technology applications. They understand the inherent risks-personal and organizational-of technology applications, and they take actions to prevent or mitigate these risks. |
| Work productively in teams while using cultural/global competence. | Students positively contribute to every team, whether formal or informal. They apply an awareness of cultural differences to avoid barriers to productive and positive interaction. They find ways to increase the engagement and contribution of all team members. They plan and facilitate effective team meetings. |

| Evidence of Student Learning | |
|---|---|
| **Formative Tasks:**<br>• Teacher Observations<br>• Anecdotal Notes<br>• Directed Reading<br>• Cooperative Group Learning<br>• Labeling | **Alternative Assessments:**<br>• Performance Tasks: Activities to provide evidence for student learning of content and cognitive skills. x |
| **Summative Assessments:**<br>• Portfolio Assessment<br>• Benchmark Assessment<br>• Alternative Assessments<br>• Group Work/Class Discussion Rubric<br>• Guided Observations<br>• Questions Starters<br>• Participation Rubric<br>• Modified Tests/Quizzes/Classwork<br>• Mystery Science Activities<br>• Fundamentals Unlimited Books and Assessments | **Benchmark Assessments:**<br>• Student Assessment Booklet |

| Vocabulary |
|---|
| Structure, stable, sturdy, building, data, arrange, tower |

| Knowledge & Skills | |
|---|---|
| **Content:** | **Skills:**<br>Students will be able to … |

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**Stafford Township School DIstrict Curriculum Guide**

| Grade: Kindergarten | Content Area: Science |
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|---|---|
| Students will know…<br>• How to solve a problem through engineering<br>• To use questioning, observing, and gathering information to help solve problems<br>• A clear understanding of the problem is the first step<br>• Designs can be conveyed through sketches, drawings, or physical models and will aid in communicating with others<br>• Comparing and testing designs is a useful way to determine the best solution to a problem | • Ask questions based on observations to find more information about the natural and/or designed world(s).<br>• Define a simple problem that can be solved through the development of a new or improved object or tool.<br>• Develop a simple model based on evidence to represent a proposed object or tool.<br>• Analyze data from tests of an object or tool to determine if it works as intended. |

**Core Instructional & Supplemental Materials**

**Suggested Activities/Resources:**

Students will construct a new “3 Little Pigs” house constructed well enough to withstand the big bad wolf’s “blow dryer.”
Resources/Websites:
- 12 “Dot” candies”
- toothpicks
- Pinterest
- Three Little Pigs Book or video

Students will construct “Cat in the Hat” towers using mini red solo cups and square pieces of paper.
Resources/Websites:
- Square pieces of paper
- Mini red solo cups
- Pinterest

Students will build towers as tall as possible using only toothpicks and playdough.
Resources/Websites:
- Toothpicks
- Playdough
- Pinterest

Students will build towers sturdy enough to withstand shaking (earthquake).
Resources/Websites:
- Cardboard
- Toothpicks
- Marshmallows

Students will build towers sturdy enough to withstand shaking (earthquake).
Resources/Websites:
- Jenga blocks

**Varied Levels of Text:**
- Three Little Pigs by Walt Disney
- The Cat in the Hat by Dr. Seuss
- Rosie Revere Engineer by Andrea Beaty
- How Do You Lift A Lion? By Robert E. Wells
- The Most Magnificent Thing by Ashley Spires

Additional Websites:

https://www.sciencea-z.com/marketing-content/science-a-z-and-ngss-grade-k.pdf

http://www.education.com/activity/kindergarten/science/

http://www.science4us.com/k-2-science-lesson-plans/

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| Grade: Kindergarten | Content Area: Science |
|---|---|

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Stafford Township School District
School Hours
Employee Hours
2026-2027

| | Oxycocus | PLC | Ocean Acres | McKinley | Intermediate |
|---|---|---|---|---|---|
| ***Staff Hours (Full Day)*** | 8:55 am -3:55 pm | 8:10 am-3:10 pm | 8:10 am-3:10 pm | 7:20 am – 2:20 pm | 7:20 am – 2:20 pm |
| ***AM TA*** | 8:55 am -1:40 pm | 8:15 am to 1:00 pm | 8:15 am to 1:00 pm<br>*1st Gr. TA: 8:35 am to 1:20 pm*<br>*Preschool: 8:10 to 12:55 pm* | 7:20 am to 12:05 pm | 7:20 am to 12:05 pm |
| ***PM TA*** | 11:10 am to 3:55 pm | 10:25 am to 3:10 pm | 10:25 am to 3:10 pm | 9:35 am to 2:20 pm | 9:35 am to 2:20 pm |
| ***CPA*** | N/A | 10:35 am to 1:20 pm | 10:40 am to 1:25 pm | 9:45 am to 12:30 pm | 9:45 am to 12:30 pm |

5-18-2026 rev. 9-3-2026

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September 17, 2026

To approve the following substitutes for the 2026-2027 school year:

a. David Rotan= Bus Aide
b. Alison Rasmusson= Bus Aide
c. Allison Manahan= NJ Certified Teacher, Teacher Aide
d. Tyler Osborne- Lomax= County Certified Teacher
e. Sheena Harper= Teacher Aide
f. Halee Houser= EDP Aide
g. Kaycee Callanan= County Certified Teacher (Pending Cert), Teacher Aide
h. Angelica Valdez = Custodian
i. Danni Bodzak= Secretary
j. Kelly Farina= Custodian, CPA, Teacher Aide
k. Diana Gould= NJ Certified Teacher, Teacher Aide, CPA, Secretary
l. Damon De Senzo= Teacher Aide, CPA
m. Courtney Pimm= Teacher Aide, CPA, Secretary
n. +Anthony LaBrutto= Bus Attendant
o. Lora Bowman= County Certified Teacher,Teacher Aide
p. Sydney Reilly= County Certified Teacher, Teacher Aide
q. Alexander Davies= Teacher Aide, CPA, Secretary

>Indicates rehire
*Indicates upgrade
+Indicates an additional position
#TA w/certification

Revised 8/31/2026

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Stafford Township School District
PERSONNEL CHANGE OF ASSIGNMENT 2026-2027 SCHOOL YEAR
September 17, 2026

| | Last Name | First Name | Beginning Date | Ending Date | Current Assignment/Location | New Assignment/Location |
|---|---|---|---|---|---|---|
| 1 | Drum | Kimberlye | 9/1/2026 | 6/30/2027 | PT Teacher Aide-Extraordinary, McKinley | PT Teacher Aide- Autistic Class, McKinley |
| 2 | Folse | Claudia | 9/1/2026 | 6/30/2027 | PT Teacher Aide- LLD Class, PLC | PT Teacher Aide- Autistic Class Extraordinary, PLC |
| 3 | Sheehan | Sheryl | 9/1/2026 | 6/30/2027 | Teacher- Preschool, PLC | Teacher- ERI Class, PLC |
| 4 | Tatro | Lauren | 9/1/2026 | 6/30/2027 | Teacher- ERI Class, PLC | Teacher- Preschool, PLC |

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Stafford Township School District
PERSONNEL CHANGE OF ASSIGNMENT 2026-2027 SCHOOL YEAR
September 17, 2026

| | | | | | | |
|---|---|---|---|---|---|---|
| | | | | | | |

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Stafford Township School District

PERSONNEL TRANSFER OF ASSIGNMENT 2026-2027 SCHOOL YEAR

September 17, 2026

| | Last Name | First Name | Beginning Date | Ending Date | Current Assignment/Location | New Assignment/Location |
|---|---|---|---|---|---|---|
| 1 | Briones | Belgica | 8/27/26 | 6/30/2027 | Custodian, Oxycocus | Custodian, McKinley |
| 2 | Williams | Oral | 8/27/26 | 6/30/2027 | Custodian, McKinley | Custodian, Oxycocus |

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September 17, 2026

**STAFFORD TOWNSHIP SCHOOL DISTRICT**
**MENTORS FOR NOVICE TEACHERS**
**2026-2027 SCHOOL YEAR**

1. Lauren Larson
2. Susanne Davis
3. Cheryl Nicoletti
4. Mary Darmody
5. Alicia Segalla
6. Sarah Baart
7. Amber Myhre

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| | Enrichment- 2 sessions, up to 10 hrs each session; must have 15 students ($51.44/h) | | |
|---|---|---|---|
| 1 | Ashley | Garcia-Romero | Ocean Acres, Session 1 & 2 |
| 2 | Tiffany | Hahl | Intermediate, Session 1 & 2 |
| 3 | Rachel | Schenk | Ocean Acres, Session 1 & 2 |
| | | | |

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**Stafford Township School District**
**Student Teaching/Fieldwork Placement**
**September 17, 2026 Board Meeting**

| | Last Name | First Name | School | Beginning Date | Ending Date | Cooperating Teacher/Location | Type of Placement |
|---|---|---|---|---|---|---|---|
| 1 | Decker | Hailey | Kean | 9/8/2026 | 12/2026 | J Golderer/Int | 175 Clinical Hours |
| 2 | McHugh | Christine | Rowan | 9/2026 | 9/2026 | A Bellissimo/OA | 20 Clinical Hours |
| | | | | | | | |

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**Stafford Township School District**
**Salary**
**September 17, 2026**

| | Last Name | First Name | Position | Salary |
|---|---|---|---|---|
| 1 | Deren | William | Director of Technology | $113,024 (Effective 9/1/26) |
| 2 | Saxton | Joseph | Interim Administrator | $450/diem |
| 3 | McKEon | Karn | Interim Administrator | $450/diem |

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# Stafford Township Board of Education Policy



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## 9150 School Visitors

The Board of Education welcomes and encourages visits to school by parent(s) or legal guardian(s), other adult residents of the community, and interested educators. In order for the educational program to continue undisturbed when visitors are present and to prevent the intrusion of disruptive persons into the schools, the board directs the enforcement of rules governing school visits.

The Board of Education and School Administration each possess the authority to prohibit the entry of any person into a school of this district or to expel any person from the school when there is reason to believe the presence of such person would be inimical to the good order of the school or may be banned by the Board of Education and School Administration for any reason at any time. If such a person refuses to leave the school grounds or creates a disturbance, the Principal is authorized to request from the local law enforcement agency whatever assistance is required to remove the individual.

Classroom Observations and Private Clinicians
The Board of Education recognizes its responsibility to maintain a secure, stable, and undisrupted educational environment. Except as required by a student's Individualized Education Program (IEP), Section 504 Plan, or an approved Independent Educational Evaluation (IEE) conducted in strict compliance with District criteria, the District does not permit outside, parent-employed, or privately retained professional consultants—including but not limited to Board Certified Behavior Analysts (BCBAs), behaviorists, therapeutic aides, or private tutors—to conduct ongoing student consultations, observations, data collection, or direct interventions on school grounds during regular school hours.

The Superintendent or building Principal retains absolute discretion to permit or deny any school visit, observation, or consultation. Authorized observations by outside entities, when permitted in writing by the administration, shall be strictly limited in duration, must be closely escorted by a district staff member, and must not disrupt the classroom instruction or infringe upon the privacy rights of other students.

Visitors shall be required to register their presence in the school with the district's main office secretary and if not a regular, known visitor will be escorted to their destination. Visitors will be given a badge which must be worn at all times. Visitors must return to the school main office secretary to sign out before exiting the building. No staff member shall transact business with or permit the continuing presence in the school of a visitor who has not been duly registered.

No visitor may confer with a pupil in school without the approval of the Principal; any such conference may take place only in the presence of a teaching staff member and/or administrator, except as required by law.

# Stafford Township Board of Education Policy

COMMUNITY
9150
School Visitors

The Superintendent shall develop regulations that will protect pupils and employees of the district from disruption to the educational program and the efficient conduct of their assigned tasks.

For the purposes of this policy, the term “visitors” includes but is not limited to parents/guardians, relatives of staff and contractors/delivery personnel and otherwise defined in Regulation 9150.

N.J.S.A. 2C:18-3
N.J.S.A. 18A:17-42; 18A:20-1; 18A:20-34

Adopted: 22 July 2004
Revised: 21 March 2013
Revised: 14 September 2016
Revised: 8 January 2024
Revised:

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# Stafford Township Board of Education Policy



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## 5516 STUDENT USE OF INTERNET-ENABLED DEVICES

The Board of Education prohibits student use of internet-enabled devices on school grounds during the school day in accordance with N.J.S.A. 18A:36-40b. The Board adopts this Policy and Regulation 5516 pursuant to N.J.S.A. 18A:36-40b. and the guidelines developed by the Commissioner of Education concerning student use of internet-enabled devices during regular school hours, on a school bus, or during school-sponsored events when the student is under the direct supervision of a teaching staff member or employee of the Board.

For the purpose of this Policy and Regulation 5516:

1. "Bell-to-bell" means the timeframe when the bell rings at the start of the school day until the dismissal bell rings at the end of the academic day. Bell-to-bell includes time in between class periods and lunch.

2. "Digital citizenship" means the development of thoughtful, empathetic citizens who can wrestle with important ethical questions at the intersection of technology and humanity. Model digital citizens focus on using technology to make communities better, engage respectfully online with others, and leverage technology to amplify voices and perspectives. They are careful to determine the validity of online sources of information and are always respectful of ideas different than their own.

3. "District-managed tools" means school-issued technology or platforms used for educational purposes (e.g., laptops, tablets, learning management systems, etc.).

4. "Internet-enabled device" means any device capable of connecting to the internet and accessing online content (e.g., smartphones, tablets, smartwatches, smart glasses, etc.), including social media applications. An internet-enabled device does not include an internet-enabled device provided by the Board when used for educational purposes.

5. "Non-internet-enabled device" means a basic communication device that is not capable of connecting to the internet or enabling the user to access content on the internet (e.g., basic flip-style cell phones, two-way radio/walkie-talkie, etc.).

6. "School grounds" means and includes land, portions of land, structures, buildings, and vehicles, not to include school buses, owned, operated, or used for the provision of academic or extracurricular programs sponsored by the district or community provider and structures that support these buildings, such as school wastewater

treatment facilities, generating facilities, and other central facilities including, but not limited to, kitchens and maintenance shops. "School grounds" also includes athletic stadiums; swimming pools; any associated structures or related equipment tied to such facilities including, but not limited to, grandstands; greenhouses; garages; facilities used for non-instructional or non-educational purposes; and any structure, building, or facility used solely for school administration. "School grounds" also includes other facilities as defined in N.J.A.C. 6A:26-1.2; playgrounds; and other recreational places owned by local municipalities, private entities, or other individuals during those times when the school district has exclusive use of a portion of such land.

A student's use of an internet-enabled device on a school bus or during school-sponsored events when the student is under the direct supervision of a teaching staff member or employee of the Board will be in accordance with the age-appropriate and grade-level differentiated requirements outlined in Regulation 5516.

District-issued technology and sponsored platforms are permitted to be used in classrooms for educational purposes. The district may use existing information technology systems to proactively establish and monitor restrictions to the district's network. The district may utilize device management software to restrict or monitor student browsing on school-issued devices or from devices connecting to the district's Wi-Fi. If the district chooses to use software or other technology to block students' use of their internet-enabled devices, the district may collaborate with the local municipality to determine that there are no safety or security concerns. The Board shall notify students and parents about the monitoring practices in Policy and Regulation 2361.

The Board shall assume no responsibility for the security of or damage to a student's internet-enabled device brought onto school grounds. If a student brings an internet-enabled device to school, the internet-enabled device must remain off and may be required to be stored in a storage system as indicated in Regulation 5516. An internet-enabled device required to be stored in a district storage system shall be password protected by the student so only the student owner of the internet-enabled device can use the internet-enabled device.

The district shall provide instruction aligned to the New Jersey Student Learning Standards (NJSLS) on Digital Citizenship and shall ensure classroom instructional time is entirely free of internet-enabled devices. Teachers shall not incorporate students' personal technology into lesson plans. All digital engagement shall occur through district-managed tools and devices.

The district shall communicate behavioral expectations for student use of internet-enabled devices to students and their parent(s) and reinforce these behavioral expectations throughout the school year. Communication of this Policy and

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Regulation 5516 may include, but not be limited to, school-wide notifications, signage, and reinforcement as part of classroom routines.

The district shall comply with all applicable State and Federal laws that protect the rights of students with disabilities or health related needs, including, but not limited to, the Individuals with Disabilities Act (IDEA) and Section 504 of the Rehabilitation Act of 1973.

Students shall be permitted to use their internet-enabled device on school grounds during the school day, on the school bus, and at school-sponsored events in the following circumstances in accordance with N.J.S.A. 18A:36-40b.:

1. To fulfill accommodations provided in a student's individualized education program (IEP);
2. To support the implementation of a 504 Plan;
3. To implement a student health plan established to monitor or address a student's health condition (upon submission by a parent of documentation from a healthcare professional indicating that the use of an internet-enabled device is necessary for the health or well-being of the student);
4. For translation services;
5. For a student caregiver who is routinely responsible for the care or well-being of a family member;
6. When no reasonable alternative to the use of the internet-enabled device for a specific purpose exists (upon authorization by the Superintendent, Principal, or designee);
7. When required by law; and
8. In the event of an emergency.

The Superintendent or designee will inform students and parents of their right to request an internet-enabled device accommodation. The parent(s) shall submit a written request to the Superintendent or designee. The written request shall include, but not be limited to, supporting documentation from the student's physician, child study team, and/or any other documentation as required by the Superintendent or designee as to why the student requires an internet-enabled device accommodation. The Superintendent or designee shall inform the parent(s) of the approval or denial of the written request for an internet-enabled device accommodation within five school days of receiving the written request. The Superintendent or designee shall base such an accommodation determination on documented educational, medical,

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developmental, accessibility, or other needs or specific purposes and review them on a regular basis.

The Superintendent or designee may involve school nurses, case managers, and IEP/504 coordinators in planning for and implementing internet-enabled device accommodations. Staff responsible for implementation shall have ready access to documentation of the accommodation and shall ensure their enforcement strategies minimize disruption. The district shall develop and disseminate clear procedures to ensure staff implement internet-enabled device accommodations confidentially. Staff training may be necessary to recognize and honor valid internet-enabled device accommodations without drawing unnecessary attention to the student. Staff shall treat students with an internet-enabled device accommodation with sensitivity and dignity. As appropriate, the district may develop one-page "internet-enabled device use summaries" for staff to ensure awareness while maintaining student confidentiality.

Pursuant to N.J.A.C. 6A:16-5.1, the district has developed and implemented comprehensive plans, procedures, and mechanisms that provide for safety and security in the district's schools. School safety plans include thoughtful integration of internet-enabled device procedures during emergencies or perceived threats. The district has incorporated clear expectations into school safety plans, emergency drill protocols, and staff professional development.

In the event of an unplanned emergency closure that prevents students from retrieving stored internet-enabled devices, the district shall develop and communicate a clear, centralized protocol for retrieving stored internet-enabled devices safely and efficiently once the school building is accessible.

In the event of a family emergency or for non-emergency communication, families shall contact the school's main office directly rather than reaching out to students during the school day. District staff will then follow local notification procedures to ensure the student receives the information in a timely and appropriate manner.

When a student leaves school grounds, whether for an open lunch period, internship, or other purpose, the student may be permitted to use their internet-enabled device. However, upon returning to school grounds, the student's internet-enabled device must be stored for the remainder of the school day in accordance with Regulation 5516.

The district shall ensure students, parents, and school staff members are aware of this Policy and Regulation 5516 and understand how this Policy and Regulation 5516 apply to them. The Board shall include information about this Policy and Regulation 5516 in student handbooks.

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# Stafford Township Board of Education Policy



District staff shall apply clear, age-appropriate consequences and use strategies to redirect students who attempt to use internet-enabled devices. Discipline and consequences shall be addressed in Regulation 5516.

No student enrolled as a student of an elementary or secondary school, knowingly and without the express written permission of the Board, its delegated authority, or any Principal, shall bring or possess any remotely activated paging device on any property used for school purposes, at any time and regardless of whether school is in session or others are present pursuant to N.J.S.A. 2C:33-19.

N.J.S.A. 2C:33-19.
N.J.S.A. 18A:36-40a.; 18A:36-40b.
Guidance for Schools on Student Use of Internet-Enabled Devices, New Jersey Department of Education, January 2026

Adopted: 22 July 2004
Revised: 16 December 2010
Revised: 18 August 2011
Revised: 29 January 2015
Revised: 21 January 2016
Revised: 13 March 2025
Revised:

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# Stafford Township Board of Education Regulation



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R 5516 STUDENT USE OF INTERNET-ENABLED DEVICES

The following age-appropriate and grade level differentiated provisions shall govern student use of internet-enabled devices on school grounds during the school day.

A. Preschool through Grade 6

1. Students in Preschool through grade 6 are prohibited from using an internet-enabled device on school grounds during the school day.

2. Students in Preschool through grade 6 shall store their internet-enabled device using the following storage options for internet-enabled devices during the school day. It is the student's responsibility to turn off the internet-enabled device and have the internet-enabled device password protected to prevent any unauthorized use of the device.

   a. A student storage system – Each student who brings an internet-enabled device to school is expected to turn off their internet-enabled device and store it in their backpack, locker, or other bag throughout the entire school day.

3. Students in Preschool through grade 6 are prohibited from using their internet-enabled device on a school bus on their way to school or on their way home from school at the end of the school day.

4. Students in Preschool through grade 6 are prohibited from using their internet-enabled device on school grounds before the start of the regular school day and on school grounds after the regular school day.

5. Students in Preschool through grade 6 are prohibited from using their internet-enabled device during school-sponsored events off school grounds during the school day while under the direct supervision of a school staff member or employee of the Board (e.g. field trip).

6. Students in Preschool through grade 6 are prohibited from using their internet-enabled device during school-sponsored events taking place outside of the school day when students are under the direct supervision of a school staff member or employee of the Board (e.g., afterschool club meeting, sport team practice/game, etc.). The supervising school staff member or employee of the Board may establish the storage

method to be used for a student's internet-enabled device during school-sponsored events taking place outside of the school day when students are under the direct supervision of a school staff member or employee of the Board.

a. If the supervising school staff member establishes a storage method, it is the student's responsibility to turn off the internet-enabled device and have the internet-enabled device password protected to prevent any unauthorized use of the internet-enabled device.

7. Students in Preschool through grade 6 are prohibited from using non-internet-enabled devices.

8. Discipline

a. School staff members shall apply clear, age-appropriate consequences and use strategies to redirect students who use internet-enabled devices in violation of this Regulation and Policy 5516.

(1) First Offense in a School Year

(a) The internet-enabled device shall be taken from the student by a school staff member or employee of the Board and turned in to the Principal or designee's office for the remainder of the school day.

(b) It is the student's responsibility to turn off the internet-enabled device and have the internet-enabled device password protected to prevent any unauthorized use of the internet-enabled device before turning the internet-enabled device in to the school staff member or employee of the Board.

(c) The student will be permitted to pick up the internet-enabled device in the Principal or designee's office at the end of the school day.

(d) The student will have the internet-enabled device returned upon signing an acknowledgment of their first offense in a school year in violation of this Regulation and Policy 5516.

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(e) The following discipline will be imposed on a student for a first offense in a school year in violation of the provisions in this Regulation and Policy 5516: Verbal Warning by a staff member

(2) Second Offense in a School Year

(a) The internet-enabled device shall be taken from the student by the school staff member or employee of the Board and turned in to the Principal or designee's office for the remainder of the school day.

(b) It is the student's responsibility to turn off the internet-enabled device and have the internet-enabled device password protected to prevent any unauthorized use of the internet-enabled device before turning the internet-enabled device in to the school staff member or employee of the Board.

(c) The internet-enabled device must be picked up at the Principal or designee's office by a parent at the end of the school day.

(d) If the parent cannot pick up the internet-enabled device by the end of the school day, the parent may pick up the internet-enabled device before the end of the next or any subsequent school day.

(e) The parent shall be required to sign for receipt of the internet-enabled device with notice provided of a second offense in a school year for their child.

(f) The following discipline will be imposed on a student for a second offense in a school year in violation of the provisions in this Regulation and Policy 5516: Phone is confiscated and the parent/guardian is notified by the staff member

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(3) Third Offense in a School Year

(a) The internet-enabled device shall be taken from the student by the school staff member or employee of the Board and turned in to the Principal or designee's office for the remainder of the school day.

(b) It is the student's responsibility to turn off the internet-enabled device and have the internet-enabled device password protected to prevent any unauthorized use of the internet-enabled device before turning the internet-enabled device in to the school staff member or employee of the Board.

(c) The internet-enabled device must be picked up at the Principal or designee's office by a parent at the end of the school day.

(d) If the parent cannot pick up the internet-enabled device by the end of the school day, the parent may pick up the internet-enabled device before the end of the next or any subsequent school day.

(e) The parent shall be required to sign for receipt of the internet-enabled device with notice provided of a third offense in a school year for their child.

(f) The following discipline will be imposed on a student for a third offense in a school year in violation of the provisions in this Regulation and Policy 5516: Phone is confiscated by the building principal and the parent/guardian must pick up the device and disciplinary action will be taken with a minimum of detention per the Student Code of Conduct

(4) Fourth Offense in a School Year

(a) The internet-enabled device shall be taken from the student by the school staff member or employee of the Board and turned in to the

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Principal or designee's office for the remainder of the school day.

(b) It is the student's responsibility to turn off the internet-enabled device and have the internet-enabled device password protected to prevent any unauthorized use of the internet-enabled device before turning the internet-enabled device in to the school staff member or employee of the Board.

(c) The internet-enabled device must be picked up at the Principal or designee's office by a parent at the end of the school day.

(d) If the parent cannot pick up the internet-enabled device by the end of the school day, the parent may pick up the internet-enabled device before the end of the next or any subsequent school day.

(e) The parent shall be required to sign for receipt of the internet-enabled device with notice provided of a fourth offense in a school year for their child.

(f) The following discipline will be imposed on a student for a fourth offense in a school year in violation of the provisions in this Regulation and Policy 5516: Phone is confiscated by the building principal and the parent/guardian must pick up the device and disciplinary action will be taken with a minimum of suspension per the Student Code of Conduct. In addition, the device must be turned in to the building principal each morning and picked up by the student at the end of each day

(5) A student who violates the provisions of this Regulation and Policy 5516 more than four times during a school year shall, for the remainder of the school year, be prohibited from bringing an internet-enabled device on school grounds during the school day, on a school bus before and after school, or while participating in school-sponsored programs which include, but are not limited to: during before and after school programs; during co-

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curricular activities; during extra-curricular activities, and during intramurals and interscholastic games and practices.

(a) The following discipline will be imposed on a student for bringing their internet-enabled device to school after being prohibited to have their internet-enabled device on school grounds: The student will serve a minimum of a 3 day out of school suspension and subject to further disciplinary action per the Student Code of Conduct

Issued: 13 March 2025
Revised:

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**Stafford Township School District**
**Special Services**
**2026-2027 School Year**

## In-district Tuition Students
## September 2026

| ID# | District | Class | Building |
|---|---|---|---|
| 26243 | Eagleswood | ESY | McKinley |

## Out of District Tuition
## September 2026

| ID# | School |
|---|---|
| 22851 | Shore Center |
| 22509 | Shore Center |
| 25722 | Children's Center of Monmouth County |
| 23439 | Hawkswood School |
| 24714 | Hawkswood School |
| 25649 | Y.A.L.E. School |
| 23050 | Y.A.L.E. School |
| 23229 | Y.A.L.E. School |
| 26224 | Ocean Academy |
| 23494 | SEARCH Day Program |

Attachments are subject to change without notice

Stafford Township School District
Manahawkin, NJ 08050

"Set Sail for Success"

Oxycocus Elementary School
William Wilkinson, Director of Early Childhood Education

MONTHLY REPORT

**AUGUST 2026**

MISSION STATEMENT

The mission of the Stafford Township School District, a partnership of schools, parents, and community, shall provide a secure, nurturing environment that fosters a positive self-image through educational achievement and promotes mastery of the New Jersey Student Learning Standards while encouraging students to become life-long learners in a global society.

Attachments are subject to change without notice

## REQUIRED INFORMATION

| ***ENROLLMENT*** | | ***HEALTH REPORT*** | |
|---|---|---|---|
| PEA Grant | 46 | Student Visits | N/A |
| PSD | 27 | Staff Visits | N/A |
| | | Medications | N/A |
| | | CST Meetings/Screenings | N/A |
| | | Trips | N/A |
| ***TOTAL*** | ***72*** | ***TOTAL*** | ***N/A*** |

## REQUIRED DRILLS

| ***DRILL*** | ***DATE*** | ***TIME*** | ***OCCUPANTS*** |
|---|---|---|---|
| N/A | | | |
| N/A | | | |

Stafford Township School District
Manahawkin, NJ

*"Set Sail for Success"*

Primary Learning Center
Dawn Reo, Principal

Monthly Report
August 2026

MISSION STATEMENT

The mission of the Stafford Township School District, a partnership of schools, parents, and community, shall provide a secure, nurturing environment that fosters a positive self-image through educational achievement and promotes mastery of the New Jersey Student Learning Standards while encouraging students to become life-long learners in a global society.

Required Information:

Enrollment:
Grade K: 275
Grade DK: 4
Special Education: 31
PreK: 134
Total Enrollment: 444

Choice: 2

Health Reports:
Visits:0
Medications: 0
Staff Contacts:0
Screenings: 0
Accidents: 0
Workman's Comp: 0
Total Visits: 0

Required Drills:

| Drill | Date | Time | Occupants |
|---|---|---|---|
| Fire Drill | N/A | | |
| Active Shooter Drill | N/A | | |

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Stafford Township School District
Manahawkin, NJ

*"SET SAIL FOR SUCCESS"*

Ocean Acres Elementary School
Susan D'Alessandro, Principal

Monthly Report
August 2026

MISSION STATEMENT

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**Required Information**:

**Enrollment**:
Grade 1: 321
Grade 2: 282
Grade K: 0
Pre-K: 120
Total Enroll 733

**Health Reports**:
Visits: 0
Medications: 0
Staff/Parent Contact: 0
In person Parent Conferences:0
Screenings: 0
Accidents: 0
Work. Comp: 0
**Total Visits: 0**

| *Drill* | *Date* | *Time* | *Occupants* |
|---|---|---|---|
| Fire Drill | n/a | | |
| . | n/a | | |

*Q:\Monthly Report/2026-2027/Monthly Report/August/2026*

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**Revised**

.Stafford Township School District
Manahawkin, NJ

*"BUILDING A BETTER WORLD ONE STUDENT AT A TIME"*

McKinley Avenue Elementary School
Tiffany Eberle, Principal
Jacqueline Aliseo, Vice Principal

***"Set Sail for Success"***

Monthly Report
August, 2026

MISSION STATEMENT

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## Required Information:

**Enrollment:**

| | |
|---|---|
| Grade 3: | 324 |
| Grade 4: | 325 |
| Special Education: | 160 |
| Total Enrollment: | 649 |
| Choice: | 6 |

**Health Reports:**

| | |
|---|---|
| Visits: | 0 |
| Medications: | 0 |
| Staff Contacts: | 0 |
| Screenings: | 0 |
| Accidents: | 0 |
| Workman's Comp.: | 0 |
| Total Visits: | 0 |

## Required Drills:

| *Drill* | *Date* | *Time* | *Occupants* |
|---|---|---|---|
| Fire Drill | 7/14/2026 | 10:00 am | 321 |
| Shelter in Place Drill | 7/15/2026 | 8:30 am | 321 |

Stafford Township School District
Manahawkin, NJ

*"SET SAIL FOR SUCCESS"*
Intermediate School
Kristin Ducker, Principal

Monthly Report
August 2026

MISSION STATEMENT

The mission of the Stafford Township School District, a partnership of schools, parents and community, shall provide a secure, nurturing environment that fosters a positive self-image through educational achievement and promotes mastery of the New Jersey Student Learning Standards while encouraging students to become life-long learners in a global society.

**Required Information**:

**Enrollment**:
3rd Grade: 5
4th Grade: 3
5th Grade: 346
6th Grade: 316
**Total Enrollment: 670 records**

Special Ed: 166
Choice: 8

**Health Reports**:

Total Visits: 0
Medications: 0
Staff Contact: 0
Screenings: 0
Accidents: 0
Workman's Comp: 0

**Required Drills**:

| *Drill* | *Date* | *Time* | *Occupants* |
|---|---|---|---|
| Fire Drill | 8/6/2026 | 12:35pm | 6 |
| Shelter in Place Drill | 8/6/2026 | 9:00am | 6 |



Attachments are subject to change without notice