

LAMPETER-STRASBURG SCHOOL DISTRICT
Lampeter, Pennsylvania 17537

February 3, 2025

A G E N D A

Meeting Called to Order

Pledge of Allegiance

Introduction of Guests

Opportunity for Public Comment regarding Agenda Items

Approval of Minutes of Previous Meetings

Communications and Recognition

Treasurer's Report – Mr. Keith A. Stoltzfus

Academic Committee – Mr. Matthew E. Parido, Chairperson

Buildings and Grounds Committee – Mr. Andrew L. Welk, Chairperson

Board of Review Committee – Mrs. Melissa S. Herr, Chairperson

Finance Committee – Mr. Dustin D. Knarr, Chairperson

Personnel Committee – Mrs. Suzanne S. Knowles, Chairperson

Federal Programs – Dr. Andrew M. Godfrey, Representative

Liaison Reports

Student Representatives – Mr. Truman Horst, Mr. Shrey Singh

Superintendent's Report

Old Business

New Business

Opportunity for Public Comment

Adjournment

LAMPETER-STRASBURG SCHOOL DISTRICT

Lampeter, Pennsylvania 17537

February 3, 2025

LAMPETER-STRASBURG HIGH SCHOOL – Dr. Benjamin J. Feeney, Principal

A. ATHLETICS

2024-25 WINTER SPORTS PARTICIPATION

<u>Sport</u>	<u>7th</u>	<u>8th</u>	<u>9th</u>	<u>10th</u>	<u>11th</u>	<u>12th</u>	<u>Total</u>
Bowling- Coed	--	--	4	4	4	1	13
Basketball - Boys	14	14	8	7	4	8	55
Basketball - Girls	9	11	3	3	1	4	31
Cheerleading	2	9	3	9	1	0	24
Swimming- Coed	--	--	7	3	4	3	17
Wrestling (JH, B, G)	8	13	6	21	11	5	64
Total	33	47	31	47	25	21	204

This is an increase of 8 students compared to the 2023-24 season (196).

B. STUDENT COUNCIL

The annual Food Drive Homeroom Competition was held November 14th through 20th. This year, students, faculty, and staff donated 14,848 items for the L-S Annual Turkey Drive and the local food banks at First Presbyterian Church of Strasburg, Lampeter United Methodist Church, and Mission Church. 36 different homerooms along with the support staff donated items this year. The first-period classes earning a trip to George's Family Restaurant for breakfast were Mrs. Shockey and Mrs. Stauffer. In addition to the trip to George's Restaurant, many first-period classes met the challenge of 10 points per student and earned rewards in their class. Items like donuts provided by the Student Council and homework passes were on the line. This could not have happened without the help of Karren Kurtz.

C. HOLIDAY WORKSHOP

On Thursday, December 5th and Friday, December 6th, approximately (200) third grade students from Hans Herr Elementary School went to the Lampeter-Strasburg High School to participate in an activity called "Holiday Workshop." This was the 28th year that this event was coordinated by the high school Technology Education Department and FFA. The third graders had their activities divided into four stations consisting of the following:

Mass Production of Gum ball Machines - Students learned about using an assembly line process and interchangeable parts to quickly manufacture a large number of products. They used basic tools as they go through an assembly line to produce their own gumball machine. This was in the wood lab under the supervision of Mr. Adrian Baker's Wood Technology classes.

Pioneer Pride Backpack / Christmas Tree Ornament - Students were exposed to various printing and design methods used in today's desktop publishing industry. Students had their picture taken for use in Christmas tree ornaments that they will assemble. Students also customized a Pioneer Pride drawstring backpack using heat transfer paper. This activity was completed in the graphics lab under the supervision of Mr. Adam Zurn's & Mr. Ben Krothe's classes.

Soybean Science - Students were introduced to the book, "My Family's Soybean Farm" which details the day-to-day activities of a farming family through the eyes of young Alexander who lives on his family's farm. Throughout the book, readers learned about how plants grow, the nutrients they need to grow and how they are harvested. Students then got the chance to use soybean materials to manufacture candles, crayons, hand lotion or lip balm. This activity took place in the agricultural room under the supervision of Mrs. Holly Oberholtzer's and Mrs. Katherine Ranck's FFA club.

Design & Construction of Graham Cracker Houses - Students learned about Architectural Drawing and Construction Technology as each student will design and construct their own Holiday Graham Cracker House. This activity was held in the CADD Lab under the supervision of Mr. Todd Garber's Design Engineering classes.

The event was mainly financed by the Elementary PTO, but was also strongly supported by some local businesses and the high school PTO who helped with some of the materials and ingredients that were necessary to make this project successful. For example, Weis and Giant Markets provided gift certificates for the event. All candies and cereals used for the graham cracker houses came from generous donations from the high school PTO and the high school cafeteria staff made the royal icing. The wood materials used for the gumball machines were donated by Keystone Wood Specialties. Other expenses were paid for by the high school Tech Ed department and FFA club.

It was a great experience for the third graders and the high school students. This event is made possible by having motivated students and staff, cooperative administrators, generous and active PTO groups, and supportive community businesses.

MARTIN MEYLIN MIDDLE SCHOOL – Mrs. Alicia C. Kowitz, Principal

A. STUDENTS OF THE MONTH

December

December students of the month were announced for Martin Meylin. Students were selected in the category “I” - Inclusive of Everyone - they recognize human worth and dignity, the rights of others, and individual differences; accept and respect rules and authority, act with politeness, manners, courtesy and concern for the feelings and comfort of others, treat others with fairness, acceptance, and tolerance.

6A G.O.A.T.S.

Declan Bohannon
Chloe Guo
Cooper Naramore
Katherine Szoke

6B ALL STARS

Wyatt Martin
Atreau Allen
Penelope Schlegelmilch
Clark Stone

7A SHARKS

Cora Stiles
Elliette Hogg
Laurel Hodge
Brody Keith

7B LIONS

Mira Lindskog
Segen Perez-Valle
Keira Walters
Bria Clemens

8A OWLS

Paisley Rankin
Luella Wagner
Carson Beiler
Issac Short

8B KINGS

Carter Metz
Chase Eshleman
Evan Smith
Isabelle Metzler

January

January students of the month were announced for Martin Meylin. Students were selected in the category. “I” - Inclusive of Everyone - they recognize human worth and dignity, the rights of others, and individual differences; accept and respect rules and authority, act with politeness, manners, courtesy and concern for the feelings and comfort of others, treat others with fairness, acceptance, and tolerance.

Technology Education - Mr. Neumann - Sophia Coon - 8A
German - Dr. Mencarini - Eve Staley - 6A
Spanish - Mrs. Mier - Lucia Major - 8A
Art - Mr. Leone - Jasmine Willox-Jones - 6A
Health - Mrs. Diffendarfer - Nicholas Weaver 8A
Physical Education -Mr. Heeter - Scarlett Heinly - 6A
Physical Education - Mrs. Beard - Jillian Schlegelmilch - 8A
Music - Mr. Gibson - Danica Suter - 7B
Band - Mr. Royer - Leah Williams - 8A
Orchestra - Mr. Shaubach - Madeleine Cousin - 7B

B. MARTIN MEYLIN MIDDLE SCHOOL PRESENTS *ROCK OF AGES*

Martin Meylin Middle School presented *Rock of Ages: The Musical (Youth Edition)* in December. Please take a moment to review the [virtual playbill](#) to see the names of all talented cast, crew, and creative team members, and read a note from the Director, Mrs. Memory D’Agostino.

C. WINTER SPIRIT DAYS

During the week of December 16th, students and staff had the chance to participate in Festive Winter Spirit Days.

Monday - Favorite Flannel Day
Tuesday - Holiday Hat/Accessories/Headband Day
Wednesday - Winter Wonderland Day (White & Blue)
Thursday - Pajama Pants Day
Friday - Ugly Holiday Sweater Day

D. WINTER GAMES 2025

On Friday, January 3rd, Martin Meylin staff and students competed in the fourth Winter Games Assembly. Participants gathered in the school gym to challenge each other in winter themed games like make a snowman (speed activity with toilet paper), the unwrap Hershey Kiss challenge (unwrapping kisses while wearing oven mitts), a snowsuit relay (speed activity where you dress and undress in show attire), sled races on a bed sheet, and an obstacle relay that consisted of a dizzy bat activity, jumping through hula hoops, and crawling on the floor. Students from each grade level were randomly selected by having their pride tickets drawn and staff team members volunteered to participate. Martin Meylin students and staff not participating watched and cheered from the bleachers. Seventh grade reigned victorious with sixth grade not far behind. This was an exciting way to wrap up the first half of the school year. Students and staff members had a blast!

E. UPCOMING DATES

February 7 - Valentine's Dance

HANS HERR ELEMENTARY SCHOOL – Dr. Jeffrey T. Smecker, Principal

A. HOLIDAY WORKSHOP

In December, our third graders had the wonderful opportunity to visit the High School for the annual Holiday Workshop. They enjoyed building gingerbread houses, designing personal gumball machines, and engaging in various festive activities! Hans Herr is incredibly grateful to the LSHS Tech Ed Department for hosting this fantastic event. A huge thank-you goes to Todd Garber, Ben Krothe, Joe Sloss, Holly Oberholtzer, Adrian Baker, and Adam Zurn for their hard work in bringing this holiday tradition to life. We also want to recognize the high school students who helped make the day extra special for our third graders—your efforts are truly appreciated!

B. HOLIDAY CONCERT AND CONCERT ASSEMBLY

Our fourth and fifth graders gave outstanding performances during this year's holiday concerts! The Hans Herr Elementary School band, orchestra, and chorus delighted the community with a Holiday Concert on the evening of December 12, 2024. The following day, they gave a second performance for staff and students. A big thank-you to our amazing music teachers, Mr. Robert Shaubach, Mrs. Heather Ceresini, and Mrs. Lori Groff, for their dedication and effort in making these concerts a success!

C. THIRD GRADERS VISIT HARRISBURG

In December, our third-grade students had an exciting trip to Harrisburg, where they explored the State Capitol Building and the State Museum. They gained valuable insights into Pennsylvania's history and how our state government operates during their visit. The day was a fantastic opportunity for students to connect their social studies lessons to real-world experiences while enjoying a full day of learning and discovery in Harrisburg.

LAMPETER ELEMENTARY SCHOOL/EARLY CHILDHOOD CENTER – Dr. Michele B. Westphal, Principal

A. FULTON THEATER FIELD TRIPS

On December 19, 2024, the K-2 PTO sponsored the annual field trip to the Fulton Theater. All of the students in first and second grade attended the same performance of A Christmas Carol. The Lampeter Elementary School students and staff filled the seats in the entire lower level of the Fulton Theater, with a few classes sitting on the second level to fit everyone in for the same performance. The students enjoyed an outstanding performance, and were able to ask the cast members questions at the end of the show. The cast members really lifted the curtain on what it takes to put on a live show. Everyone at Lampeter Elementary School is truly grateful for the PTO's willingness to sponsor this trip, and we look forward to going to the theater in the future.

B. DECEMBER ACTIVITIES

The month started with the PTO sponsored Winter Wonderland holiday shopping. The shopping opportunities were held during the school day in room 101 at Lampeter Elementary. Kindergarten students got to have their first experience at Lampeter Elementary by riding the bus from the Early Childhood Center, shopping and watching the movie in the Red Pod. All of the students who participated were able to buy gifts for their family members. This was truly a great experience for all the students, and we are grateful for the assistance of so many parent volunteers to make this happen.

Winter Spirit week was held at both schools during the last week of school before winter break. Students had the opportunity to dress for a warm and cozy day, dress like their favorite book or movie character and wear clothing for a snowy day. The students also dressed up to perform some songs or head to the theater. Winter Spirit Week concluded with a Warm-Up for Winter Break at Lampeter Elementary where the students and staff got to groove in the gym, sing in the cafeteria and hear a story from a mystery reader.

C. EARLY CHILDHOOD ACTIVITIES

The second Preschool Morning Out of the year was held on Saturday, January 11th. With cold and snowy weather, we had a great turnout as many families brought their preschool aged children to the Early Childhood Center for a morning of activities in the gymnasium. High school student volunteers ran stations that included bowling, scooters, an obstacle course, completing balance activities, and playing with the parachute.

INFORMATION TECHNOLOGY DEPARTMENT – Mr. William E. Griscom, Jr., Technology Director

A. MFP CHANGES

Mr. Bill Griscom and Mrs. Amanda Allison recently met with the District's MFP/copier company to discuss the 2026 purchase of new equipment and explore ways to improve overall service and support. During the meeting, they reviewed the current equipment's performance and identified areas where enhancements could be made to better meet the needs of the District. The discussion also focused on optimizing the support process, ensuring that any issues with the equipment can be addressed more efficiently. Their goal is to streamline operations, reduce downtime, and ultimately provide better service to all staff members who rely on these tools daily. Additionally, the District is attempting to consolidate equipment where possible, while also considering the changing needs created by the Martin Meylin renovation.

B. HIGH SCHOOL CAMERAS

Mr. Paul Marx has begun the installation of Rhombus security cameras at Lampeter-Strasburg High School to enhance the safety and security of the campus. These state-of-the-art cameras will be strategically placed around the school, providing improved surveillance coverage and real-time monitoring. The decision to implement this new security system reflects the school's commitment to maintaining a safe learning environment for students, staff, and visitors. When the installation is complete, the District will have one consolidated camera system, easily accessible across all devices, including mobile.

C. LAMPETER ELEMENTARY CARD ACCESS

The installation of a new cloud-connected card access system at Lampeter Elementary has been successfully completed. This advanced system enhances security by allowing authorized personnel to access designated areas of the building using their card credentials, while also providing real-time monitoring and tracking of access events. With cloud connectivity, the system offers greater flexibility and easier management, allowing for remote adjustments and updates to access permissions. The new system is a key part of the school's ongoing efforts to improve safety and ensure a secure environment for both students and staff.

FOR BOARD ACTION

PERSONNEL COMMITTEE

1. RECOMMENDATION FOR APPROVAL OF RESIGNATIONS

Recommend the approval of resignations from the following individuals:

- a. Tammy M. Miller, kitchen helper, Martin Meylin Middle School, effective February 7, 2025.
- b. Julie A. Thiboldeaux, technology specialist, Lampeter-Strasburg High School, effective March 19, 2025.

2. RECOMMENDATION FOR APPROVAL OF EMPLOYMENT – SUPPORT

Recommend the approval to employ Magdiel E. Gray, as a kitchen helper at Martin Meylin Middle School retroactively effective to January 9, 2025. Ms. Gray will become a category D support employee and will be compensated \$16.01 per hour.

3. RECOMMENDATION FOR APPROVAL OF CHANGES OF STATUS

Recommend the approval of a change of status for the following individuals:

- a. Lyndsey M. Keener, part-time (75%) special education teacher, Hans Herr Elementary School, through the end of the first semester of the 2024-2025 school year. Ms. Keener will continue as a part-time (75%) special education teacher at Hans Herr Elementary school through the end of the 24-25 school year. Her annual salary will remain \$63,133.50 based upon Step 10, Level 15 (75%) of the District compensation agreement.
- b. Erica N. Musser, part-time (75%) special education teacher, Hans Herr Elementary School, through the end of the first semester of the 2024-2025 school year. Ms. Keener will continue as a part-time (75%) special education teacher at Hans Herr Elementary school through the end of the 24-25 school year. Her annual salary will remain \$64,910.25 based upon Step 9, Level 30 (75%) of the District compensation agreement.

4. RECOMMENDATION FOR APPROVAL OF ADDITIONAL ASSIGNMENT

Recommend the approval of an additional assignment for Jessica B. Braiterman, Title I assistant, Hans Herr Elementary School. Ms. Braiterman will have the additional assignment as a long-term substitute ESL teacher at Lampeter Elementary School and Martin Meylin Middle School retroactively effective to January 21, 2025, through the end of the 2024-2025 school year. She will be compensated at \$347.53 per diem based upon Step 1, Level B, of the District compensation agreement.

5. RECOMMENDATION FOR APPROVAL OF LEAVES OF ABSENCE

Recommend the approval of a leave of absence for the following individuals:

- a. Christine M. Brenchley, SACC group supervisor, Lampeter-Strasburg Early Childhood Center, effective February 11, 2025, through on or about March 25, 2025.
- b. Michelle T. Brubaker, social worker, Hans Herr Elementary School, effective March 4, 2025, through on or about May 5, 2025.
- c. Alicia M. Garcia, learning support teacher, Lampeter-Strasburg Early Childhood Center, effective on or about May 5, 2025, through October 6, 2025. This is an extension to a previously approved leave of absence from May 5, 2025, through the end of the 2024-2025 school year.

6. RECOMMENDATION FOR APPROVAL OF CHANGES TO SUPPLEMENTAL CONTRACTS

Recommend the approval of additions/deletions to 2024-2025 supplemental contracts, as follows:

a.	Kyle D. Black	Soccer - Boys - Asst - 50% of 50%	\$1,260.00	Addition
b.	Robert N. Holmberg	Wrestling - 2nd Asst - 50% of 60%	\$2,079.00	Addition

7. RECOMMENDATION FOR APPROVAL OF SUBSTITUTES

Recommend the approval of 2024-2025 substitutes, as follows:

Certified Substitutes

Shaika, Grant A.	Social Studies 7-12
Witte mann, Erick A.	Elementary K-6

Emergency Certified Substitute

Hinkle, Beverley A.	All Instructional Areas PK-12
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Support Staff Substitute

Miller, Tammy M.

8. RECOMMENDATION FOR APPROVAL OF VOLUNTEERS

Recommend the approval of 2024-2025 volunteers, as follows:

Deckman, Kenneth A.
 Galarza-Rios, Maddy S.
 Sensenig, Austin H.

ACADEMIC COMMITTEE

9. RECOMMENDATION FOR APPROVAL OF GRADES K-8 SCIENCE CURRICULUM

Recommend the approval of science curriculum for grades K-8 aligned to the Science, Technology and Engineering, Environmental Literacy and Sustainability (STEELS) Standards, as posted.

10. RECOMMENDATION FOR APPROVAL OF CONTRACT WITH LANCASTER-LEBANON VIRTUAL SOLUTIONS

Recommend the approval of a contract for online learning services with Lancaster-Lebanon Virtual Solutions (LLVS) from July 1, 2025, through June 30, 2028, as posted.

MISCELLANEOUS

11. RECOMMENDATION FOR APPROVAL OF UPDATED BOARD POLICIES (FIRST READING)

Recommend the approval of updated policies (first reading), as follows and as posted:

- a. Policy 805 Emergency Preparedness and Response
- b. Policy 805.1 Relations with Law Enforcement Agencies
- c. Policy 805.2 School Security Personnel (New policy)

12. RECOMMENDATION FOR APPROVAL OF FIELD TRIPS

Recommend the approval of overnight field trips, as follows and as posted:

- a. One Lampeter-Strasburg High School student to attend the PMEA District 7 Orchestra Festival at Manheim Township High School from January 10, 2025, to January 11, 2025, as posted.
- b. One Lampeter-Strasburg High School student to attend the National Association for Music Education (NAfME) All-Eastern Division Honors Ensemble at Sheraton Rocky Hill in Rocky Hill, Connecticut, and The Bushnell Performing Arts from April 24 to April 27, 2025, as posted.

FOR BOARD INFORMATION

- 1. The Finance Committee will be meeting on Monday, February 10, 2025, at 6:30 p.m.
- 2. The Buildings and Grounds Committee will be meeting on Tuesday, February 18, 2025, at 6:30 p.m.
- 3. The Board Workshop will be held on Tuesday, February 18, 2025, at 7:30 p.m.
- 4. The Academic Committee will be meeting on Monday, March 3, 2025, at 6:30 p.m.
- 5. The next meeting of the Board will be held on Monday, March 3, 2025, at 7:30 p.m.

MINUTES OF THE BOARD OF SCHOOL DIRECTORS
LAMPETER-STRASBURG SCHOOL DISTRICT
Administration Building
1600 Book Road
Lancaster, Pennsylvania 17602
January 6, 2024

President Melissa S. Herr called the meeting to order at 7:30 p.m. and opened the meeting with the pledge of allegiance.

PRESENT: Board Members, Mrs. Melissa S. Herr, Mr. Matthew E. Parido, Mr. Dean E. McComsey, Mrs. Suzanne S. Knowles (remotely), Ms. Kelly A. Osborne (remotely), Mrs. Kristin M. Staley, Mrs. Kari A. Steinbacher, Mr. Andrew L. Welk; Superintendent, Dr. Kevin S. Peart; Assistant Superintendent, Dr. Andrew M. Godfrey; Administrative Assistant, Mrs. Mary E. Williams; and visitors.

ABSENT: Board Member, Mr. Dustin D. Knarr

OPPORTUNITY FOR PUBLIC COMMENT ON AGENDA ITEMS

No comments.

MINUTES

Mr. Welk moved and Mrs. Steinbacher seconded the motion to approve the Minutes of the Board reorganization meeting and regular Board meeting on December 4, 2024.

A voice vote was unanimous in favor of the motion.

COMMUNICATIONS AND RECOGNITION

Dr. Peart shared that, due to the weather, January student recognition and student reports will be presented at the February meeting.

Dr. Peart shared that January is School Director recognition month and recognized School Board members for their service to the Lampeter-Strasburg School District.

Dr. Peart recognized Lampeter Elementary School students who have artwork displayed in the Board room.

Dr. Peart shared the following communications:

1. Binkley, Lisa M. – a letter of resignation.
2. Long, Deborah K. – a letter of resignation as a kitchen helper.
3. Pierce, Valecia W., PDE Division of Subsidy Administration – a letter of acceptance of the 2025-2026 Act I Index.

TREASURER'S REPORT – Mr. Keith A. Stoltzfus

Mr. Stoltzfus read the treasurer's report as attached to these Minutes.

Thereafter, Mr. Welk moved and Mrs. Staley seconded the motion to accept the treasurer's report as submitted and to approve the payment of bills for the General Fund in the amount of \$4,538,567.08, Cafeteria Fund checks in the amount of \$81,981.86, Capital Reserve Fund checks in the amount of \$121,837.10, Capital Projects Fund checks in the amount of \$456,499.15, and Athletic Account Officials in the amount of \$3,833.00.

A voice vote was unanimous in favor of the motion.

ACADEMIC COMMITTEE – Mr. Matthew E. Parido, Chairperson

Mr. Parido reported on the Academic Committee meeting that took place earlier in the evening.

BUILDINGS AND GROUNDS COMMITTEE – Mr. Andrew L. Welk, Chairperson

No report.

BOARD OF REVIEW COMMITTEE – Mrs. Melissa S. Herr, Chairperson

No report.

FINANCE COMMITTEE – Mr. Dustin D. Knarr, Chairperson

No report.

PERSONNEL COMMITTEE – Mrs. Suzanne S. Knowles, Chairperson

Dr. Peart reported that the Committee is recommending all personnel items below as a consent agenda. Mr. McComsey made a motion to approve the consent agenda items as presented and Mr. Welk seconded the motion. A voice vote was unanimous in favor of the motion to approve the consent agenda as follows:

1. APPROVAL OF RESIGNATION

Lisa M. Binkley, special education teacher assistant at Martin Meylin Middle School effective January 16, 2025, and cafeteria monitor at Martin Meylin Middle School effective February 13, 2025.

2. APPROVAL OF EMPLOYMENT – SUPPORT

- a. Dylan P. Eshbach, as a SACC aide at the Lampeter-Strasburg Early Childhood Center retroactively effective to December 9, 2024. Mr. Eshbach will become a category C support employee and will be compensated \$16.01 per hour.
- b. Jennifer L. Zimmerman, as a kitchen helper at Lampeter-Strasburg High School retroactively effective to December 16, 2024. Ms. Zimmerman will become a category E support employee and will be compensated \$16.16 per hour.

3. APPROVAL OF CHANGES OF STATUS

- a. Deborah K. Long, kitchen helper, Martin Meylin Middle School. Ms. Long will become a second shift custodian at Martin Meylin Middle School retroactively effective to December 16, 2024. She will become a category A support employee and will be compensated \$16.42 per hour.
- b. Samantha M. Whitton, kitchen helper, Martin Meylin Middle School. Ms. Whitton will become the assistant kitchen manager at Martin Meylin Middle School retroactively effective to December 3, 2024. She will become a category C support employee with no change in compensation.

4. APPROVAL OF CHANGES TO SUPPLEMENTAL CONTRACTS

2024-2025 additions/deletions to supplemental contracts, as follows:

a. Edward Burton	Basketball - Boys - 2nd Asst - 60%	\$3,855.60	Deletion
b. Neil Koser	Basketball - Boys - Asst - 50% of 50%	\$1,606.50	Deletion
c. Neil Koser	Basketball - Boys - 2nd Asst - 60%	\$3,855.60	Addition
d. Jeremy Messinger	Basketball - Boys - Asst - 50% of 50%	\$1,606.50	Addition
e. Jacqueline Koob	Swimming - 1st Asst - 70%	\$3,439.80	Addition

5. APPROVAL OF SUBSTITUTES

2024-2025 substitutes, as follows:

Support Staff Substitute

Reath, Amy E.
Souders, Jay R.
Sylvester, Jr., Jerry J.

6. APPROVAL OF VOLUNTEERS

2024-2025 volunteers, as follows:

Koob, Jacqueline M.
Wentzel, Bradley S.

CURRICULAR ISSUES AND FEDERAL PROGRAMS – Dr. Andrew M. Godfrey, Representative

Dr. Godfrey reported on Title I and Federal programs.

LIAISON REPORTS

Mr. Welk reported on the Lancaster County Career and Technology Center.

STUDENT REPRESENTATIVES – Mr. Truman Horst, Mr. Shrey Singh

No student reports.

SUPERINTENDENT'S REPORT – Dr. Kevin S. Peart

Dr. Peart reported that all personnel items were approved during the Personnel Committee report.

ACCEPTANCE OF 2023-2024 FINANCIAL STATEMENTS AND AUDIT

Mr. Parido moved and Mrs. Steinbacher seconded the motion to approve the 2023-2024 financial statements and audit as presented by Withum Smith+Brown, PC, at the November 18, 2024, Board Workshop meeting.

A voice vote was unanimous in favor of the motion.

APPROVAL OF 2024-2025 SPECIAL EDUCATION CONTRACT

Mr. McComsey moved and Mrs. Staley seconded the motion to approve a 2024-2025 special education contract with the School District of Lancaster for one student continuing in current placement at an annual base expense of \$62,573.40.

A voice vote was unanimous in favor of the motion.

APPROVAL OF FIELD TRIPS

Mr. McComsey moved and Mr. Parido seconded the motion to approve overnight field trips, as follows:

- a. Lampeter-Strasburg High School Mock Trial Club to compete in Mock Trial Competition at Penn State University from February 1 to 2, 2025, as posted.
- b. Martin Meylin Middle School Cape Henlopen Trip, Cape Henlopen State Park, Lewes, Delaware, from June 23 to June 26, 2025, as posted.

A voice vote was unanimous in favor of the motion.

APPROVAL OF 2025-2026 SCHOOL CALENDAR

Mr. Welk moved and Mrs. Steinbacher seconded the motion to approve the 2025-2026 school calendar, as attached to these Minutes.

A voice vote was unanimous in favor of the motion.

OPPORTUNITY FOR PUBLIC COMMENT

No comments.

MEETING ADJOURNED

The meeting was properly adjourned at 7:51 p.m.

Mary E. Williams
Secretary

MINUTES OF THE BOARD OF SCHOOL DIRECTORS
LAMPETER-STRASBURG SCHOOL DISTRICT
Administration Building
1600 Book Road
Lancaster, Pennsylvania 17602
January 21, 2025

Vice President Mr. Matthew E. Parido called the meeting to order at 7:30 p.m.

PRESENT: Board Members, Mr. Dustin D. Knarr, Mrs. Suzanne S. Knowles, Mr. Dean E. McComsey, Ms. Kelly A. Osborne, Mr. Matthew E. Parido, Mrs. Kristin M. Staley, Mrs. Kari A. Steinbacher, Mr. Andrew L. Welk; Superintendent, Dr. Kevin S. Peart; Assistant Superintendent, Dr. Andrew M. Godfrey; Business Manager, Mr. Keith A. Stoltzfus; Martin Meylin Middle School Principal, Mrs. Alicia C. Kowitz; Mrs. Mary E. Williams; and visitors.

ABSENT: Board Member, Mrs. Melissa S. Herr.

PRESENTATION ON MARTIN MEYLIN MIDDLE SCHOOL INITIATIVES

Mrs. Kowitz presented information on Martin Meylin Middle School initiatives and progress toward comprehensive planning goals.

DISCUSSION AND APPROVAL OF LANCASTER COUNTY CAREER AND TECHNOLOGY CENTER 2025-2026 PROPOSED BUDGET

Mr. Stoltzfus led a discussion on the Lancaster County Career and Technology Center 2025-2026 proposed budget. Thereafter, Mrs. Knowles moved and Mr. Knarr seconded the motion to approve the proposed budget as presented.

A voice vote was unanimous in favor of the motion.

DISCUSSION OF BOARD POLICIES

Dr. Peart led a discussion reviewing Board Policies, as follows:

- a. Policy 805 Emergency Preparedness and Response
- b. Policy 805.1 Relations with Law Enforcement Agencies
- c. Policy 805.2 School Security Personnel (New policy)
- d. Policy 707 Use of School Facilities (Buildings & Grounds Committee request – Mr. Welk provided background on a facility usage request from District resident Ryan Null. After discussion, there was no support from Board members to revise the current policy.)

DISCUSSION OF PSBA PRINCIPLES FOR GOVERNANCE AND LEADERSHIP

Dr. Peart led a discussion on the PSBA Principle for Governance and Leadership – Communicate clearly.

ADJOURNMENT

The meeting was properly adjourned at 8:41 p.m.

Mary E. Williams
Assistant Secretary

LAMPETER-STRASBURG SCHOOL DISTRICT
Lampeter, Pennsylvania 17537
February 3, 2025

Communications

1. Brenchley, Christine M. – a letter requesting a leave of absence.
2. Brubaker, Michelle T. – a letter requesting a leave of absence.
3. Garcia, Alicia M. – a letter requesting an extension to a leave of absence.
4. Miller, Tammy M. – a letter of resignation.
5. Thiboldeaux, Julie A. – a letter of resignation.

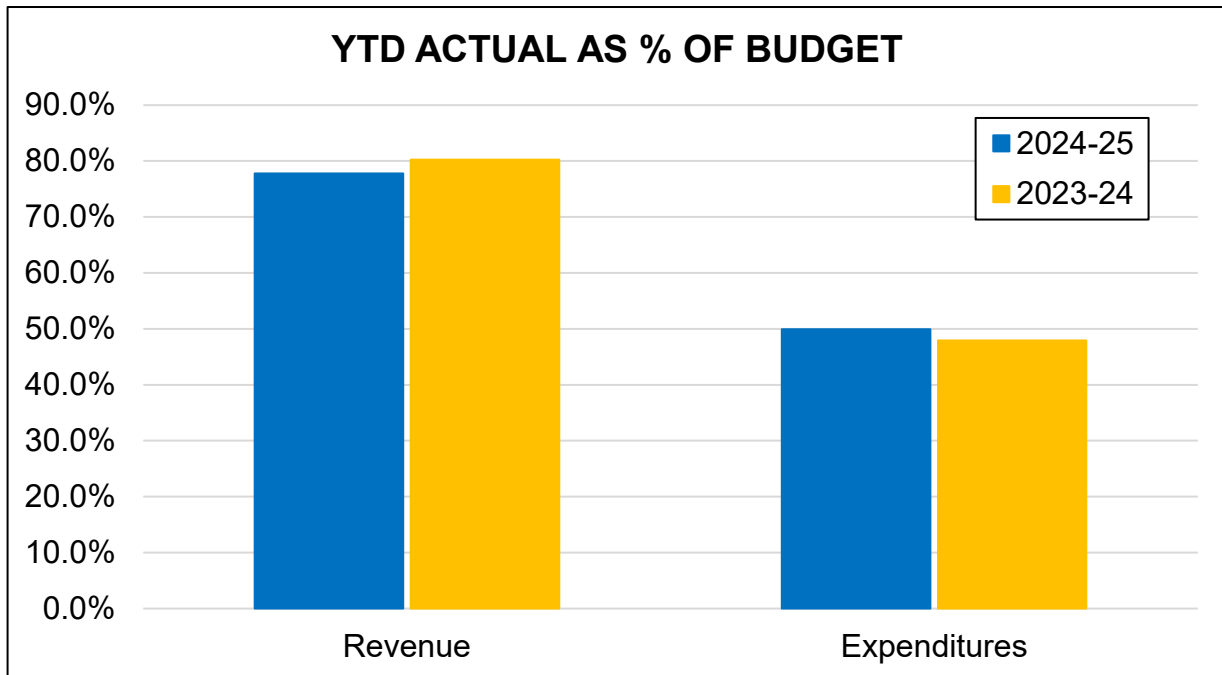
LAMPETER-STRASBURG SCHOOL DISTRICT

Financial Comparison Report

February 4, 2025

	<u>Revenue</u>	<u>Expenditures</u>	<u>Surplus/Loss</u>
Year 2024-25 Budget	62,728 =====	63,388 =====	(660) =====
Year-to-Date Actual (219 Days)	48,795	31,649	17,146
Prior Year-to-Date Actual (221 Days)	48,266	28,960	19,306
Year-to-Date Increase (Decrease)	529	2,689	(2,160)
% Change - Current vs. Prior YTD Over (Under)	1.1%	9.3%	(11.2%)
Year-to-Date Actual as % of 2024-25 Budget	77.8%	49.9%	-----
Prior Year-to-Date Actual as % of 2023-24 Budget	80.3%	48.0%	-----

(\$ in Thousands)



BOARD SUMMARY

Fund: 10 - General Fund Encumbrances Included

As of: 02/04/2025

Funding Source: All

Account Description	Original Budget	Current Budget	Outstanding Enc	Exp/Rec	Balance	% Used
1100 REG PROG ELEMEN/SECOND						
100 PERSONNEL EMPL SALARIES	13,939,230.00	13,939,230.00	0.00	6,394,190.34	7,545,039.66	45.87
200 PERSONNEL EMPL BENEFITS	8,837,175.00	8,837,175.00	0.00	3,114,071.45	5,723,103.55	35.24
300 PURCH PROF & TECH SERVICES	217,000.00	217,000.00	0.00	25,556.85	191,443.15	11.78
400 PURCHASED PROPERTY SVCS	88,090.00	88,090.00	1,090.00	41,696.01	45,303.99	48.57
500 OTHER PURCHASED SERVICES	620,300.00	620,300.00	2,472.13	285,524.14	332,303.73	46.43
600 SUPPLIES	572,465.00	572,465.00	9,226.04	535,296.03	27,942.93	95.12
700 PROPERTY	40,000.00	40,000.00	0.00	41,435.47	(1,435.47)	103.59
800 OTHER OBJECTS	500.00	500.00	0.00	0.00	500.00	0.00
Totals for 1100s	24,314,760.00	24,314,760.00	12,788.17	10,437,770.29	13,864,201.54	42.98
1200 SPEC PROG ELEMEN/SECOND						
100 PERSONNEL EMPL SALARIES	4,072,896.00	4,072,896.00	0.00	1,918,917.07	2,153,978.93	47.11
200 PERSONNEL EMPL BENEFITS	3,016,659.00	3,016,659.00	0.00	869,832.75	2,146,826.25	28.83
300 PURCH PROF & TECH SERVICES	2,930,031.00	2,930,031.00	0.00	1,532,577.93	1,397,453.07	52.31
400 PURCHASED PROPERTY SVCS	2,000.00	2,000.00	0.00	0.00	2,000.00	0.00
500 OTHER PURCHASED SERVICES	1,388,281.00	1,388,281.00	0.00	633,099.14	755,181.86	45.60
600 SUPPLIES	8,950.00	8,950.00	242.15	41,869.44	(33,161.59)	470.52
800 OTHER OBJECTS	4,400.00	4,400.00	0.00	3,090.00	1,310.00	70.23
Totals for 1200s	11,423,217.00	11,423,217.00	242.15	4,999,386.33	6,423,588.52	43.77
1300 VOCATIONAL EDUCATION						
100 PERSONNEL EMPL SALARIES	172,622.00	172,622.00	0.00	77,796.42	94,825.58	45.07
200 PERSONNEL EMPL BENEFITS	108,507.00	108,507.00	0.00	37,411.98	71,095.02	34.48
400 PURCHASED PROPERTY SVCS	90,866.00	90,866.00	0.00	10,706.76	80,159.24	11.78
500 OTHER PURCHASED SERVICES	704,133.00	704,133.00	273.75	381,450.53	322,408.72	54.21
600 SUPPLIES	11,000.00	11,000.00	770.76	9,310.43	918.81	91.65
Totals for 1300s	1,087,128.00	1,087,128.00	1,044.51	516,676.12	569,407.37	47.62
1400 OTHER INSTRUCTION PROG						

BOARD SUMMARY
Encumbrances Included
As of: 02/04/2025

Funding Source: All

Account Description	Original Budget	Current Budget	Outstanding Enc	Exp/Rec	Balance	% Used
100 PERSONNEL EMPL SALARIES	240,010.00	240,010.00	0.00	108,897.25	131,112.75	45.37
200 PERSONNEL EMPL BENEFITS	117,844.00	117,844.00	0.00	42,982.95	74,861.05	36.47
300 PURCH PROF & TECH SERVICES	92,000.00	92,000.00	0.00	107,597.77	(15,597.77)	116.95
500 OTHER PURCHASED SERVICES	71,697.00	71,697.00	0.00	74,539.82	(2,842.82)	103.97
600 SUPPLIES	0.00	0.00	0.00	1,446.84	(1,446.84)	0.00
700 PROPERTY	0.00	0.00	0.00	2,498.00	(2,498.00)	0.00
Totals for 1400s	521,551.00	521,551.00	0.00	337,962.63	183,588.37	64.80
1500 NONPUBLIC SCHOOL PGMS						
300 PURCH PROF & TECH SERVICES	39,975.00	39,975.00	0.00	445.30	39,529.70	1.11
600 SUPPLIES	0.00	0.00	1,903.51	18,639.42	(20,542.93)	0.00
Totals for 1500s	39,975.00	39,975.00	1,903.51	19,084.72	18,986.77	52.50
2100 SUPPORT SVCS - STUDENTS						
100 PERSONNEL EMPL SALARIES	1,604,897.00	1,604,897.00	0.00	804,846.39	800,050.61	50.15
200 PERSONNEL EMPL BENEFITS	959,413.00	959,413.00	0.00	378,685.76	580,727.24	39.47
300 PURCH PROF & TECH SERVICES	142,370.00	142,370.00	0.00	66,832.16	75,537.84	46.94
500 OTHER PURCHASED SERVICES	14,350.00	14,350.00	0.00	5,744.50	8,605.50	40.03
600 SUPPLIES	10,840.00	10,840.00	4,174.40	6,315.56	350.04	96.77
700 PROPERTY	0.00	0.00	1,140.00	0.00	(1,140.00)	0.00
800 OTHER OBJECTS	1,500.00	1,500.00	0.00	650.00	850.00	43.33
Totals for 2100s	2,733,370.00	2,733,370.00	5,314.40	1,263,074.37	1,464,981.23	46.40
2200 SUPPORT SVCS - INSTR STAFF						
100 PERSONNEL EMPL SALARIES	530,202.00	530,202.00	0.00	280,823.97	249,378.03	52.97
200 PERSONNEL EMPL BENEFITS	630,297.00	630,297.00	0.00	248,060.82	382,236.18	39.36
300 PURCH PROF & TECH SERVICES	4,575.00	4,575.00	0.00	50,264.43	(45,689.43)	1098.68
500 OTHER PURCHASED SERVICES	3,000.00	3,000.00	0.00	1,073.93	1,926.07	35.80
600 SUPPLIES	57,435.00	57,435.00	2,376.85	13,682.08	41,376.07	27.96
700 PROPERTY	85,971.00	85,971.00	0.00	0.00	85,971.00	0.00
800 OTHER OBJECTS	1,600.00	1,600.00	0.00	1,464.00	136.00	91.50

BOARD SUMMARY
Encumbrances Included
As of: 02/04/2025

Funding Source: All

Account Description	Original Budget	Current Budget	Outstanding Enc	Exp/Rec	Balance	% Used
Totals for 2200s	1,313,080.00	1,313,080.00	2,376.85	595,369.23	715,333.92	45.52
2300 SUPPORT SERVICES-ADMIN						
100 PERSONNEL EMPL SALARIES	1,883,081.00	1,883,081.00	0.00	1,073,277.63	809,803.37	57.00
200 PERSONNEL EMPL BENEFITS	1,178,596.00	1,178,596.00	0.00	499,175.90	679,420.10	42.35
300 PURCH PROF & TECH SERVICES	240,250.00	240,250.00	0.00	93,645.90	146,604.10	38.98
500 OTHER PURCHASED SERVICES	14,800.00	14,800.00	0.00	3,430.79	11,369.21	23.18
600 SUPPLIES	49,010.00	49,010.00	39.19	20,010.18	28,960.63	40.91
700 PROPERTY	0.00	0.00	0.00	77.94	(77.94)	0.00
800 OTHER OBJECTS	25,450.00	25,450.00	0.00	23,417.62	2,032.38	92.01
Totals for 2300s	3,391,187.00	3,391,187.00	39.19	1,713,035.96	1,678,111.85	50.52
2400 SUPP SVCS-PUPIL HEALTH						
100 PERSONNEL EMPL SALARIES	420,980.00	420,980.00	0.00	204,930.65	216,049.35	48.68
200 PERSONNEL EMPL BENEFITS	303,774.00	303,774.00	0.00	92,170.03	211,603.97	30.34
300 PURCH PROF & TECH SERVICES	5,000.00	5,000.00	0.00	0.00	5,000.00	0.00
500 OTHER PURCHASED SERVICES	800.00	800.00	0.00	0.00	800.00	0.00
600 SUPPLIES	17,500.00	17,500.00	78.07	11,759.61	5,662.32	67.64
Totals for 2400s	748,054.00	748,054.00	78.07	308,860.29	439,115.64	41.30
2500 SUPP SERVICES-BUSINESS						
100 PERSONNEL EMPL SALARIES	348,757.00	348,757.00	0.00	208,526.14	140,230.86	59.79
200 PERSONNEL EMPL BENEFITS	218,965.00	218,965.00	0.00	94,084.22	124,880.78	42.97
300 PURCH PROF & TECH SERVICES	30,000.00	30,000.00	0.00	21,653.68	8,346.32	72.18
400 PURCHASED PROPERTY SVCS	7,500.00	7,500.00	0.00	4,239.82	3,260.18	56.53
500 OTHER PURCHASED SERVICES	2,500.00	2,500.00	0.00	616.76	1,883.24	24.67
600 SUPPLIES	5,000.00	5,000.00	0.00	1,879.33	3,120.67	37.59
700 PROPERTY	0.00	0.00	0.00	3,751.80	(3,751.80)	0.00
800 OTHER OBJECTS	900.00	900.00	0.00	1,600.00	(700.00)	177.78
Totals for 2500s	613,622.00	613,622.00	0.00	336,351.75	277,270.25	54.81
2600 OPER/MAINT PLANT SVCS						

BOARD SUMMARY
Encumbrances Included
As of: 02/04/2025

Funding Source: All

Account Description	Original Budget	Current Budget	Outstanding Enc	Exp/Rec	Balance	% Used
100 PERSONNEL EMPL SALARIES	1,791,370.00	1,791,370.00	0.00	979,495.19	811,874.81	54.68
200 PERSONNEL EMPL BENEFITS	1,342,054.00	1,342,054.00	0.00	416,556.74	925,497.26	31.04
300 PURCH PROF & TECH SERVICES	133,180.00	133,180.00	0.00	30,371.65	102,808.35	22.80
400 PURCHASED PROPERTY SVCS	544,650.00	544,650.00	8,520.00	344,722.85	191,407.15	64.86
500 OTHER PURCHASED SERVICES	399,500.00	399,500.00	0.00	362,211.66	37,288.34	90.67
600 SUPPLIES	1,056,430.00	1,056,430.00	0.00	447,847.45	608,582.55	42.39
700 PROPERTY	22,000.00	22,000.00	0.00	26,940.24	(4,940.24)	122.46
800 OTHER OBJECTS	400.00	400.00	0.00	35.00	365.00	8.75
Totals for 2600s	5,289,584.00	5,289,584.00	8,520.00	2,608,180.78	2,672,883.22	49.47
2700 STUDENT TRANSPORTATION SVCS						
100 PERSONNEL EMPL SALARIES	291,543.00	291,543.00	0.00	159,014.15	132,528.85	54.54
200 PERSONNEL EMPL BENEFITS	190,087.00	190,087.00	0.00	58,695.90	131,391.10	30.88
300 PURCH PROF & TECH SERVICES	1,000.00	1,000.00	0.00	835.00	165.00	83.50
400 PURCHASED PROPERTY SVCS	24,850.00	24,850.00	0.00	11,671.75	13,178.25	46.97
500 OTHER PURCHASED SERVICES	1,627,140.00	1,627,140.00	0.00	677,214.10	949,925.90	41.62
600 SUPPLIES	64,500.00	64,500.00	0.00	34,912.00	29,588.00	54.13
700 PROPERTY	140,000.00	140,000.00	0.00	201,590.00	(61,590.00)	143.99
800 OTHER OBJECTS	200.00	200.00	0.00	0.00	200.00	0.00
Totals for 2700s	2,339,320.00	2,339,320.00	0.00	1,143,932.90	1,195,387.10	48.90
2800 SUPPORT SVCS-CENTRAL						
100 PERSONNEL EMPL SALARIES	581,267.00	581,267.00	0.00	315,123.62	266,143.38	54.21
200 PERSONNEL EMPL BENEFITS	388,282.00	388,282.00	0.00	158,424.62	229,857.38	40.80
300 PURCH PROF & TECH SERVICES	104,250.00	104,250.00	42,825.96	104,830.15	(43,406.11)	141.64
400 PURCHASED PROPERTY SVCS	14,700.00	14,700.00	0.00	6,155.65	8,544.35	41.88
500 OTHER PURCHASED SERVICES	76,100.00	76,100.00	0.00	46,953.74	29,146.26	61.70
600 SUPPLIES	386,200.00	386,200.00	8,058.19	405,834.39	(27,692.58)	107.17
700 PROPERTY	449,129.00	449,129.00	54,573.00	659,873.89	(265,317.89)	159.07
800 OTHER OBJECTS	1,200.00	1,200.00	0.00	0.00	1,200.00	0.00

BOARD SUMMARY
Encumbrances Included
As of: 02/04/2025

Funding Source: All

Account Description	Original Budget	Current Budget	Outstanding Enc	Exp/Rec	Balance	% Used
Totals for 2800s	2,001,128.00	2,001,128.00	105,457.15	1,697,196.06	198,474.79	90.08
2900 OTHER SUPPORT SERVICES						
500 OTHER PURCHASED SERVICES	27,400.00	27,400.00	0.00	27,342.16	57.84	99.79
Totals for 2900s	27,400.00	27,400.00	0.00	27,342.16	57.84	99.79
3200 STUDENT ACTIVITIES						
100 PERSONNEL EMPL SALARIES	600,051.00	600,051.00	0.00	385,032.63	215,018.37	64.17
200 PERSONNEL EMPL BENEFITS	226,428.00	226,428.00	0.00	130,542.21	95,885.79	57.65
300 PURCH PROF & TECH SERVICES	142,740.00	142,740.00	0.00	78,236.69	64,503.31	54.81
400 PURCHASED PROPERTY SVCS	20,300.00	20,300.00	1,090.00	21,684.49	(2,474.49)	112.19
500 OTHER PURCHASED SERVICES	78,860.00	78,860.00	365.68	61,772.70	16,721.62	78.80
600 SUPPLIES	64,500.00	64,500.00	5,213.77	87,071.74	(27,785.51)	143.08
700 PROPERTY	85,400.00	85,400.00	0.00	94,691.41	(9,291.41)	110.88
800 OTHER OBJECTS	14,730.00	14,730.00	0.00	14,650.42	79.58	99.46
Totals for 3200s	1,233,009.00	1,233,009.00	6,669.45	873,682.29	352,657.26	71.40
3300 COMMUNITY SERVICES						
800 OTHER OBJECTS	6,000.00	6,000.00	0.00	0.00	6,000.00	0.00
Totals for 3300s	6,000.00	6,000.00	0.00	0.00	6,000.00	0.00
3400 SCHOLARSHIPS & AWARDS						
800 OTHER OBJECTS	1,750.00	1,750.00	0.00	0.00	1,750.00	0.00
Totals for 3400s	1,750.00	1,750.00	0.00	0.00	1,750.00	0.00
5100 DEBT SVC / OTHER EXP						
800 OTHER OBJECTS	808,640.00	808,640.00	0.00	619,991.54	188,648.46	76.67
900 OTHER USES OF FUNDS	2,025,000.00	2,025,000.00	0.00	0.00	2,025,000.00	0.00
Totals for 5100s	2,833,640.00	2,833,640.00	0.00	619,991.54	2,213,648.46	21.88
5200 FUND TRANSFERS						
900 OTHER USES OF FUNDS	2,990,464.00	2,990,464.00	0.00	0.00	2,990,464.00	0.00
Totals for 5200s	2,990,464.00	2,990,464.00	0.00	0.00	2,990,464.00	0.00
5800 SUSPENSE ACCOUNT						

BOARD SUMMARY
Encumbrances Included
As of: 02/04/2025

Funding Source: All

Account Description	Original Budget	Current Budget	Outstanding Enc	Exp/Rec	Balance	% Used
200 PERSONNEL EMPL BENEFITS	0.00	0.00	6,484.12	4,000,414.57	(4,006,898.69)	0.00
Totals for 5800s	0.00	0.00	6,484.12	4,000,414.57	(4,006,898.69)	0.00
5900 BUDGETARY RESERVE						
800 OTHER OBJECTS	480,000.00	480,000.00	0.00	0.00	480,000.00	0.00
Totals for 5900s	480,000.00	480,000.00	0.00	0.00	480,000.00	0.00
Expenditure Totals	63,388,239.00	63,388,239.00	150,917.57	31,498,311.99	31,739,009.44	49.93
6100 TAXES LEVIED BY THE LEA						
000 000	(4,727,500.00)	(4,727,500.00)	0.00	(1,479,282.10)	(3,248,217.90)	31.29
100 RE TAXES	(40,069,599.00)	(40,069,599.00)	0.00	(39,425,312.53)	(644,286.47)	98.39
Totals for 6100s	(44,797,099.00)	(44,797,099.00)	0.00	(40,904,594.63)	(3,892,504.37)	91.31
6400 DELINQUENCIES TAXES LEV						
000 000	(500,000.00)	(500,000.00)	0.00	(110,441.91)	(389,558.09)	22.09
Totals for 6400s	(500,000.00)	(500,000.00)	0.00	(110,441.91)	(389,558.09)	22.09
6500 EARNINGS ON INVESTMENTS						
000 000	(800,000.00)	(800,000.00)	0.00	(868,231.24)	68,231.24	108.53
Totals for 6500s	(800,000.00)	(800,000.00)	0.00	(868,231.24)	68,231.24	108.53
6700 REV FROM STUDENT ACT						
000 000	(100,000.00)	(100,000.00)	0.00	(81,850.62)	(18,149.38)	81.85
Totals for 6700s	(100,000.00)	(100,000.00)	0.00	(81,850.62)	(18,149.38)	81.85
6800 REV FROM INTERMEDIATE						
000 000	(765,434.00)	(765,434.00)	0.00	(55,131.80)	(710,302.20)	7.20
Totals for 6800s	(765,434.00)	(765,434.00)	0.00	(55,131.80)	(710,302.20)	7.20
6900 OTHER REV FROM LOCAL						
000 000	(59,750.00)	(59,750.00)	0.00	(20,217.77)	(39,532.23)	33.84
Totals for 6900s	(59,750.00)	(59,750.00)	0.00	(20,217.77)	(39,532.23)	33.84
7100 BASIC INSTRUCT & OPER						
000 000	(5,730,000.00)	(5,730,000.00)	0.00	(2,522,604.00)	(3,207,396.00)	44.02
Totals for 7100s	(5,730,000.00)	(5,730,000.00)	0.00	(2,522,604.00)	(3,207,396.00)	44.02

BOARD SUMMARY
Encumbrances Included
As of: 02/04/2025

Funding Source: All

Account Description	Original Budget	Current Budget	Outstanding Enc	Exp/Rec	Balance	% Used
7200 SUBSIDIES SPECIFIC ED PROGS						
000 000	(1,805,000.00)	(1,805,000.00)	0.00	(857,927.56)	(947,072.44)	47.53
Totals for 7200s	(1,805,000.00)	(1,805,000.00)	0.00	(857,927.56)	(947,072.44)	47.53
7300 SUBSIDIES NON-ED PGMS						
000 000	(1,963,892.00)	(1,963,892.00)	0.00	(1,505,480.35)	(458,411.65)	76.66
Totals for 7300s	(1,963,892.00)	(1,963,892.00)	0.00	(1,505,480.35)	(458,411.65)	76.66
7500 EXTRA GRANTS						
000 000	(281,120.00)	(281,120.00)	0.00	(627,040.56)	345,920.56	223.05
Totals for 7500s	(281,120.00)	(281,120.00)	0.00	(627,040.56)	345,920.56	223.05
7800 STATE SHARE FICA/PSERS						
000 000	(5,373,082.00)	(5,373,082.00)	0.00	(652,294.16)	(4,720,787.84)	12.14
Totals for 7800s	(5,373,082.00)	(5,373,082.00)	0.00	(652,294.16)	(4,720,787.84)	12.14
8500 RESTRICT GRANTS-IN-AID						
000 000	(552,727.00)	(552,727.00)	0.00	(197,245.91)	(355,481.09)	35.69
Totals for 8500s	(552,727.00)	(552,727.00)	0.00	(197,245.91)	(355,481.09)	35.69
8700 FEDERAL STIMULUS						
000 000	0.00	0.00	0.00	(315,766.25)	315,766.25	0.00
Totals for 8700s	0.00	0.00	0.00	(315,766.25)	315,766.25	0.00
9900 OTHER FINANCING SOURCES						
000 000	0.00	0.00	0.00	(75,804.15)	75,804.15	0.00
Totals for 9900s	0.00	0.00	0.00	(75,804.15)	75,804.15	0.00
Revenue Totals	(62,728,104.00)	(62,728,104.00)	0.00	(48,794,630.91)	(13,933,473.09)	77.79
Fund 10 Totals						
Total Expenditure	57,084,135.00	57,084,135.00	144,433.45	26,877,905.88	30,061,795.67	47.34
Total Other Expenditure	6,304,104.00	6,304,104.00	6,484.12	4,620,406.11	1,677,213.77	73.39
Total Revenue	(62,728,104.00)	(62,728,104.00)	0.00	(48,718,826.76)	(14,009,277.24)	77.67
Total Other Revenue	0.00	0.00	0.00	(75,804.15)	75,804.15	0.00

BOARD SUMMARY
Encumbrances Included
As of: 02/04/2025

Funding Source: All

Account Description	Original Budget	Current Budget	Outstanding Enc	Exp/Rec	Balance	% Used
Grand Totals All Funds						
Total Expenditure	57,084,135.00	57,084,135.00	144,433.45	26,877,905.88	30,061,795.67	47.34
Total Other Expenditure	6,304,104.00	6,304,104.00	6,484.12	4,620,406.11	1,677,213.77	73.39
Total Revenue	(62,728,104.00)	(62,728,104.00)	0.00	(48,718,826.76)	(14,009,277.24)	77.67
Total Other Revenue	0.00	0.00	0.00	(75,804.15)	75,804.15	0.00

FUND ACCOUNTING PAYMENT SUMMARY

Bank Account: GF - L-S GENERAL FUND **Payment Dates:** 01/08/2025 - 02/04/2025

Payment Categories: Regular Checks, Non-negotiable Disbursements, Direct Deposits, Manual Checks, Procurement Cards, Credit Cards

Sort: Payment Number

Payment #	Paymnt Dt	Vendor Name	Description Of Purchase	Description Of Purchase	Amount
0000122967	01/02/2025	DIRECT ENERGY BUSINESS	electric - campus	electric - stadium sign	28,968.82
0000122968	01/02/2025	HAJOCA CORPORATION	pressure relief valves		2,162.59
0000122969	01/02/2025	NRG BUSINESS MARKETING, LLC	ntl gas - fieldhouse	ntl gas - LE kitchen	324.46
0000122970	01/02/2025	UGI UTILITIES INC.	ntl gas - ECC	ntl gas - admin bldg	3,406.31
0000122971	01/09/2025	AT&T MOBILITY	district cell phone charges		1,944.08
0000122972	01/09/2025	CCIU	career academy & speech		12,638.08
0000122973	01/09/2025	CDW GOVERNMENT INC	Chromebooks		1,412.13
0000122974	01/09/2025	CENTRAL SUSQUEHANNA I.U.	HR customization		495.00
0000122975	01/09/2025	CITY OF LANCASTER PA	water usage - campus and ECC		2,284.69
0000122976	01/09/2025	CMEA	HS chorus Eastern Honors Ensemble		700.00
0000122977	01/09/2025	COMCAST CABLE	additional outlets - HS		67.20
0000122978	01/09/2025	DECKER INC	LE custodial supplies		162.80
0000122979	01/09/2025	DONEGAL WRESTLING BOOSTER CLUB	jr high wrestling tournament		200.00
0000122980	01/09/2025	FULTON BANK	4000-31286 Chromebook lease - final		95.00
0000122981	01/09/2025	HAINES, MICHAEL	van lettering		250.00
0000122982	01/09/2025	HAND 2 MIND	new school supplies		14.99
0000122983	01/09/2025	JOHN KLINE SEPTIC SERVICES, LLC	plumbing work - MM		507.50
0000122984	01/09/2025	LIGHTHOUSE VOCATIONAL SERVICES INC.	work training		126.00
0000122985	01/09/2025	LINCOLN PAVEMENT SERVICES INC.	line painting - HS		1,000.00
0000122986	01/09/2025	MACMILLAN HOLDINGS LLC	HS ELA books		2,440.06
0000122987	01/09/2025	MERION PUMP & EQUIPMENT CO.	check valve diagnosis		742.50
0000122988	01/09/2025	OAK SHADE TREE SERVICE LLC	removal of 10 Bradford Pear trees	removal of 2 spruce trees	4,550.00
0000122989	01/09/2025	PRO-ED	rating scales		64.90
0000122990	01/09/2025	REALVNC	software		2,000.00
0000122991	01/09/2025	SOLANCO BASKETBALL BOOSTERS	girls basketball tournament		350.00
0000122992	01/09/2025	SUBURBAN LANC. SEWER AUTHORITY	sewer usage - campus	sewer usage - admin bldg	3,043.33
0000122993	01/09/2025	WEST LAMPETER TOWNSHIP	WLT annual storage tank rental		1,000.00
0000122994	01/10/2025	BYRNES CINDY L	dental reimb		313.10
0000122995	01/16/2025	ADVANCE AUTO PARTS	auto parts	credit - auto parts	66.32
0000122996	01/16/2025	AHOLD DELHAIZE USA	HS home ec groceries		136.07
0000122997	01/16/2025	BTI SCHOOL SERVICES LLC	classroom support		14,335.06
0000122998	01/16/2025	CAPP INC	reverse credit - HVAC part		20.63
0000122999	01/16/2025	CCIU	ESY		5,329.04
0000123000	01/16/2025	E.M. HERR FARM & HOME SUPPLY	maint supplies		15.55
0000123001	01/16/2025	EDWARDS BUSINESS SYSTEMS	HS copier fee	HH copier fee	3,116.91

FUND ACCOUNTING PAYMENT SUMMARY

Bank Account: GF - L-S GENERAL FUND **Payment Dates:** 01/08/2025 - 02/04/2025

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Sort: Payment Number

Payment #	Paymnt Dt	Vendor Name	Description Of Purchase	Description Of Purchase	Amount
0000123002	01/16/2025	ELCO GIRLS WRESTLING BOOSTER CLUB	girls wrestling tournament		300.00
0000123003	01/16/2025	GOVCONNECTION INC	translator service		2,498.00
0000123004	01/16/2025	H & F TIRE SERVICE	tires - Chevy van		588.08
0000123005	01/16/2025	KH ELECTRIC, LLC	electrical work		380.00
0000123006	01/16/2025	LANCASTER GENERAL MEDICAL GROUP	medical services - January		17,457.00
0000123007	01/16/2025	LHS WRESTLING	girls wrestling tournament		0.00
0000123008	01/16/2025	M J EARL	LE custodial supplies	ECC custodial supplies	1,127.00
0000123009	01/16/2025	NOLT'S AUTO PARTS INC	auto parts	return - auto parts	11.00
0000123010	01/16/2025	NRG BUSINESS MARKETING, LLC	HS water heater	MM water heater	9,748.14
0000123011	01/16/2025	ORTHOPEDIC ASSOCIATES OF LANCASTER, LTD.	athletic training services - Oct.	athletic training services - November	4,675.00
0000123012	01/16/2025	PENN WASTE INC	HS trash removal	LE trash removal	7,368.09
0000123013	01/16/2025	PENNSYLVANIA COUNSELING SV INC	student assistance program		4,079.00
0000123014	01/16/2025	PSBA INSURANCE	unemployment comp renewal		1,340.00
0000123015	01/16/2025	SHULTZ TRANSPORTATION COMPANY	HH 3rd graders to Harrisburg		1,513.90
0000123016	01/16/2025	STOCK AND LEADER, LLP	legal fees		296.00
0000123017	01/16/2025	TRIANGLE COMMUNICATIONS INC	radio work		481.50
0000123018	01/16/2025	UGI UTILITIES INC.	ntl gas transp - HS water heater	ntl gas transp - MM water heater	12,820.05
0000123019	01/16/2025	WILLIAM V. MACGILL & CO.	ECC nursing supplies		931.41
0000123020	01/23/2025	APPLE INC	to be reimb - Thespians	Apple - Mac Book Air - laptop	4,145.00
0000123021	01/23/2025	CM REGENT LLC	Life/LTD - January		2,749.41
0000123022	01/23/2025	DAVID H FRIEDRICH, JR.	census mailings 2025		4,990.00
0000123023	01/23/2025	ELIZABETHTOWN SPORTING GOODS	girls wrestling supplies		349.00
0000123024	01/23/2025	G.R. MITCHELL INC.	maint supplies		17.45
0000123025	01/23/2025	GOVCONNECTION INC	Rhombus camera mounts		2,133.18
0000123026	01/23/2025	H & F TIRE SERVICE	van 316 flat repair		33.02
0000123027	01/23/2025	JOHN E LANDIS INC	vo ag supplies		26.32
0000123028	01/23/2025	JP MCCASKEY FRIENDS OF MUSIC	County Band registration		736.00
0000123029	01/23/2025	JW PEPPER & SON INC.	HH vocal	HH vocal music supplies	636.49
0000123030	01/23/2025	KEENAN ASSOCIATES	express scripts - January		2,699.40
0000123031	01/23/2025	LANCASTER GENERAL HEALTH	drug screening- employees & random		447.50
0000123032	01/23/2025	LANCASTER-LEBANON INT. UNIT 13	spec ed contract	job training - December	359,206.58
0000123033	01/23/2025	LITERACY RESOURCES, LLC.	new school order		827.28
0000123034	01/23/2025	M STREET LLC	website work		500.00
0000123035	01/23/2025	MENCHEY MUSIC SERVICE INC.	elem band french horn	HS band supplies	2,090.03
0000123036	01/23/2025	NRG BUSINESS MARKETING, LLC	ntl gas - ECC		735.81

FUND ACCOUNTING PAYMENT SUMMARY

Bank Account: GF - L-S GENERAL FUND Payment Dates: 01/08/2025 - 02/04/2025

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Sort: Payment Number

Payment #	Paymnt Dt	Vendor Name	Description Of Purchase	Description Of Purchase	Amount
0000123037	01/23/2025	ORTHOPEDIC ASSOCIATES OF LANCASTER, LTD.	athletic training services - December		2,113.85
0000123038	01/23/2025	PETTY CASH	District Band change drawer		500.00
0000123039	01/23/2025	PLETCHER JOHN	suppression inspections		1,520.00
0000123040	01/23/2025	PMEA DISTRICT 7	District Band registration		990.00
0000123041	01/23/2025	PPL ELECTRIC UTILITIES	electric transp - campus	electric transp - ECC	4,912.64
0000123042	01/23/2025	RICH INC.	HS art supplies - clay		1,388.75
0000123043	01/23/2025	RISK PROGRAM ADMINISTRATORS	insurance - international liability		2,749.00
0000123044	01/23/2025	SCHOLASTIC INC.	new school order		209.72
0000123045	01/23/2025	STEVE WEISS MUSIC	HS band drum supplies		214.80
0000123046	01/23/2025	TELE-PEST INC.	LE pest control		52.00
0000123047	01/23/2025	TRANSPERFECT REMOTE INTERPRETING, INC.	ESL - translations		66.60
0000123048	01/23/2025	VENTRIS LEARNING	Title I supplies		827.75
0000123049	01/23/2025	WAKEFIELD AMBULANCE ASSOCIATION	ambulance service		2,880.00
0000123050	01/23/2025	WINNER'S CIRCLE CENTER, INC.	alt ed		15,616.00
0000123051	01/27/2025	ACCELERATE EDUCATION	workbooks - elem - LLVS		152.00
0000123052	01/27/2025	ADVANCE AUTO PARTS	auto parts		283.94
0000123053	01/27/2025	B&B INTEGRATIONS	ECC audio work		378.39
0000123054	01/27/2025	BLACK & DECKER U.S. INC.	router lock bolt - wood tech		14.99
0000123055	01/27/2025	CAPITAL ELECTRIC	HVAC parts for LE		253.55
0000123056	01/27/2025	CAROLINA BIOLOGICAL SUPPLY CO.	sheep brains		186.14
0000123057	01/27/2025	CEDAR CREST WRESTLING PARENTS ASSOCIATION	wrestling tournament		450.00
0000123058	01/27/2025	CLIFF, AUSTIN	parking tag refund		10.00
0000123059	01/27/2025	CONTINENTAL PRESS INC.	ESL supplies		1,410.60
0000123060	01/27/2025	DIRECT ENERGY BUSINESS	electric - campus	electric - stadium sign	31,719.67
0000123061	01/27/2025	DIXIE LAND ENERGY	gas at WLT for vans		1,337.64
0000123062	01/27/2025	E.M. HERR FARM & HOME SUPPLY	ECC custodial supplies	HH custodial supplies	108.81
0000123063	01/27/2025	EBERSOLE'S VACUUM CLEANER	vac part		8.06
0000123064	01/27/2025	EDWARDS BUSINESS SYSTEMS	print management services		136.45
0000123065	01/27/2025	FRY, KELLI	student transportation		299.26
0000123066	01/27/2025	G.R. MITCHELL INC.	HS wood tech supplies	maint supplies	155.86
0000123067	01/27/2025	JACKSON, JEFFREY L.	constable - 1/8 & 1/10 boys basketball	constable - 12/18 girls basketball	420.00
0000123068	01/27/2025	JOHN E LANDIS INC	vo ag supplies		9.34
0000123069	01/27/2025	JW PEPPER & SON INC.	HS vocal music supplies	HS orchestra music	1,002.85

FUND ACCOUNTING PAYMENT SUMMARY

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Sort: Payment Number

Payment #	Paymnt Dt	Vendor Name	Description Of Purchase	Description Of Purchase	Amount
0000123070	01/27/2025	KILLIAN, HANNAH	parking tag refund		10.00
0000123071	01/27/2025	LI, BRIAN	parking tag refund		10.00
0000123072	01/27/2025	LI, VIVIAN	parking tag refund		10.00
0000123073	01/27/2025	LOWE'S COMPANIES INC	washer	vo ag supplies	669.43
0000123074	01/27/2025	M J EARL	HH custodial supplies		423.90
0000123075	01/27/2025	MENCHEY MUSIC SERVICE INC.	HS band music		136.00
0000123076	01/27/2025	MSTS RECEIVABLES LLC	maint supplies		64.99
0000123077	01/27/2025	NOLT'S AUTO PARTS INC	auto parts		104.88
0000123078	01/27/2025	NUTRIEN AG SOLUTIONS	lawn treatment supplies		1,945.00
0000123079	01/27/2025	OFFICE BASICS INC.	LE teaching supplies		10,747.55
0000123080	01/27/2025	PEPE, DOMINIC	parking tag refund		10.00
0000123081	01/27/2025	PHILHAVEN	education therapy		315.92
0000123082	01/27/2025	PHILHAVEN	education therapy		301.56
0000123083	01/27/2025	PRECISION SERVICES INC.	door work		1,044.56
0000123084	01/27/2025	RHOADS ENERGY CORP	diesel fuel - transportation	unleaded gas - transportation	14,784.00
0000123085	01/27/2025	SCHOOLPRIDE	football banner		290.00
0000123086	01/27/2025	SHULTZ TRANSPORTATION COMPANY	transportation - December	LE students to the Fulton Theatre	84,152.38
0000123087	01/27/2025	SID HARVEY INDUSTRIES INC.	HVAC parts	blower motor	914.95
0000123088	01/27/2025	SWARR, SHAWN MICHAEL	constable - 1/7-9 wrest & 1/10 boys BB	constable - 12/16 boys BB, 12/17 wrestling	525.00
0000123089	01/27/2025	TRIANGLE COMMUNICATIONS INC	maint radios	HH radio	1,275.10
0000123090	01/27/2025	VERDAK, BIBI SEIDE	ESL - translations		75.00
0000123091	01/27/2025	WEINSTEIN SUPPLY CORPORATION	plumbing parts	maint supplies	203.77
0000123092	01/27/2025	WILLIAMS, OWEN	parking tag refund		10.00
0000123093	01/27/2025	ZIMMERMAN'S HARDWARE	snow shovels - maint		123.98
0000123094	02/04/2025	BAILEY, LILY	parking tag refund		10.00
0000123095	02/04/2025	DIXIE LAND ENERGY	gas at WLT for vans		1,858.01
0000123096	02/04/2025	HERR, MIGUEL	parking tag refund		10.00
0000123097	02/04/2025	KULP, HANNAH	PHEAA student teacher stipend		10,000.00
0000123098	02/04/2025	LANCASTER-LEBANON INT. UNIT 13	speech, occup & physical therapy - Nov	supplemental spec ed contract	52,362.57
0000123099	02/04/2025	LIGHTHOUSE VOCATIONAL SERVICES INC.	work training		168.00
0000123100	02/04/2025	L-S EDUCATIONAL FOUNDATION	DED: LSEF - Pay Date: 1/3/2025	DED: LSEF - Pay Date: 1/17/2025	273.00
0000123101	02/04/2025	LSEA	DED: Union Dues - Pay Date: 1/3/2025	DED: Union Dues - Pay Date: 1/17/2025	45,145.62
0000123102	02/04/2025	LSEA DONATION	DED: LSEA - Pay Date: 1/3/2025	DED: LSEA - Pay Date: 1/17/2025	156.00
0000123103	02/04/2025	LSSD - CAFETERIA ACCOUNT	ministerium breakfast	substitute teacher lunches	754.75
0000123104	02/04/2025	M J EARL	HH custodial supplies		2,486.30

FUND ACCOUNTING PAYMENT SUMMARY

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Payment #	Paymnt Dt	Vendor Name	Description Of Purchase	Description Of Purchase	Amount
0000123105	02/04/2025	NEFF, JACK	parking tag refund		10.00
0000123106	02/04/2025	OFFICE BASICS INC.	LE teaching supplies		60.50
0000123107	02/04/2025	PETTY CASH	MM teaching supplies	6th grade teaching supplies	38.64
0000123108	02/04/2025	POPSON, MARLENA FRANCES	PHEAA student teacher stipend		10,000.00
0000123109	02/04/2025	RENNINGER, CROSBY	PHEAA student teacher stipend		10,000.00
0000123110	02/04/2025	RODRIGUEZ, THANNIA E.	ESL - translations		227.86
0000123111	02/04/2025	RODRIGUEZ-TANON, VICKY	FBI volunteer reimbursement		26.20
0000123112	02/04/2025	SHULTZ TRANSPORTATION COMPANY	Ski Club to Seven Springs Mtn Resort	LE 2nd grade swimmers to YMCA	2,448.72
0000123113	02/04/2025	SMECKER JEFFREY	dental reimb	vision reimb	778.44
0000123114	02/04/2025	U.S. POSTMASTER	stamps - HS	stamps - MM	584.00
0000123115	02/04/2025	UNITED WAY OF LANCASTER COUNTY	DED: United Way - Pay Date: 1/3/2025	DED: United Way - Pay Date: 1/17/2025	150.00
0000123116	02/04/2025	VALLEY FORGE EDUCATIONAL SERVICES	tuition		42,500.00
0000123117	02/04/2025	ZIMMERMAN, PAUL	parking tag refund		10.00
D000328537	02/04/2025	ALLEN-GORDON CAROL	dental reimb		173.00 D
D000328538	02/04/2025	ALLISON, AMANDA	dental reimb		205.75 D
D000328539	02/04/2025	BAKER ADRIAN	dental reimb		265.50 D
D000328540	02/04/2025	BEERS JENNIFER D	dental reimb		988.94 D
D000328541	02/04/2025	BITLER DONNA	tuition reimb	dental reimb	2,400.25 D
D000328542	02/04/2025	BLAIR, EMILIE J	dental reimb		162.50 D
D000328543	02/04/2025	BLOSE MATTHEW A	dental reimb		119.50 D
D000328544	02/04/2025	BONGIOVANNI, LYNN E	tuition reimb		1,620.00 D
D000328545	02/04/2025	BREITKREUTZ ALEXANDER	dental reimb		174.00 D
D000328546	02/04/2025	BRENEMAN KERRY M	vision reimb		100.00 D
D000328547	02/04/2025	CANTY MICHAEL J.	dental reimb		441.00 D
D000328548	02/04/2025	CERESINI HEATHER A	dental reimb		210.50 D
D000328549	02/04/2025	COLVIN DANIEL G	tuition reimb		1,650.00 D
D000328550	02/04/2025	CRAWFORD AUDRA	tuition reimb		1,620.00 D
D000328551	02/04/2025	CURRY, KRISTI L	vision reimb		175.00 D
D000328552	02/04/2025	DAVIS JR. GLENN R.	dental reimb		162.50 D
D000328553	02/04/2025	DEPEW ANGELA	dental reimb		455.50 D
D000328554	02/04/2025	DESHONG HEATHER N	vision reimb		250.00 D
D000328555	02/04/2025	DESILETS, CHRISTOPHER	travel mileage		70.35 D
D000328556	02/04/2025	DIFFENDARFER, MICHELLE	tuition reimb		4,493.79 D
D000328557	02/04/2025	DITZLER CARA	dental reimb		577.00 D
D000328558	02/04/2025	EBERSOL ANDREA B	dental reimb		314.50 D

FUND ACCOUNTING PAYMENT SUMMARY

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Payment #	Paymnt Dt	Vendor Name	Description Of Purchase	Description Of Purchase	Amount
D000328559	02/04/2025	FAKOLT DAVID	dental reimb		807.50 <i>D</i>
D000328560	02/04/2025	FARGO, JENNA M	tuition reimb		1,548.00 <i>D</i>
D000328561	02/04/2025	FEENEY BENJAMIN	vision reimb		460.95 <i>D</i>
D000328562	02/04/2025	FEHRENBACHER LAURA	6th grade science supplies		59.26 <i>D</i>
D000328563	02/04/2025	FELIX, JENNIFER	tuition reimb		1,548.00 <i>D</i>
D000328564	02/04/2025	FISHER BRIAN	dental reimb	vision reimb	453.89 <i>D</i>
D000328565	02/04/2025	FRICK NORA B	1/2 FBI clearance reimb		13.10 <i>D</i>
D000328566	02/04/2025	FRY JODI A	vision reimb	1/2 FBI clearance reimb	263.10 <i>D</i>
D000328567	02/04/2025	GARBER TODD L.	dental reimb		809.50 <i>D</i>
D000328568	02/04/2025	GARCIA, ALICIA M	dental reimb		131.50 <i>D</i>
D000328569	02/04/2025	GARRETT BOBBI	dental reimb		144.00 <i>D</i>
D000328570	02/04/2025	GARRETT, LINDSAY E	tuition reimb		1,965.00 <i>D</i>
D000328571	02/04/2025	GLASS KRISTIN	conference - Glass	snacks for Teen Hope	143.52 <i>D</i>
D000328572	02/04/2025	GLEIBERMAN ALYSON	dental reimb		200.00 <i>D</i>
D000328573	02/04/2025	GODFREY ANDREW	dental reimb		101.90 <i>D</i>
D000328574	02/04/2025	GRAMLEY, MELISSA	PDE Conference - Gramley	PDE Conference - Crawford	650.00 <i>D</i>
D000328575	02/04/2025	GRAYBILL TAMMY	vision reimb		250.00 <i>D</i>
D000328576	02/04/2025	GREENWOOD KRISTEN	vision reimb		45.00 <i>D</i>
D000328577	02/04/2025	GREENWOOD MATTHEW	vision reimb		250.00 <i>D</i>
D000328578	02/04/2025	GRISCOM JR WILLIAM E.	dental reimb		386.98 <i>D</i>
D000328579	02/04/2025	GROFF, TANYA L	dental reimb		118.00 <i>D</i>
D000328580	02/04/2025	GROVE KARA	dental reimb		189.00 <i>D</i>
D000328581	02/04/2025	GUSTAFSON, AMANDA R	tuition reimb		2,865.00 <i>D</i>
D000328582	02/04/2025	HARNISH KATRINA	dental reimb		360.50 <i>D</i>
D000328583	02/04/2025	HEARN, KYLIE J	vision reimb		72.07 <i>D</i>
D000328584	02/04/2025	HESS ANDREW P	1/2 FBI clearance reimb		13.10 <i>D</i>
D000328585	02/04/2025	HESS ROSEMARY	1/2 FBI clearance reimb		13.10 <i>D</i>
D000328586	02/04/2025	HIGGINS MICHELE	1/2 FBI clearance reimb		13.10 <i>D</i>
D000328587	02/04/2025	HOLLIDAY JUNE	dental reimb	vision reimb	560.50 <i>D</i>
D000328588	02/04/2025	HOUCK JEFFREY S	tuition reimb		1,620.00 <i>D</i>
D000328589	02/04/2025	HUYNG, ESTHER H	tuition reimb		2,340.00 <i>D</i>
D000328590	02/04/2025	JOHNSON JOAN	dental reimb		232.50 <i>D</i>
D000328591	02/04/2025	KIRKWOOD, SAMANTHA	vision reimb		250.00 <i>D</i>
D000328592	02/04/2025	KONKLE, JANELLE	tuition reimb		1,650.00 <i>D</i>
D000328593	02/04/2025	KORTRIGHT, BRITTANY L	dental reimb		194.50 <i>D</i>

FUND ACCOUNTING PAYMENT SUMMARY

Bank Account: GF - L-S GENERAL FUND Payment Dates: 01/08/2025 - 02/04/2025

Payment Categories: Regular Checks, Non-negotiable Disbursements, Direct Deposits, Manual Checks, Procurement Cards, Credit Cards

Sort: Payment Number

Payment #	Paymnt Dt	Vendor Name	Description Of Purchase	Description Of Purchase	Amount
D000328594	02/04/2025	KUCHINSKI CLARISSA M	vision reimb		250.00 <i>D</i>
D000328595	02/04/2025	LANDIS, ALISA A	tuition reimb		1,548.00 <i>D</i>
D000328596	02/04/2025	LAPP ROSA S.	vision reimb		250.00 <i>D</i>
D000328597	02/04/2025	LONG PAULA	dental reimb		147.50 <i>D</i>
D000328598	02/04/2025	LUCARINO MARY L	dental reimb		417.00 <i>D</i>
D000328599	02/04/2025	MARCROFT, CHERYL L	dental reimb	vision reimb	332.50 <i>D</i>
D000328600	02/04/2025	MARSH JEFFREY B	vision reimb		250.00 <i>D</i>
D000328601	02/04/2025	MATTERN BRIAN	vision reimb		250.00 <i>D</i>
D000328602	02/04/2025	MCCARDELL, ANDREA L	dental reimb	vision reimb	463.99 <i>D</i>
D000328603	02/04/2025	MCCRABB JENNIFER LYNN	travel expenses		1,050.45 <i>D</i>
D000328604	02/04/2025	MENCARINI JOSEPH M	tuition reimb	dental reimb	2,531.50 <i>D</i>
D000328605	02/04/2025	MESSINGER JEREMY	vision reimb		174.96 <i>D</i>
D000328606	02/04/2025	MILLER ANN S.	dental reimb		194.50 <i>D</i>
D000328607	02/04/2025	MILLER MELISSA	dental reimb		658.00 <i>D</i>
D000328608	02/04/2025	MONTANTI, ELIZABETH A	dental reimb		165.00 <i>D</i>
D000328609	02/04/2025	MORGAN DERRICK	vision reimb		250.00 <i>D</i>
D000328610	02/04/2025	NEW STORY LLC	tuition		42,260.00 <i>D</i>
D000328611	02/04/2025	NOLT JEFFREY	dental reimb		133.00 <i>D</i>
D000328612	02/04/2025	NOVAK, RYAN M	tuition reimb		1,620.00 <i>D</i>
D000328613	02/04/2025	ORNDORFF JOHNNA R	dental reimb		434.56 <i>D</i>
D000328614	02/04/2025	PARKER, ALANNA Z	dental reimb		802.50 <i>D</i>
D000328615	02/04/2025	PEART KEVIN S.	dental reimb		404.50 <i>D</i>
D000328616	02/04/2025	PEREZ, ALEX P	tuition reimb		1,650.00 <i>D</i>
D000328617	02/04/2025	POTTER JACLYN	tuition reimb	dental reimb	3,533.50 <i>D</i>
D000328618	02/04/2025	RAYMOND SHEILA M.	vision reimb		173.88 <i>D</i>
D000328619	02/04/2025	RICE, AMY A	dental reimb	vision reimb	653.00 <i>D</i>
D000328620	02/04/2025	RIDENOUR VICTOR J	tuition reimb		1,620.00 <i>D</i>
D000328621	02/04/2025	RIVER ROCK ACADEMY, LLC	2 slots at River Rock		6,623.00 <i>D</i>
D000328622	02/04/2025	SAVOCA DEBRA A.	dental reimb		308.00 <i>D</i>
D000328623	02/04/2025	SCHATZMANN MICHELLE L	tuition reimb		1,650.00 <i>D</i>
D000328624	02/04/2025	SCHAUB, MARY K	tuition reimb	dental reimb	1,708.00 <i>D</i>
D000328625	02/04/2025	SHAIKA STEPHEN	dental reimb		987.50 <i>D</i>
D000328626	02/04/2025	SHOCKEY MATTHEW	dental reimb		334.50 <i>D</i>
D000328627	02/04/2025	SHOCKEY TINA	vision reimb		84.72 <i>D</i>
D000328628	02/04/2025	SPROUT, REBECCA K	dental reimb		190.00 <i>D</i>

FUND ACCOUNTING PAYMENT SUMMARY

Bank Account: GF - L-S GENERAL FUND Payment Dates: 01/08/2025 - 02/04/2025

Payment Categories: Regular Checks, Non-negotiable Disbursements, Direct Deposits, Manual Checks, Procurement Cards, Credit Cards

Sort: Payment Number

Payment #	Paymnt Dt	Vendor Name	Description Of Purchase	Description Of Purchase	Amount
D000328629	02/04/2025	STAUB KAREN	vision reimb		335.00 <i>D</i>
D000328630	02/04/2025	STAUFFER LAURI LOAR	vision reimb		250.00 <i>D</i>
D000328631	02/04/2025	STERNER BRONSTON L.	vision reimb		250.00 <i>D</i>
D000328632	02/04/2025	STOLTZFUS KEITH A	dental reimb		165.58 <i>D</i>
D000328633	02/04/2025	SWARR JEFFREY	dental reimb		832.50 <i>D</i>
D000328634	02/04/2025	SWARR KATRINA K	vision reimb		201.96 <i>D</i>
D000328635	02/04/2025	THE VISTA SCHOOL	tuition	services	28,600.58 <i>D</i>
D000328636	02/04/2025	TRACY PENNY	dental reimb		961.50 <i>D</i>
D000328637	02/04/2025	TUTEN, BENJAMIN T	dental reimb		791.00 <i>D</i>
D000328638	02/04/2025	US-RX CARE	pharmacy - mgmt program - January		2,658.50 <i>D</i>
D000328639	02/04/2025	VESTERMARK MARY	dental reimb		308.50 <i>D</i>
D000328640	02/04/2025	VITAL, DEBRA B	dental reimb		211.50 <i>D</i>
D000328641	02/04/2025	WADE JENNIFER G	dental reimb		227.00 <i>D</i>
D000328642	02/04/2025	WELSH, RACHEL M	tuition reimb	dental reimb	1,867.50 <i>D</i>
D000328643	02/04/2025	WHITE ERICA L	dental reimb		145.50 <i>D</i>
D000328644	02/04/2025	WILHELM JUDITH A	dental reimb		289.50 <i>D</i>
D000328645	02/04/2025	WITMER, OLIVIA M	vision reimb		218.29 <i>D</i>
D000328646	02/04/2025	ZANDER, ASHLEY K	dental reimb		146.50 <i>D</i>
D000328647	02/04/2025	ZIMMERMAN, HOPE L	tuition reimb	HS home ec groceries	1,900.05 <i>D</i>
D000328648	02/04/2025	ZURN ADAM	dental reimb		196.00 <i>D</i>
* BANK122024	12/31/2024	TRUIST BANK	Bank Fees - Truist		710.53
* DELAGE0106	01/06/2025	DE LAGE LANDEN PUBLIC FINANCE LLC	Copier Lease		3,222.12
* EHCC012725	01/27/2025	EHCC	EHCC - Stop Loss Premium	EHCC - Reinsurance	29,199.23
* ERHSA02025	01/03/2025	HEALTH EQUITY	ER HSA Contributions - 2025		384,833.33
* EXPSCR1231	12/31/2024	EXPRESS SCRIPTS	Express Scripts - Claims 12/21-12/31		74,600.60
* EXPSCR0127	01/27/2025	EXPRESS SCRIPTS	Express Scripts - Claims 1/1-1/27		172,794.09
* FED0000103	01/03/2025	FEDERAL TAX PAYMENT SYSTEM	Purpose: EE FED Pay Date: 1/3/2025	Purpose: ER FICA Pay Date: 1/3/2025	283,291.76
* FED0000117	01/17/2025	FEDERAL TAX PAYMENT SYSTEM	Purpose: EE FED Pay Date: 1/17/2025	Purpose: ER FICA Pay Date: 1/17/2025	214,317.82
* HSA0000103	01/03/2025	HEALTH EQUITY	DED: HSA Contr - Pay Date: 1/3/2025	ER HSA Contribution - Slade	17,222.54
* HSA0000117	01/17/2025	HEALTH EQUITY	DED: HSA Contr - Pay Date: 1/17/2025	ER HSA Contribution - S Whitton	19,634.45
* LOC0001231	01/24/2025	LANC CO TAX COLLECTION BUREAU	EE EIT Q4 2024		65,327.08
* LUMNRE1231	12/31/2024	LUMINARE HEALTH BENEFITS INC.	Luminare - Claims 12/21-12/31	Luminare - Flex Claims 12/21-12/31	147,339.71
* LUMNRE0127	01/27/2025	LUMINARE HEALTH BENEFITS INC.	Luminare - Claims 1/1-1/27	Luminare - Flex Claims 1/1-1/27	484,261.29
* OPT0001231	01/24/2025	LANC CO TAX COLLECTION BUREAU	EE LST Q4 2024		6,010.00
* PAT0000103	01/03/2025	PA DEPARTMENT OF REVENUE	Purpose: EE STPA Pay Date: 1/3/2025		36,146.76

FUND ACCOUNTING PAYMENT SUMMARY

Bank Account: GF - L-S GENERAL FUND Payment Dates: 01/08/2025 - 02/04/2025

Payment Categories: Regular Checks, Non-negotiable Disbursements, Direct Deposits, Manual Checks, Procurement Cards, Credit Cards

Sort: Payment Number

Payment #	Paymnt Dt	Vendor Name	Description Of Purchase	Description Of Purchase	Amount
* PAT0000117	01/17/2025	PA DEPARTMENT OF REVENUE	Purpose: EE STPA Pay Date: 1/17/2025	Purpose: EE STPA Pay Date: 1/3/2025	27,595.57
* PENS000103	01/03/2025	PENSERV PLAN SERVICES INC.	DED: 403B Sec Life - Pay Date: 1/3/2025	DED: ROTH AXA - Pay Date: 1/3/2025	18,436.88
* PENS000117	01/17/2025	PENSERV PLAN SERVICES INC.	DED: 403B Sec Life - Pay Date: 1/17/2025	DED: ROTH AXA - Pay Date: 1/17/2025	17,808.09
* PENS000131	01/31/2025	PENSERV PLAN SERVICES INC.	DED: 403B Sec Life - Pay Date: 1/31/2025	DED: ROTH AXA - Pay Date: 1/31/2025	18,485.45
* PNC0010225	01/02/2025	PNC BANK N.A.	Procurement Card Purchases		28,213.26
* PSER001231	12/31/2024	PUB SCH EMPLOYES RETIREMENT	Purpose: EE RETP Pay Date: 12/6/2024	Purpose: EE RETP Pay Date: 12/20/2024	154,012.56
* SCD0000103	01/03/2025	PA SCDU	DED: Child Support - Pay Date: 1/3/2025		637.75
* SCD0000117	01/17/2025	PA SCDU	DED: Child Support - Pay Date: 1/17/2025		637.75
* TCF0011025	01/13/2025	TCF Capital Solutions	Lease - 2020 Ford Transit Van		571.91
* UIC0001231	01/06/2025	PENNSYLVANIA UC FUND	EE UNEM Q4 2024		4,530.83
* VOYA000103	01/03/2025	VOYA - PSERS	EE PSERS DC Contributions	ER PSERS DC Contributions	7,251.07
* VOYA000117	01/17/2025	VOYA - PSERS	EE PSERS DC Contributions	ER PSERS DC Contributions	4,582.10
10 - General Fund					3,286,492.70
Grand Total All Funds					3,286,492.70
Grand Total Credit Cards					0.00
Grand Total Direct Deposits					152,013.17
Grand Total Manual Checks					0.00
Grand Total Other Disbursement Non-negotiables					2,221,674.53
Grand Total Procurement Card Other Disbursement Non-negotiables					0.00
Grand Total Regular Checks					912,805.00
Grand Total Virtual Payments					0.00
Grand Total All Payments					3,286,492.70

FUND ACCOUNTING PAYMENT SUMMARY

Bank Account: CF - CAFETERIA ACCOUNT **Payment Dates:** 01/08/2025 - 02/04/2025

Payment Categories: Regular Checks, Non-negotiable Disbursements, Direct Deposits, Manual Checks, Procurement Cards, Credit Cards

Sort: Payment Number

Payment #	Paymnt Dt	Vendor Name	Description Of Purchase	Description Of Purchase	Amount
000008243	01/07/2025	DOMINOS PIZZA	HH food - pizza	MM food - pizza	2,046.00
000008244	01/07/2025	DRISCOLL FOODS	MM food - 9/19, 9/26	HH food	7,548.41
000008245	01/07/2025	ECOLAB INC.	chemicals		60.66
000008246	01/07/2025	EDWARDS BUSINESS SYSTEMS	copier fees		5.34
000008247	01/07/2025	FEESERS INC.	HS food - 12/12, 12/19	MM food - 12/12, 12/19	18,007.85
000008248	01/07/2025	GILBERT CONSULTING LLC	consulting work		2,520.00
000008249	01/07/2025	GOLD STAR FOODS	HS food - 12/10, 12/17	MM food - 12/10, 12/17	17,812.11
000008250	01/07/2025	HERSHEY CREAMERY CO.	HH food - IC 12/13, 12/20		539.76
000008251	01/07/2025	K & D FACTORY SERVICE INC.	HH freezer work	HS freezer work	988.01
000008252	01/07/2025	MORIBITO BAKING CO INC	HS food - bread 12/9 - 12/16	MM food - bread 12/9, 12/16	808.00
000008253	01/07/2025	NARDONE BROS BAKING CO INC	MM food - pizza	HH food - pizza	1,157.20
000008254	01/07/2025	PETTY CASH	HS food	MM hand mixer	221.14
000008255	01/07/2025	SCHEID PRODUCE INC.	HH food - produce	HS food - produce	1,320.50
000008256	01/07/2025	SERENA A. KIRCHNER INC	HS food - drinks		223.55
000008257	01/07/2025	SINGER EQUIPMENT COMPANY	paper	chemicals	1,661.06
000008258	01/07/2025	SWISS DAIRY	LE food - milk 12/3 - 12/9	HS food - milk 12/10 - 12/19	4,854.96
000008259	01/07/2025	TELE-PEST INC.	HS pest control	ECC pest control	261.00
000008260	01/23/2025	FEESERS INC.	HS food - 1/9, 1/16	HH food - 1/9, 1/16	17,503.78
000008261	01/23/2025	GOLD STAR FOODS	HS food - 1/7, 1/14	HH food - 1/7 - 1/14	17,690.50
000008262	01/23/2025	HERSHEY CREAMERY CO.	MM food - IC 1/3	HS food - IC 1/13	1,019.64
000008263	01/23/2025	K & D FACTORY SERVICE INC.	LE repairs - booster heater	HS repairs - steamer	4,330.38
000008264	01/23/2025	MORIBITO BAKING CO INC	HS food - bread 1/2, 1/13	HH food - bread 1/6, 1/13	921.45
000008265	01/23/2025	SCHEID PRODUCE INC.	LE food - produce	HS food - produce	1,444.05

* - Non-Negotiable Disbursement + - Procurement Card Non-Negotiable # - Payable within Payment P - Prenote D - Direct Deposit C - Credit Card ^ - Virtual Payment

FUND ACCOUNTING PAYMENT SUMMARY

Bank Account: CF - CAFETERIA ACCOUNT **Payment Dates:** 01/08/2025 - 02/04/2025

Payment Categories: Regular Checks, Non-negotiable Disbursements, Direct Deposits, Manual Checks, Procurement Cards, Credit Cards
Sort: Payment Number

Payment #	Paymnt Dt	Vendor Name	Description Of Purchase	Description Of Purchase	Amount
0000008266	01/23/2025	SERENA A. KIRCHNER INC	HS food - drinks		736.20
0000008267	01/23/2025	SINGER EQUIPMENT COMPANY	paper		3,086.12
0000008268	01/23/2025	SWISS DAIRY	HS food - milk 1/2 - 1/16	HH food - milk 1/2 - 1/16	2,910.07
0000008269	01/23/2025	THE AMERICAN BOTTLING COMPANY	HS food - drinks		707.35
51 - FOOD SERVICE/CAFETERIA					110,385.09
Grand Total All Funds					110,385.09
Grand Total Credit Cards					0.00
Grand Total Direct Deposits					0.00
Grand Total Manual Checks					0.00
Grand Total Other Disbursement Non-negotiables					0.00
Grand Total Procurement Card Other Disbursement Non-negotiables					0.00
Grand Total Regular Checks					110,385.09
Grand Total Virtual Payments					0.00
Grand Total All Payments					110,385.09

* - Non-Negotiable Disbursement + - Procurement Card Non-Negotiable # - Payable within Payment P - Prenote D - Direct Deposit C - Credit Card ^ - Virtual Payment

FUND ACCOUNTING PAYMENT SUMMARY

Bank Account: CR - CAPITAL RESERVE ACCT **Payment Dates:** 01/08/2025 - 02/04/2025

Payment Categories: Regular Checks, Non-negotiable Disbursements, Direct Deposits, Manual Checks, Procurement Cards, Credit Cards

Sort: Payment Number

Payment #	Paymnt Dt	Vendor Name	Description Of Purchase	Description Of Purchase	Amount
0000004616	01/16/2025	FREY LUTZ	HVAC work - early childhhod		60,828.72
0000004617	01/16/2025	HOWELLS GLASS CO. INC.	window le		33,000.00
32 - Capital Reserve					93,828.72
Grand Total All Funds					93,828.72
Grand Total Credit Cards					0.00
Grand Total Direct Deposits					0.00
Grand Total Manual Checks					0.00
Grand Total Other Disbursement Non-negotiables					0.00
Grand Total Procurement Card Other Disbursement Non-negotiables					0.00
Grand Total Regular Checks					93,828.72
Grand Total Virtual Payments					0.00
Grand Total All Payments					93,828.72

* - Non-Negotiable Disbursement + - Procurement Card Non-Negotiable # - Payable within Payment P - Prenote D - Direct Deposit C - Credit Card ^ - Virtual Payment

FUND ACCOUNTING PAYMENT SUMMARY

Bank Account: CP - CAPITAL PROJECTS FUND **Payment Dates:** 01/08/2025 - 02/04/2025

Payment Categories: Regular Checks, Non-negotiable Disbursements, Direct Deposits, Manual Checks, Procurement Cards, Credit Cards

Sort: Payment Number

Payment #	Paymnt Dt	Vendor Name	Description Of Purchase	Description Of Purchase	Amount
0000001195	01/15/2025	16-6 CONSULTING, LLC.	managing site work - MM - capital projects		2,400.00
0000001196	01/15/2025	BARRY ISETT & ASSOCIATES INC	MM renovation work		4,287.58
0000001197	01/15/2025	CODE ADMINISTRATORS INC	MM plan work - cap projects		1,125.00
0000001198	01/15/2025	CRABTREE ROHRBAUGH & ASSOCIATES INC.	professional services - MM - cap projects		6,295.15
0000001199	01/15/2025	NORTH BAY MECHANICAL	HVAC work - MM - cap projects		451,191.60
0000001200	01/21/2025	PPL ELECTRIC UTILITIES	electric power work - MM renovations		1,705.00
0000001201	01/28/2025	CAULER CONTAINERS, INC.	trash removal - MM project		322.60
0000001202	01/28/2025	NORTH BAY MECHANICAL	HVAC work - MM - cap projects		45,831.20
39 - Capital Projects					513,158.13
Grand Total All Funds					513,158.13
Grand Total Credit Cards					0.00
Grand Total Direct Deposits					0.00
Grand Total Manual Checks					0.00
Grand Total Other Disbursement Non-negotiables					0.00
Grand Total Procurement Card Other Disbursement Non-negotiables					0.00
Grand Total Regular Checks					513,158.13
Grand Total Virtual Payments					0.00
Grand Total All Payments					513,158.13

* - Non-Negotiable Disbursement + - Procurement Card Non-Negotiable # - Payable within Payment P - Prenote D - Direct Deposit C - Credit Card ^ - Virtual Payment



Date	Transaction Description	Debit	Credit	Balance
12/20/2024	Beginning Balance in ArbiterPay Account			14,051.05
n/a	Upload Funds into ArbiterPay (EFT)			-
12/20/2024	Lampeter-Strasburg High School, 11/25/2024, Group 102368, Game 1235061761, 5:30 PM, Game Fee \$74.00, Chad Moline	74.00		
12/20/2024	Lampeter-Strasburg High School, 11/25/2024, Group 102368, Game 1235061761, 5:30 PM, Game Fee \$74.00, Miguel E. Tirado	74.00		
12/20/2024	Lampeter-Strasburg High School, 11/25/2024, Group 102368, Game 1235061760, 5:30 PM, Game Fee \$100.00, Brian London	100.00		
12/20/2024	Lampeter-Strasburg High School, 11/25/2024, Group 102368, Game 1235061760, 5:30 PM, Game Fee \$100.00, Bill Riiff	100.00		
1/2/2025	Lampeter-Strasburg High School, 12/27/2024, Group 102368, Game 1235062112, 4:00 PM, Game Fee \$74.00, Luke Mateyak	74.00		
1/2/2025	Lampeter-Strasburg High School, 12/27/2024, Group 102368, Game 1235062112, 4:00 PM, Game Fee \$74.00, Scott Eckenrod	74.00		
1/2/2025	Lampeter-Strasburg High School, 12/27/2024, Group 102368, Game 1235062116, 5:30 PM, Game Fee \$100.00, Nathan Rittenhouse	100.00		
1/2/2025	Lampeter-Strasburg High School, 12/27/2024, Group 102368, Game 1235062116, 5:30 PM, Game Fee \$100.00, Jeffrey Hostetter	100.00		
1/2/2025	Lampeter-Strasburg High School, 12/27/2024, Group 102368, Game 1235062116, 5:30 PM, Game Fee \$100.00, Eric Spence	100.00		
1/6/2025	Lampeter-Strasburg High School, 1/3/2025, Group 102368, Game 1235058488, 4:00 PM, Game Fee \$66.00, Paula Katchmer	66.00		
1/6/2025	Lampeter-Strasburg High School, 1/3/2025, Group 102368, Game 1235058444, 7:00 PM, Game Fee \$100.00, Mike Brauner	100.00		
1/6/2025	Lampeter-Strasburg High School, 1/3/2025, Group 102368, Game 1235058489, 5:00 PM, Game Fee \$57.00, Mike Brauner	57.00		
1/6/2025	Lampeter-Strasburg High School, 1/3/2025, Group 102368, Game 1235058489, 5:00 PM, Game Fee \$57.00, Tom Hillen	57.00		
1/6/2025	Lampeter-Strasburg High School, 1/3/2025, Group 102368, Game 1235058488, 4:00 PM, Game Fee \$66.00, Autumn Cook	66.00		
1/6/2025	Lampeter-Strasburg High School, 1/3/2025, Group 102368, Game 1235058444, 7:00 PM, Game Fee \$100.00, Brian Shopf	100.00		
1/6/2025	Lampeter-Strasburg High School, 1/3/2025, Group 102368, Game 1235058444, 7:00 PM, Game Fee \$100.00, Tom Hillen	100.00		
1/8/2025	Lampeter-Strasburg High School, 1/7/2025, Group 107658, Game 1237273582, 5:00 PM, Game Fee \$97.00, R Lundquist	97.00		
1/8/2025	Lampeter-Strasburg High School, 1/7/2025, Group 107658, Game 670743, 7:00 PM, Game Fee \$129.00, Gregory Duke	129.00		
1/9/2025	Lampeter-Strasburg High School, 1/8/2025, Group 102368, Game 1235059276, 3:45 PM, Game Fee \$123.00, Doug Meyers	123.00		
1/9/2025	Lampeter-Strasburg High School, 1/8/2025, Group 102368, Game 1235059275, 6:00 PM, Game Fee \$74.00, Wayne Nguyen	74.00		
1/9/2025	Lampeter-Strasburg High School, 1/8/2025, Group 102368, Game 1235059274, 7:30 PM, Game 1235059275, 6:00 PM, Game Fee \$174.00, Adam Wagaman	174.00		
1/9/2025	Lampeter-Strasburg High School, 1/8/2025, Group 102368, Game 1235059274, 7:30 PM, Game Fee \$100.00, Jay Gallagher	100.00		
1/9/2025	Lampeter-Strasburg High School, 1/8/2025, Group 102368, Game 1235059274, 7:30 PM, Game 1235059276, 3:45 PM, Game Fee \$223.00, Brian Wiggins	223.00		
1/10/2025	Lampeter-Strasburg High School, 1/9/2025, Group 107658, Game 670726, 7:00 PM, Game Fee \$297.00, Mike Rampulla	297.00		
1/14/2025	Lampeter-Strasburg High School, 1/13/2025, Group 107658, Game 670727, 7:00 PM, Game Fee \$180.00, Dennis Kemmick	180.00		
1/15/2025	Lampeter-Strasburg High School, 1/14/2025, Group 102368, Game 1235058492, 4:00 PM, Game Fee \$123.00, Autumn Cook	123.00		
1/15/2025	Lampeter-Strasburg High School, 1/14/2025, Group 102368, Game 1235058448, 7:00 PM, Game Fee \$100.00, Chad Moline	100.00		
1/15/2025	Lampeter-Strasburg High School, 1/14/2025, Group 102368, Game 1235058448, 7:00 PM, Game 1235058492, 4:00 PM, Game Fee \$223.00, Dan Mentzer	223.00		
1/15/2025	Lampeter-Strasburg High School, 1/14/2025, Group 102368, Game 1235058448, 7:00 PM, Game Fee \$100.00, Pat Ross	100.00		
1/17/2025	Lampeter-Strasburg High School, 1/16/2025, Group 102368, Game 1235058495, 5:00 PM, Game Fee \$123.00, Tracy Leaman	123.00		
1/17/2025	Lampeter-Strasburg High School, 1/16/2025, Group 102368, Game 1235058495, 5:00 PM, Game Fee \$123.00, Pat Ross	123.00		
1/17/2025	Lampeter-Strasburg High School, 1/16/2025, Group 102368, Game 1235058450, 7:00 PM, Game Fee \$100.00, Nathan Rittenhouse	100.00		
1/17/2025	Lampeter-Strasburg High School, 1/16/2025, Group 102368, Game 1235058450, 7:00 PM, Game Fee \$100.00, Joe GEBHARD	100.00		
1/17/2025	Lampeter-Strasburg High School, 1/16/2025, Group 102368, Game 1235058450, 7:00 PM, Game Fee \$100.00, Scott Haden	100.00		
1/17/2025	Lampeter-Strasburg High School, 1/14/2025, Group 111398, Game 833, 4:15 PM, Game Fee \$93.00, Sean Rowe	93.00		
1/17/2025	Lampeter-Strasburg High School, 1/14/2025, Group 111398, Game 833, 4:15 PM, Game Fee \$93.00, Gary Coble	93.00		
1/17/2025	Lampeter-Strasburg High School, 1/14/2025, Group 111398, Game 833, 4:15 PM, Game Fee \$93.00, Justina Roth	93.00		
1/17/2025	Lampeter-Strasburg High School, 1/14/2025, Group 111398, Game 833, 4:15 PM, Game Fee \$93.00, John Roth	93.00		
1/22/2025	Lampeter-Strasburg High School, 1/21/2025, Group 111398, Game 834, 4:15 PM, Game Fee \$93.00, Gary Coble	93.00		
1/22/2025	Lampeter-Strasburg High School, 1/21/2025, Group 111398, Game 834, 4:15 PM, Game Fee \$93.00, Justina Roth	93.00		
1/22/2025	Lampeter-Strasburg High School, 1/21/2025, Group 111398, Game 834, 4:15 PM, Game Fee \$93.00, John Roth	93.00		
1/22/2025	Lampeter-Strasburg High School, 1/21/2025, Group 111398, Game 834, 4:15 PM, Game Fee \$93.00, Brian Kramp	93.00		
1/22/2025	Lampeter-Strasburg High School, 1/21/2025, Group 102368, Game 1235059041, 5:00 PM, Game Fee \$123.00, Tracy Leaman	123.00		
1/22/2025	Lampeter-Strasburg High School, 1/21/2025, Group 102368, Game 1235059041, 5:00 PM, Game Fee \$123.00, Phil Rudisill	123.00		
1/22/2025	Lampeter-Strasburg High School, 1/21/2025, Group 102368, Game 1235059038, 7:00 PM, Game Fee \$100.00, Sasha Williams	100.00		
1/22/2025	Lampeter-Strasburg High School, 1/21/2025, Group 102368, Game 1235059038, 7:00 PM, Game Fee \$100.00, Brian Woodfill	100.00		
1/22/2025	Lampeter-Strasburg High School, 1/21/2025, Group 102368, Game 1235059038, 7:00 PM, Game Fee \$100.00, Darrin Smith	100.00		
1/22/2025	Lampeter-Strasburg High School, 1/10/2025, Group 102368, Game 1235058425, 6:00 PM, Game Fee \$140.00, Ken Wright	140.00		



Date	Transaction Description	Debit	Credit	Balance
1/22/2025	Lampeter-Strasburg High School, 1/10/2025, Group 102368, Game 1235058425, 6:00 PM, Game Fee \$140.00, Leander Toney	140.00		
1/22/2025	Lampeter-Strasburg High School, 1/10/2025, Group 102368, Game 1235058424, 7:30 PM, Game 1235058471, 5:00 PM, Game Fee \$214.00, Josh Boulton	214.00		
1/22/2025	Lampeter-Strasburg High School, 1/10/2025, Group 102368, Game 1235058424, 7:30 PM, Game Fee \$100.00, Jeffrey Hostetter	100.00		
1/22/2025	Lampeter-Strasburg High School, 1/10/2025, Group 102368, Game 1235058424, 7:30 PM, Game 1235058471, 5:00 PM, Game Fee \$214.00, Brian London	214.00		
1/23/2025	Lampeter-Strasburg High School, 1/22/2025, Group 102368, Game 1235058446, 7:00 PM, Game Fee \$100.00, Jonathan Yoder	100.00		
1/23/2025	Lampeter-Strasburg High School, 1/22/2025, Group 102368, Game 1235058446, 7:00 PM, Game Fee \$100.00, Dave Kmiecik	100.00		
1/23/2025	Lampeter-Strasburg High School, 1/22/2025, Group 102368, Game 1235058446, 7:00 PM, Game Fee \$100.00, Darrin Smith	100.00		
	Total Payments to Officials - 12/21/2024 - 1/28/2025	6,229.00		
	Processing Fees	-		
	Total Paid from ArbiterPay Account	6,229.00		
1/28/2025	Ending Balance in ArbiterPay Account			7,822.05

Curriculum Map: Elem Science K (2023)

Course: Science - Grade K Sub-topic: Uncategorized

Grade(s): None specified

Course Description: This engaging and hands-on curriculum introduces young learners to the wonders of science through exploration, observation, and hands-on situational learning. Students will discover the basics of life science as they explore weather and natural resources, plants and animals, and force and motion. A variety of activities include lessons designed to spark curiosity and encourage critical thinking. This curriculum fosters a love for learning and helps students develop foundational skills in inquiry, problem-solving, and teamwork.

Unit: Weather & Natural Resources

Unit Description: This unit is broken down into the following topics: Weather, Energy, and Environment.

STANDARDS: STANDARDS

State: Pennsylvania STEELS K-12 - Science (2023)

3.3.K.A (Advanced) Use and share observations of local weather conditions to describe patterns over time.

3.3.K.D (Advanced) Ask questions to obtain information about the purpose of weather forecasting to prepare for, and respond to, severe weather.

3.3.K.E (Advanced) Communicate solutions that will reduce the impact of humans on the land, water, air, and/or other living things in the local environment.

3.2.K.C (Advanced) Make observations to determine the effect of sunlight on Earth's surface.

3.2.K.D (Advanced) Use tools and materials to design and build a structure that will reduce the warming effect of sunlight on an area.

Topic: Weather

Description:

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.

Some kinds of severe weather are more likely than others in a given region. Weather scientists forecast severe weather so that the communities can prepare for and respond to these events.

Student

Learning Objectives:

Use observations (firsthand or from media) to describe patterns in the natural world in order to answer scientific questions.

Ask questions based on observations to find more information about the designed world.

Read grade appropriate texts and/or use media to obtain scientific information to describe patterns in the natural world.

Essential

Questions:

What regulates weather and climate?

How do natural hazards affect individuals and societies?

Big Ideas:

Weather and climate are shaped by complex interactions involving sunlight, the ocean, the atmosphere, ice, landforms, and living things.

Natural processes can cause sudden or gradual changes to Earth's systems, some of which may adversely affect humans.

Key**Terminology & Definitions:**

- sunny
- changes
- cloudy
- cold
- cool
- describe
- foggy
- hot
- observe
- partly cloudy
- patterns
- predict
- rainy
- snowy
- warm
- weather
- windy
- conditions
- design
- evaluate
- hazard
- natural
- natural hazard
- process
- region
- solution
- weather

Notes:

[Standard Links](#)

STANDARDS

State: Pennsylvania STEELS K-12 - Science (2023)

- [3.3.K.A \(Advanced\)](#) Use and share observations of local weather conditions to describe patterns over time.
- [3.3.K.D \(Advanced\)](#) Ask questions to obtain information about the purpose of weather forecasting to prepare for, and respond to, severe weather.

Topic: Energy**Description:**

Sunlight warms Earth's surface.

Student**Learning****Objectives:**

Make observations (firsthand or from media) to collect data that can be used to make comparisons.

Scientists use different ways to study the world.

Use tools and materials provided to design and build a device that solves a specific problem or a solution to a specific problem.

Essential Questions: What is energy?

Big Ideas: Energy can be modeled as either motions of particles or as being stored in force fields.

Key Terminology & Definitions:

- changes
- describe
- earth
- surface
- sunlight
- observe
- predict
- solution
- design
- tools

Notes: [Standard Links](#)

STANDARDS

State: Pennsylvania STEELS K-12 - Science (2023)

[3.2.K.C \(Advanced\)](#) Make observations to determine the effect of sunlight on Earth's surface.
[3.2.K.D \(Advanced\)](#) Use tools and materials to design and build a structure that will reduce the warming effect of sunlight on an area.

Topic: Environment

Description:

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.

Student

Learning Objectives:

Communicate solutions with others in oral and/or written forms using models and/or drawings that provide detail about scientific ideas.

Essential Questions:

How do humans change the planet?

Big Ideas:

Human activities in agriculture, industry, and everyday life has an impact on the land, rivers, ocean and air.

Key

Terminology & Definitions: - recycle

- reduce
- reuse
- solutions
- air
- choices
- impact
- land
- water

Notes: [Standard Links](#)

STANDARDS

State: Pennsylvania STEELS K-12 - Science (2023)

3.3.K.E (Advanced) Communicate solutions that will reduce the impact of humans on the land, water, air, and/or other living things in the local environment.

Unit: Plants & Animals

Unit Description: This unit is broken down into the following topics: Organization for Matter and Energy Flow in Organisms, Biogeology, and Natural Resources

STANDARDS: STANDARDS

State: Pennsylvania STEELS K-12 - Science (2023)

3.3.K.B (Advanced) Construct an argument supported by evidence for how plants and animals (including humans) can change the environment to meet their needs.

3.3.K.C (Advanced) Use a model to represent the relationship between the needs of different plants or animals(including humans) and the places they live.

3.1.K.A (Advanced) Use observations to describe patterns of what plants and animals (including humans) need to survive.

Topic: Organization for Matter and Energy Flow in Organisms

Description: 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.

Student Learning Objectives: Use observations (firsthand or from media) to describe patterns in the natural world in order to answer scientific questions.

Essential Questions: How do organisms obtain and use the matter and energy they need to live and grow?

Big Ideas: The structures, functions, and behaviors of organisms allow them to obtain, use, transport, and remove the matter and energy needed to sustain them.

Key Terminology & Definitions:

- environment
- leaves
- organism

- patterns
- roots
- stems
- structure
- survive

Notes: [Standard Links](#)

STANDARDS

State: Pennsylvania STEELS K-12 - Science (2023)

3.1.K.A (Advanced) Use observations to describe patterns of what plants and animals (including humans) need to survive.

Topic: Biogeology

Description:

Plants and animals can change their environment.

Student Learning Objectives:

Construct an argument with evidence to support a claim.

Essential Questions:

How do living organisms alter Earth's processes and structures?

Big Ideas:

Life and the planet's nonliving systems impact one another.

Key Terminology & Definitions:

- needs
- environment

Notes: [Standard Links](#)

STANDARDS

State: Pennsylvania STEELS K-12 - Science (2023)

3.3.K.B (Advanced) Construct an argument supported by evidence for how plants and animals (including humans) can change the environment to meet their needs.

Topic: Natural Resources

Description:

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.

Student Learning Objectives:

Use a model to represent relationships in the natural world.

Essential Questions:

How do Earth's surface processes and human activities affect each other?

How do humans depend on Earth's resources?

Big Ideas:

All materials, energy, and fuels that humans use are derived from natural sources, some of which are renewable over time and others are not.

Key

Terminology & - argument

Definitions: - evidence

Notes: [Standard Links](#)

STANDARDS

State: Pennsylvania STEELS K-12 - Science (2023)

[3.3.K.C \(Advanced\)](#) Use a model to represent the relationship between the needs of different plants or animals(including humans) and the places they live.

Unit: Force & Motion

Unit Description: This unit is broken down into the following topics: Types of Interaction and Forces and Interaction.

STANDARDS: STANDARDS

State: Pennsylvania STEELS K-12 - Science (2023)

[3.2.K.A \(Advanced\)](#) 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.

[3.2.K.B \(Advanced\)](#) 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.

Topic: Types of Interaction

Description: Pushes and pulls can have different strengths and directions.

Pushing or pulling on an object can change the speed or direction of its motion and can start or stop it.

When objects touch or collide, they push on one another and can change motion.

Student

Learning Objectives: With guidance, plan and conduct an investigation in collaboration with peers.

Scientists use different ways to study the world.

Essential

Questions: What underlying forces explain the variety of interactions observed?

Big Ideas:

All forces between objects, regardless of size or direction, arise from only a few types of interactions.

Key

Terminology & - speed

Definitions: - direction

- collide

Notes: [Standard Links](#)

Topic: Forces & Interaction

Description:

Pushes and pulls can have different strengths and directions.

Pushing or pulling on an object can change the speed or direction of its motion and can start or stop it.

Student Learning Objectives:

Analyze data from tests of an object or tool to determine if it works as intended.

Essential Questions:

How can one predict an object's continued motion, changes in motion, or stability?

Big Ideas:

A change in motion of interacting objects can be explained and predicted by forces.

Key Terminology & Definitions:

- cause and effect
- explanation
- motion
- push
- pull
- speed

Notes: [Standard Links](#)

STANDARDS

State: Pennsylvania STEELS K-12 - Science (2023)

[3.2.K.A \(Advanced\)](#) 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.

Curriculum Map: Science Grade 1 (2023)

Course: Elem Science 1 Sub-topic: Science, Technology, Engineering & Mathematics

Grade(s): None specified

Course Description: This engaging and hands-on curriculum introduces young learners to the wonders of science through exploration, observation, and hands-on situational learning. Students will discover the basics of Earth Science, Science of Sound, Engineering, and Plant and Animals. A variety of activities include lessons designed to spark curiosity and encourage critical thinking. This curriculum fosters a love for learning and helps students develop foundational skills in inquiry, problem-solving, and teamwork.

Unit:

This Curriculum Map Unit has no Topics to display

Unit: Earth Science

Unit

Description:

- This unit explores how light interacts with objects, the predictable patterns of celestial bodies, and the sustainable use of resources. Students will investigate how light makes objects visible, observe the sun, moon, and stars to identify patterns, and relate daylight changes to seasons. They will also examine ways to conserve resources through recycling and sustainable practices while exploring technologies that promote environmental stewardship in homes and communities.

Unit Essential Questions:

- What is light?
- How can one explain the varied effects that involve light?
- What other forms of electromagnetic radiation are there?
- What is the universe, and what is Earth's place in it? What is the universe, and what goes on in stars?
- What are the predictable patterns caused by Earth's movement in the solar system?
- Why is it important to sustainably manage technological resources?
- How does changing technology impact the individual, culture, and environment?

Unit Big Ideas:

- Electromagnetic radiation (e.g., radio, microwaves, light) can be modeled as a wave pattern of changing electric and magnetic fields that interact with matter.
- We can infer information about stars based on observations we make from Earth.
- Observations of the sky can be explained by predictable patterns of the movement of Earth, moon, sun and planets.
- Responsible creation and use of technology requires the sustainable use of renewable and non-renewable resources and handling of waste.
- Use of technology can lead to fundamental changes in individuals, human cultures, and the environment.

Unit Key

Terminology & Definitions:

illuminate

light

light beam

moon

observe

pattern

predict

star

sun

system

sky

sunrise

sunset

investigate
community
reduce
reuse
recycle
resource

Unit Notes:

Standards Links

STANDARDS: STANDARDS

State: Pennsylvania STEELS K-12 - Science (2023)

- 3.2.1.B (Advanced) Make observations to construct an evidence-based account that objects can be seen only when illuminated.
- 3.2.1.C (Advanced) Plan and conduct an investigation to determine the effect of placing objects made with different materials in the path of a beam of light.
- 3.3.1.A (Advanced) Use observations of the sun, moon, and stars to describe patterns that can be predicted.
- 3.3.1.B (Advanced) Make observations at different times of year to relate the amount of daylight to the time of year.
- 3.4.K-2.A (Advanced) Categorize ways people harvest, redistribute, and use natural resources.
- 3.5.K-2.D (Advanced) Select ways to reduce, reuse, and recycle resources in daily life.
- 3.5.K-2.F (Advanced) Investigate the use of technologies in the home and community.

(* standards consolidated from Topic level)

Topic: How are things illuminated?

Description:

Objects can be seen if light is available to illuminate them or if they give off their own light. 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.

Student Learning Objectives:

- The student will make observations to construct an evidence based account that objects can be seen only when illuminated.
- The student will plan and conduct an investigation to determine the effect of placing objects made with different materials in the path of a beam of light.

Essential Questions:

- What is light?
- How can one explain the varied effects that involve light?
- What other forms of electromagnetic radiation are there?

Big Ideas:

- Electromagnetic radiation (e.g., radio, microwaves, light) can be modeled as a wave pattern of changing electric and magnetic fields that interact with matter.

Key Terminology & Definitions: illuminate
light
light beam

Notes: [Standards Link](#)

STANDARDS

State: Pennsylvania STEELS K-12 - Science (2023)

- 3.2.1.B (Advanced) Make observations to construct an evidence-based account that objects can be seen only when illuminated.
- 3.2.1.C (Advanced) Plan and conduct an investigation to determine the effect of placing objects made with different materials in the path of a beam of light.

Topic: Observing patterns in time

Description:

Patterns of the motion of the sun, moon, and stars in the sky can be observed, described, and predicted. Seasonal patterns of sunrise and sunset can be observed, described, and predicted.

Student Learning Objectives:

- The student will use observations of the sun, moon, and stars to describe patterns that can be predicted.
- The student will make observations at different times of year to relate the amount of daylight to the time of year.

Essential Questions:

- What is the universe, and what is Earth's place in it? What is the universe, and what goes on in stars?
- What are the predictable patterns caused by Earth's movement in the solar system?

Big Ideas:

- We can infer information about stars based on observations we make from Earth.
- Observations of the sky can be explained by predictable patterns of the movement of Earth, moon, sun and planets.

Key Terminology & Definitions: changes
describe
moon
observe
pattern
predict
star
sun
system
sky
sunrise
sunset

Notes: [Standards Link](#)

STANDARDS

State: Pennsylvania STEELS K-12 - Science (2023)

- 3.3.1.A (Advanced) Use observations of the sun, moon, and stars to describe patterns that can be predicted.
- 3.3.1.B (Advanced) Make observations at different times of year to relate the amount of daylight to the time of year.

Topic: Create environmental awareness**Description:**

Asking questions, making observations, and gathering information are helpful in thinking about problems. 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. 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. 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.

Student Learning Objectives:

- The student will investigate the use of technologies in the home and community.
- The student will select ways to reduce, reuse, and recycle resources in daily life.
- The student will categorize ways people harvest, redistribute, and use natural resources.

Essential Questions:

- How does changing technology impact the individual, culture, and environment?
- Why is it important to sustainably manage technological resources?

Big Ideas:

- Use of technology can lead to fundamental changes in individuals, human cultures, and the environment.
- Responsible creation and use of technology requires the sustainable use of renewable and non-renewable resources and handling of waste.

Key Terminology & Definitions:

investigate

community

reduce

reuse

recycle

resource

Notes:

[Standards Link](#)

STANDARDS

State: Pennsylvania STEELS K-12 - Science (2023)

[3.4.K-2.A \(Advanced\)](#) Categorize ways people harvest, redistribute, and use natural resources.

[3.5.K-2.D \(Advanced\)](#) Select ways to reduce, reuse, and recycle resources in daily life.

[3.5.K-2.F \(Advanced\)](#) Investigate the use of technologies in the home and community.

Unit: Science of Sound

Unit Description: This unit focuses on the properties of sound and light and their applications in communication.

Students will explore how vibrating materials produce sound and how sound vibrations can affect materials through hands-on investigations. Using tools and materials, they will design and build devices that use light or sound to solve real-world communication challenges. Additionally, students will identify and use everyday symbols to understand and convey information effectively.

Unit Essential Questions:

- What are the characteristic properties and behaviors of waves?
- How are instruments that transmit and detect waves used to extend human senses?
- Why is it important for people to be technologically literate?

Unit Big Ideas: Waves are repeating patterns of motion that transfer energy and information without transferring matter.

- Useful modern technologies and instruments have been designed based on an understanding

of waves and their interactions with matter.

- Technologically literate people are well equipped to learn about and use technological products and systems.

Unit Key

Terminology & Definitions:

energy

investigation

material

sound

vibration

waves

communicate

distance

sound

symbol

communication

Unit Notes: [Standards Link](#)

STANDARDS: STANDARDS

State: Pennsylvania STEELS K-12 - Science (2023)

[3.2.1.A \(Advanced\)](#) Plan and conduct investigations to provide evidence that vibrating materials can make sound and that sound can make materials vibrate.

[3.2.1.D \(Advanced\)](#) Use tools and materials to design and build a device that uses light or sound to solve the problem of communicating over a distance.

[3.5.K-2.A \(Advanced\)](#) Identify and use everyday symbols.

(* standards consolidated from Topic level)

Topic: Investigate Vibration

Description:

Sound can make matter vibrate, and vibrating matter can make sound.

Student

Learning Objectives:

- The student will plan and conduct investigations to provide evidence that vibrating materials can make sound and that sound can make materials vibrate.

Essential Questions:

- What are the characteristic properties and behaviors of waves?

Big Ideas:

- Waves are repeating patterns of motion that transfer energy and information without transferring matter.

Key

Terminology & Definitions:

energy

investigation

material

sound

vibration

waves

Notes: [Standards Link](#)

STANDARDS

State: Pennsylvania STEELS K-12 - Science (2023)

3.2.1.A (Advanced) Plan and conduct investigations to provide evidence that vibrating materials can make sound and that sound can make materials vibrate.

Topic: Investigate Communication Tools

Description:

People also use a variety of devices to communicate (send and receive information) over long distances. 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.

Student

Learning

Objectives:

- The student will use tools and materials to design and build a device that uses light or sound to solve the problem of communicating over a distance.
- The student will identify and use everyday symbols.

Essential

Questions:

- How are instruments that transmit and detect waves used to extend human senses?
- Why is it important for people to be technologically literate?

Big Ideas:

- Useful modern technologies and instruments have been designed based on an understanding of waves and their interactions with matter.
- Technologically literate people are well equipped to learn about and use technological products and systems.

Key

Terminology &

Definitions:

communicate

distance

sound

symbol

communication

Notes: [Standards Link](#)

STANDARDS

State: Pennsylvania STEELS K-12 - Science (2023)

3.2.1.D (Advanced) Use tools and materials to design and build a device that uses light or sound to solve the problem of communicating over a distance.

3.5.K-2.A (Advanced) Identify and use everyday symbols.

Unit: Engineering

Unit

Description:

This unit explores how individuals and societies address their needs and wants through design and innovation. Students will engage in the engineering design process, learning essential skills to create solutions that respond to real-world challenges. They will discover that designing and creating are accessible to everyone while exploring the roles of scientists, engineers, technologists, and others in developing technology. Through hands-on activities and collaborative projects, students will connect creativity with problem-solving in meaningful ways.

Unit Essential

Questions:

- Why is it important to understand, use, assess, and create technological products, systems, and ways of thinking?
- How do system components work together to achieve a desired goal?
- How does technology and engineering address the needs and wants of society?
- How are requisite skills applied in technology and engineering design?
- Why is there no single correct solution in design?
- How are various resources used in technology and engineering activities?
- How do criteria and constraints drive design?

- Why is it important for people to be technologically literate?
- How can a product, system, or process be kept in proper working order?
- How do advancements from one field impact another?
- How do technological advancements define different historical eras?
-

Unit Big Ideas:

- The study of technology and engineering involves the ability to understand, use, assess, and create technological products, systems, and ways of thinking.
- A system is a group of interrelated components designed collectively to achieve a desired goal.
- The needs and wants of society often shape technology and engineering developments.
- There are requisite skills used in technology and engineering design.
- There is no single, best solution as designs can always be improved and refined
- A system is a group of interrelated components designed collectively to achieve a desired goal.
- There is no single, best solution as designs can always be improved and refined.
- Technology and engineering activities require resources.
- Design optimization is driven by criteria and constraints.
- Technologically literate people are well equipped to learn about and use technological products and systems
- Maintenance and repair of a technological product, system, or process is crucial to keeping it in proper working order.
- Technological knowledge and practices advance – and are advanced by – other fields
- Historical eras are often defined by technological advancements.
- The needs and wants of society often shape technology and engineering developments.

Unit Key

Terminology & Definitions: technology

engineering

technological products

technological systems

tools

techniques

subsystem

system

distribution

need

want

individual

society

demonstrate

essential

skills

necessary

design

illustrate

system

part

goal

solution

design

want

need

plausible
collaborate
team
requirements
tool
technique
safety
task
tool
plan
compare
evaluate
impact
societal

Unit Notes: [Standards Link](#)

STANDARDS: STANDARDS

State: [Pennsylvania STEELS K-12 - Science \(2023\)](#)

3.5.K-2.G (Advanced)	Explain the tools and techniques that people use to help them do things.
3.5.K-2.H (Advanced)	Explain the needs and wants of individuals and societies.
3.5.K-2.I (Advanced)	Compare simple technologies to evaluate their impacts.
3.5.K-2.K (Advanced)	Safely use tools to complete tasks.
3.5.K-2.L (Advanced)	Explore how technologies are developed to meet individual and societal needs and wants.
3.5.K-2.M (Advanced)	Demonstrate essential skills of the engineering design process.
3.5.K-2.O (Advanced)	Illustrate that there are different solutions to a design and that none are perfect.
3.5.K-2.T (Advanced)	Demonstrate that designs have requirements.
3.5.K-2.U (Advanced)	Explain that design is a response to wants and needs
3.5.K-2.X (Advanced)	Develop a plan in order to complete a task.
3.5.K-2.Z (Advanced)	Illustrate how systems have parts or components that work together to accomplish a goal.
3.5.K-2.AA (Advanced)	Demonstrate that creating can be done by anyone.
3.5.K-2.CC (Advanced)	Discuss the roles of scientists, engineers, technologists, and others who work with technology.
3.5.K-2.DD (Advanced)	Collaborate effectively as a member of a team.

(* standards consolidated from Topic level)

Topic: Introduction to Engineering

Description:

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. Research on a problem should be carried out before beginning to design a solution. Testing a solution involves investigating how well it performs under a range of likely conditions. 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.

Student Learning Objectives:

- The student will demonstrate that creating can be done by anyone.
- The student will describe how a subsystem is a system that operates as a part of another larger system.
- The student will be able to explain the needs and wants of individuals and societies.
- The Student will demonstrate essential skills of the engineering design process.
- Explain that design is a response to wants and needs.

Essential Questions:

- Why is it important to understand, use, assess, and create technological products, systems, and ways of thinking?
- How do system components work together to achieve a desired goal?
- How does technology and engineering address the needs and wants of society?
- How are requisite skills applied in technology and engineering design?
- Why is there no single correct solution in design?

Big Ideas:

- The study of technology and engineering involves the ability to understand, use, assess, and create technological products, systems, and ways of thinking.
- A system is a group of interrelated components designed collectively to achieve a desired goal.
- The needs and wants of society often shape technology and engineering developments.
- There are requisite skills used in technology and engineering design
- There is no single, best solution as designs can always be improved and refined

Materials:

Key Terminology & Definitions:

technology
engineering
technological products
technological systems
tools
techniques
subsystem
system
distribution
need
want
individual
society
demonstrate
essential
skills
necessary
design

Notes:

[Standards Link](#)

STANDARDS

State: Pennsylvania STEELS K-12 - Science (2023)

- 3.5.K-2.H (Advanced) Explain the needs and wants of individuals and societies.
- 3.5.K-2.M (Advanced) Demonstrate essential skills of the engineering design process.
- 3.5.K-2.U (Advanced) Explain that design is a response to wants and needs
- 3.5.K-2.AA (Advanced) Demonstrate that creating can be done by anyone.
- 3.5.K-2.CC (Advanced) Discuss the roles of scientists, engineers, technologists, and others who work with technology.

Topic: Exploring as Engineers

Description:

A situation that people want to change or create can be approached as a problem to be solved through engineering. In solving the problem, there may be different parts that need to connect. Such problems may have many acceptable solutions. Before beginning to design a solution, it is important to clearly understand the problem. Asking questions, making observations, and gathering information are helpful in thinking about problems. 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.

Student

Learning Objectives:

- The student will illustrate how systems have parts or components that work together to accomplish a goal.
- The student will illustrate that there are different solutions to a design and that none are perfect.
- The student will collaborate effectively as a member of a team.
- The student will demonstrate that designs have requirements.
- The student will explain the tools and techniques that people use to help them do things.
- The student will safely use tools to complete tasks.
- The student will develop a plan in order to complete a task.
- The student will compare simple technologies to evaluate their impacts.
- The student will explore how technologies are developed to meet individual and societal needs and wants.

Essential Questions:

- How do system components work together to achieve a desired goal?
- Why is there no single correct solution in design?
- How are various resources used in technology and engineering activities?
- How do criteria and constraints drive design?
- Why is it important for people to be technologically literate?
- How can a product, system, or process be kept in proper working order?
- How do advancements from one field impact another?
- How do technological advancements define different historical eras?
- How does technology and engineering address the needs and wants of society?

Big Ideas:

- A system is a group of interrelated components designed collectively to achieve a desired goal.
- There is no single, best solution as designs can always be improved and refined.
- Technology and engineering activities require resources.
- Design optimization is driven by criteria and constraints.
- Technologically literate people are well equipped to learn about and use technological products and systems
- Maintenance and repair of a technological product, system, or process is crucial to keeping it in proper working order.
- Technological knowledge and practices advance – and are advanced by – other fields
- Historical eras are often defined by technological advancements.
- The needs and wants of society often shape technology and engineering developments.

Key

Terminology & Definitions:

illustrate

system

part

goal
solution
design
want
need
plausible
collaborate
team
requirements
tool
technique
safety
task
tool
plan
compare
evaluate
impact
societal

Notes: [Standards Link](#)

STANDARDS

State: Pennsylvania STEELS K-12 - Science (2023)

- 3.5.K-2.G (Advanced) Explain the tools and techniques that people use to help them do things.
3.5.K-2.I (Advanced) Compare simple technologies to evaluate their impacts.
3.5.K-2.K (Advanced) Safely use tools to complete tasks.
3.5.K-2.L (Advanced) Explore how technologies are developed to meet individual and societal needs and wants.
3.5.K-2.O (Advanced) Illustrate that there are different solutions to a design and that none are perfect.
3.5.K-2.T (Advanced) Demonstrate that designs have requirements.
3.5.K-2.X (Advanced) Develop a plan in order to complete a task.
3.5.K-2.Z (Advanced) Illustrate how systems have parts or components that work together to accomplish a goal.
3.5.K-2.DD (Advanced) Collaborate effectively as a member of a team.

Topic:

Unit: Plants and Animals

Unit Description: This unit focuses on understanding how plants and animals survive, grow, and pass on traits to their offspring. Students will observe patterns in the behaviors of parents and offspring that support survival and explore how young plants and animals resemble their parents while noting slight variations. Using these observations, students will design solutions to human problems by mimicking how plants and animals use their external parts to meet their needs. Through reading, media, and hands-on activities, students will connect scientific concepts to real-world challenges.

Unit Essential Questions:

- How do organisms grow and develop?
- How are the characteristics of one generation related to the previous generation?
- How do the structures of organisms enable life's functions?
- How do organisms grow and develop?

Unit Big Ideas:

- The characteristic structures, functions, and behaviors of organisms change in predictable ways as they progress from birth to old age.
- Offspring resemble, but are not identical to, their parents due to traits being passed from one generation to the next via genes.

Unit Key Terminology & Definitions:

behavior

observe

offspring

patterns

similar

vary

mimic

problem

solution

mimic

problem

solution

patterns

Unit Notes: [Standards Link](#)**STANDARDS: STANDARDS**State: Pennsylvania STEELS K-12 - Science (2023)

- 3.1.1.A (Advanced)** Use materials to design a solution to a human problem by mimicking how plants and/or animals use their external parts to help them survive, grow, and meet their needs.
- 3.1.1.B (Advanced)** Read texts and use media to determine patterns in behavior of parents and offspring that help offspring survive.
- 3.1.1.C (Advanced)** Make observations to construct an evidence-based account that young plants and animals are like, but not exactly like, their parents.

(* standards consolidated from Topic level)

Topic: How do Hereditary Traits Effect Offspring?**Description:**

Young animals are very much, but not exactly like, their parents. Plants also are very much, but not exactly, like their parents. Individuals of the same kind of plant or animal are recognizable as similar but can also vary in many ways. Individuals of the same kind of plant or animal are recognizable as similar but can also vary in many ways themselves engage in behaviors that help the offspring to survive.

Student Learning Objectives:

- The student will read texts and use media to determine patterns in behavior of parents and offspring that help offspring survive.
- The student will make observations to construct an evidence based account that young plants and animals are like, but not exactly like, their parents.

Essential Questions:

- How do organisms grow and develop?
- How are the characteristics of one generation related to the previous generation?

Big Ideas:

- The characteristic structures, functions, and behaviors of organisms change in predictable ways as they progress from birth to old age.
- Offspring resemble, but are not identical to, their parents due to traits being passed

from one generation to the next via genes.

Key Terminology & Definitions: behavior
observe
offspring
patterns
similar
vary

Notes: [Standards Link](#)

STANDARDS

State: Pennsylvania STEELS K-12 - Science (2023)

- 3.1.1.B (Advanced) Read texts and use media to determine patterns in behavior of parents and offspring that help offspring survive.
- 3.1.1.C (Advanced) Make observations to construct an evidence-based account that young plants and animals are like, but not exactly like, their parents.

Topic: How do Plants and Animals Survive?

Description:

All organisms have external parts. 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. Plants also have different parts (roots, stems, leaves, flowers, fruits) that help them survive and grow. Animals have body parts that capture and convey different kinds of information needed for growth and survival. Animals respond to these inputs with behaviors that help them survive. Plants also respond to some external inputs. Adult plants and animals can have young. In many kinds of animals, parents and the offspring themselves engage in behaviors that help the offspring to survive.

Student Learning Objectives:

- The student will use materials to design a solution to a human problem by mimicking how plants and/or animals use their external parts to help them survive, grow, and meet their needs.
- The student will read texts and use media to determine patterns in behavior of parents and offspring that help offspring survive.

Essential Questions:

- How do the structures of organisms enable life's functions?
- How do organisms grow and develop?

Big Ideas:

- Organisms have characteristic structures, functions, and behaviors that allow them to grow, reproduce, and die.
- The characteristic structures, functions, and behaviors of organisms change in predictable ways as they progress from birth to old age

Key Terminology & Definitions: mimic
problem
solution
mimic
problem
solution
patterns

Notes: [Standards Link](#)

STANDARDS

State: Pennsylvania STEELS K-12 - Science (2023)

- 3.1.1.A (Advanced) Use materials to design a solution to a human problem by mimicking how plants and/or animals use their external parts to help them survive, grow, and meet their needs.
- 3.1.1.B (Advanced) Read texts and use media to determine patterns in behavior of parents and offspring that help offspring survive.

Curriculum Map: Elementary Science 2 (2023)

Course: Elem Science 2 Sub-topic: Science, Technology, Engineering & Mathematics

Grade(s): None specified

Course Description: This engaging and hands-on curriculum introduces young learners to the wonders of science through exploration, observation, and hands-on situational learning. Students will discover the basics of Life Science, Earth Science, Physical Science, and Engineering/Technology. A variety of activities include lessons designed to spark curiosity and encourage critical thinking. This curriculum fosters a love for learning and helps students develop foundational skills in inquiry, problem-solving, and teamwork.

Unit: Life Science

Unit Description: In this unit, students will engage in hands-on investigations to explore the basic needs of plants, focusing on whether sunlight and water are essential for plant growth. They will plan and conduct experiments to test these factors, observe the effects, and draw conclusions based on their findings. Additionally, students will develop a simple model to understand how animals play a role in plant reproduction, particularly in seed dispersal or pollination, by mimicking the functions of animals in these processes. Through observation and comparison of plants and animals across different habitats, students will examine the diversity of life, identifying how various organisms are adapted to their environments. This unit encourages critical thinking, scientific investigation, and modeling as students connect the roles of plants, animals, and the environment in ecosystems.

Unit Essential Questions:

- How do organisms interact with the living and nonliving environments to obtain matter and energy?
- What is biodiversity, how do humans affect it, and how does it affect humans?

Unit Big Ideas:

- Organisms grow, reproduce, and perpetuate their species by obtaining necessary resources through interdependent relationships with other organisms and the physical environment.
- Biodiversity—the multiplicity of genes, species, and ecosystems—provides humans with renewable resources, such as food, medicines, and clean water.

Unit Key Terminology & Definitions:

- environment
- survive
- species
- minerals
- soil
- sunlight
- water
- biodiversity
- microorganisms
- needs
- organism
- exist
- habitats
- land
- living things

Unit Notes:

Science and Engineering Practices

- **Planning and Carrying Out Investigations:** Plan and conduct an investigation collaboratively to produce data to serve as the basis for evidence to answer a question.
- **Developing and Using Models:** Develop a simple model based on evidence to represent a proposed object or tool.
- **Planning and Carrying Out Investigations:** Make observations (firsthand or from media) to collect data which can be used to make comparisons.

Disciplinary Core Ideas

- Plants depend on water and light to grow.
- Plants depend on animals for pollination or to move their seeds around.
- There are many different kinds of living things in any area, and they exist in different places on land and in water.

Crosscutting Concepts

- **Cause and Effect:** Events have causes that generate observable patterns.
- **Structure and Function:** The shape and stability of structures of natural and designed

- objects are related to their function(s).
- Patterns: Patterns in the natural world can be observed, used to describe phenomena, and used as evidence.

STANDARDS: STANDARDS

State: Pennsylvania STEELS K-12 - Science (2023)

- 3.1.2.A (Advanced) Plan and conduct an investigation to determine if plants need sunlight and water to grow.
- 3.1.2.B (Advanced) Develop a simple model that mimics the function of an animal in dispersing seeds or pollinating plants.
- 3.1.2.C (Advanced) Make observations of plants and animals to compare the diversity of life in different habitats.

Topic: How Plants Grow & Reproduce

Description:

Plants depend on water and light to grow. Plants depend on animals for pollination or to move their seeds around.

Student Learning Objectives:

1. The student will plan and conduct an investigation to determine if plants need sunlight and water to grow.
2. The student will develop a simple model that mimics the function of an animal in dispersing seeds or pollinating plants.

Essential Questions:

- How do organisms interact with the living and nonliving environments to obtain matter and energy?

Big Ideas:

- Organisms grow, reproduce, and perpetuate their species by obtaining necessary resources through interdependent relationships with other organisms and the physical environment.

Materials:

McGraw Hill Wonders Unit 6 Week 1: vocab and stories

Seeds, ziplock bags, paper towels

students will model seed dispersion - velcro strips, cotton balls, birdseed, pipe cleaners, googly eyes, glue, construction paper, toilet paper rolls, paper plates, bulletin board paper or outdoor space

Key Terminology & Definitions:

- environment
- survive
- organism
- species
- minerals
- soil
- sunlight
- water

Notes:

Science and Engineering Practices

- Planning and Carrying Out Investigations: Plan and conduct an investigation collaboratively to produce data to serve as the basis for evidence to answer a question.
- Developing and Using Models: Develop a simple model based on evidence to represent a proposed object or tool.

Crosscutting Concepts

- Cause and Effect: Events have causes that generate observable patterns.

- Structure and Function: The shape and stability of structures of natural and designed objects are related to their function(s).

STANDARDS

State: Pennsylvania STEELS K-12 - Science (2023)

- 3.1.2.A (Advanced) Plan and conduct an investigation to determine if plants need sunlight and water to grow.
- 3.1.2.B (Advanced) Develop a simple model that mimics the function of an animal in dispersing seeds or pollinating plants.

Topic: Observing Plants & Animals

Description:

Students will learn that there are many different kinds of living things in any area, and they exist in different places on land and in water.

Student Learning Objectives:

1. Make observations of plants and animals to compare the diversity of life in different habitats.
2. Explain ways that places differ in their physical characteristics, their meaning, and their value and/or importance.
3. Compare the natural world and human-made world.

Essential Questions:

- What is biodiversity, how do humans affect it, and how does it affect humans?

Big Ideas:

- Biodiversity—the multiplicity of genes, species, and ecosystems—provides humans with renewable resources, such as food, medicines, and clean water.

Materials:

McGraw Hill Reading Wonders Unit 2 Week 3 Stories and Vocabulary, Unit 4 Week 1 stories and vocabulary

Key Terminology & Definitions:

- biodiversity
- microorganisms
- needs
- organism
- survive
- exist
- habitats
- land
- living things
- water

Notes:

Science and Engineering Practices

- Planning and Carrying Out Investigations: Make observations (firsthand or from media) to collect data which can be used to make comparisons.

Crosscutting Concepts

- Patterns: Patterns in the natural world can be observed, used to describe phenomena, and used as evidence.

STANDARDS

State: Pennsylvania STEELS K-12 - Science (2023)

- 3.1.2.C (Advanced) Make observations of plants and animals to compare the diversity of life in different habitats.
- 3.4.K-2.C (Advanced) Explain ways that places differ in their physical characteristics, their meaning, and their value and/or importance.
- 3.5.K-2.BB (Advanced) Compare the natural world and human-made world.

Topic: Beliefs about Nature

Description: Examine how people from different cultures and communities, including one's own, interact and express their beliefs about nature.

Student Learning Objectives: Students will examine how people from different cultures and communities, including one's own, interact and express their beliefs about nature.

Essential Questions: How are kids around the world different?
How can we understand nature?
What excites us about nature?

Big Ideas: Emphasis is on how students' interactions and beliefs about nature compare to someone living in a different community. Emphasis is not on judging anyone's interactions or beliefs about nature.

Materials: McGraw Hill Reading Wonders: Unit 4 - Stories from weeks 3, 4 and 5

Notes: Crosscutting Concepts

- Patterns: Patterns in the natural world can be observed, used to describe phenomena, and used as evidence.
- Cause and Effect: Events have causes that generate observable patterns.

STANDARDS

State: Pennsylvania STEELS K-12 - Science (2023)

3.4.K-2.B (Advanced) Examine how people from different cultures and communities, including one's own, interact and express their beliefs about nature.

Topic:

Unit: Earth Science

Unit

Description:

- Our Changing Earth
- Movement of Earth's Plates
- Earth's Water

Unit Essential Questions:

- How do people reconstruct and date events in Earth's planetary history?
- How do Earth's major systems interact?
- Why do the continents move, and what causes earthquakes and volcanoes?
- How do the properties and movements of water shape Earth's surface and affect its systems?

Unit Big Ideas:

- Earth scientists use the structure, sequence, and properties of rocks, sediments, and fossils, as well as the locations of current and past ocean basins, lakes, and rivers, to reconstruct events in Earth's planetary history.
- Earth is a complex system of interacting subsystems: the geosphere, hydrosphere, atmosphere, and biosphere.
- Plate tectonics is the unifying theory that explains the past and current movements of the rocks at Earth's surface and provides a coherent account of its geological history.
- Earth is often called the water planet because of the abundance of liquid water on its surface and because water's unique combination of physical and chemical properties is central to Earth's dynamics.

Unit Key Terminology & Definitions:

- erosion
- weathering
- Earth
- materials
- landform
- geographic
- geologic
- geological
- map
- Pennsylvania features
- accumulation

- condensation
- Earth
- evaporation
- groundwater
- lake
- landscape
- liquid
- moon
- ocean
- planet
- pond
- precipitation
- river
- solid/ice
- types of clouds
- vapor/gas
- community
- energy
- resources
- transportation

Unit Notes:

Science and Engineering Practices

- Constructing Explanations and Designing Solutions:
 1. Make observations from several sources to construct an evidence-based account for natural phenomena.
 2. Compare multiple solutions to a problem.
- Developing and Using Models: Develop a model to represent patterns in the natural world.
- Obtaining, Evaluating, and Communicating Information: 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.

Disciplinary Core Ideas

- Some events happen very quickly; others occur very slowly, over a time period much longer than one can observe.
- Wind and water can change the shape of the land.
- Maps show where things are located. One can map the shapes and kinds of land and water in any area.
- Water is found in the ocean, rivers, lakes, and ponds. Water exists as solid ice and in liquid form.

Crosscutting Concepts

- Stability and Change: Things may change slowly or rapidly.
- Patterns: Patterns in the natural world can be observed.

STANDARDS: STANDARDS

State: Pennsylvania STEELS K-12 - Science (2023)

- [3.3.2.A \(Advanced\)](#) Use information from several sources to provide evidence that Earth events can occur quickly or slowly.
- [3.3.2.B \(Advanced\)](#) Compare multiple solutions designed to slow or prevent wind or water from changing the shape of the land.
- [3.3.2.C \(Advanced\)](#) Develop a model to represent the shapes and kinds of land and bodies of water in an area.
- [3.3.2.D \(Advanced\)](#) Obtain information to identify where water is found on Earth and that it can be solid or liquid.
- [3.4.K-2.D \(Advanced\)](#) Plan and carry out an investigation to address an issue in the local environment and community.
- [3.5.K-2.V \(Advanced\)](#) Explain that materials are selected for use because they possess desirable properties and characteristics.

(* standards consolidated from Topic level)

Topic: Our Changing Earth

Description:

Disciplinary Core Ideas

- Some events happen very quickly; others occur very slowly, over a time period much longer than one can observe.
- Wind and water can change the shape of the land.
- Maps show where things are located. One can map the shapes and kinds of land and water in any area.
- Water is found in the ocean, rivers, lakes, and ponds. Water exists as solid ice and in liquid form.

Student Learning Objectives:

1. The student will use information from several sources to provide evidence that Earth events can occur quickly or slowly.
2. The student will compare multiple solutions designed to slow or prevent wind or water from changing the shape of the land.
3. Plan and carry out an investigation to address an issue in the local environment and community.
4. Explain that materials are selected for use because they possess desirable properties and characteristics.

Essential Questions:

- How do people reconstruct and date events in Earth's planetary history?
- How do Earth's major systems interact?

Big Ideas:

- Earth scientists use the structure, sequence, and properties of rocks, sediments, and fossils, as well as the locations of current and past ocean basins, lakes, and rivers, to reconstruct events in Earth's planetary history.
- Earth is a complex system of interacting subsystems: the geosphere, hydrosphere, atmosphere, and biosphere.

Materials:

McGraw Hill Reading Wonders: Unit 4 Week 2 One Fish story only (erosion) and vocabulary

Cookie erosion investigation (eye droppers, tooth picks, straws, paper towels, cookies, recording sheet), sand/big aluminum foil baking pan, containers for water to demonstrate sand erosion, blocks, rocks, pebbles, popsicle sticks

Key Terminology & Definitions:

- erosion
- weathering
- Earth
- materials
- landform
- geographic
- geologic
- geological
- map
- Pennsylvania features
- accumulation
- condensation
- Earth
- evaporation
- groundwater
- lake
- landscape
- liquid
- moon
- ocean
- planet
- pond
- precipitation
- river
- solid/ice
- types of clouds
- vapor/gas

Notes:

Science and Engineering Practices

- Constructing Explanations and Designing Solutions:

1. Make observations from several sources to construct an evidence-based account for natural phenomena.
2. Compare multiple solutions to a problem.

Crosscutting Concepts

- Stability and Change: Things may change slowly or rapidly.

STANDARDS

State: Pennsylvania STEELS K-12 - Science (2023)

- 3.3.2.A (Advanced) Use information from several sources to provide evidence that Earth events can occur quickly or slowly.
- 3.3.2.B (Advanced) Compare multiple solutions designed to slow or prevent wind or water from changing the shape of the land.
- 3.4.K-2.D (Advanced) Plan and carry out an investigation to address an issue in the local environment and community.
- 3.5.K-2.V (Advanced) Explain that materials are selected for use because they possess desirable properties and characteristics.

Topic: Movement of Earth's Plates

Description:

Disciplinary Core Idea

- Maps show where things are located. One can map the shapes and kinds of land and water in any area.

Student Learning Objectives:

1. The student will develop a model to represent the shapes and kinds of land and bodies of water in an area.

Essential Questions:

- Why do the continents move, and what causes earthquakes and volcanoes?

Big Ideas:

- Plate tectonics is the unifying theory that explains the past and current movements of the rocks at Earth's surface and provides a coherent account of its geological history.

Materials:

McGraw Hill Reading Wonders Unit 4 Week 2 - 2 Fish story only (Volcanoes), and Earthquakes leveled readers

Baking Soda, Vinegar, [Volcano Model](#)

Alaska Map Making Activity - Unit 2 Week 1 (sled dogs) or Unit 4 Week 1 (Alaska)

Key Terminology & Definitions:

- community
- energy
- materials
- resources
- transportation

Notes:

Science and Engineering Practices

- Developing and Using Models: Develop a model to represent patterns in the natural world.

Crosscutting Concepts

- Patterns: Patterns in the natural world can be observed.

STANDARDS

State: Pennsylvania STEELS K-12 - Science (2023)

- 3.3.2.C (Advanced) Develop a model to represent the shapes and kinds of land and bodies of water in an area.

Topic: Earth's Water

Description:

Disciplinary Core Ideas

Water is found in the ocean, rivers, lakes, and ponds. Water exists as solid ice and in liquid form.

Student Learning Objectives:

1. Students will obtain information to identify where water is found on Earth and that it can be solid or liquid.

Essential Questions:

- How do the properties and movements of water shape Earth's surface and affect its systems?

Big Ideas:

- Earth is often called the water planet because of the abundance of liquid water on its surface and because water's unique combination of physical and chemical properties is central to Earth's dynamics.

Materials:

McGraw Hill Reading Wonders - Unit 4 Week 1 (Alaska)

Alaska for Kids Video:

<https://www.youtube.com/watch?v=5782rSMO5Ns>

Key Terminology & Definitions:

- ocean
- planet
- pond
- precipitation
- river
- solid/ice
- types of clouds
- vapor/gas

Notes:

Science and Engineering Practices

- Obtaining, Evaluating, and Communicating Information: 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.

Crosscutting Concepts

- Patterns: Patterns in the natural world can be observed.

STANDARDS

State: Pennsylvania STEELS K-12 - Science (2023)

- 3.3.2.D (Advanced) Obtain information to identify where water is found on Earth and that it can be solid or liquid.

Unit: Physical Science

Unit

Description: In this unit, students will investigate and describe different materials based on their properties, like texture and color. They will test materials to see which ones work best for specific purposes. Students will also explore how objects made of small parts can be taken apart and put back together to make new objects. They will learn about the effects of heating and cooling on materials and use evidence to explain which changes can be reversed and which cannot. Through these activities, students will practice observation, analysis, and problem-solving skills.

Unit Essential**Questions:**

- How do particles combine to form the variety of matter one observes?
- How do substances combine or change?

Unit Big Ideas:

- All forms of matter exist as a result of the combination or rearrangement of atoms.
- The atoms of some substances combine or rearrange to form new substances that have different properties.

Unit Key**Terminology & Definitions:**

- classify
- describe
- gas
- liquid
- matter
- patterns
- solid
- weight
- color
- flexibility
- properties
- texture
- investigations
- argument
- boiling
- cause and effect
- evidence
- freezing
- melting
- reverse
- data
- functions
- test
- construct
- design
- engineer
- problem solving
- solutions
- construct
- design
- disassemble

Unit Notes:

Science and Engineering Practices

- **Planning and Carrying Out Investigations** Plan and conduct an investigation collaboratively to produce data to serve as the basis for evidence to answer a question.
- **Analyzing and Interpreting Data** Analyze data from tests of an object or tool to determine if it works as intended.
- **Constructing Explanations and Designing Solutions** Make observations (firsthand or from media) to construct an evidence-based account for natural phenomena.
- **Construct an argument with evidence to support a claim.**

Disciplinary Core Ideas

- 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.
- Different properties are suited to different purposes.
- A great variety of objects can be built up from a small set of pieces
- Heating or cooling a substance may cause changes that can be observed. Sometimes these changes are reversible, and sometimes they are not.

Crosscutting Concepts

- **Patterns:** Patterns in the natural and human designed world can be observed.
- **Cause and Effect:** Simple tests can be designed to gather evidence to support or refute student ideas about causes.
- **Energy and Matter:** Objects may break into smaller pieces and be put together into larger pieces or change shapes.
- **Cause and Effect:** Events have causes that generate observable patterns.

STANDARDS: STANDARDS

State: Pennsylvania STEELS K-12 - Science (2023)

[3.2.2.A \(Advanced\)](#) Plan and conduct an investigation to describe and classify

- different kinds of materials by their observable properties.
- 3.2.2.B (Advanced) Analyze data obtained from testing different materials to determine which materials have the properties that are best suited for an intended purpose.
- 3.2.2.C (Advanced) 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.
- 3.2.2.D (Advanced) Construct an argument with evidence that some changes caused by heating or cooling can be reversed and some cannot.

Topic: Properties of Matter

Description:

Disciplinary Core Ideas

- 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.
- Different properties are suited to different purposes.
- A great variety of objects can be built up from a small set of pieces

Student Learning Objectives:

- Students will plan and conduct an investigation to describe and classify different kinds of materials by their observable properties.
- Students will analyze data obtained from testing different materials to determine which materials have the properties that are best suited for an intended purpose.
- Students will 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.
- Students will describe qualities of everyday products.
- Students will analyze how things work.
- Students will discuss that all designs have different characteristics that can be described.
- Students will apply skills necessary for making in design.
- Students will apply design concepts, principles, and processes through play and exploration.

Essential Questions:

How do particles combine to form the variety of matter one observes?

Big Ideas:

- All forms of matter exist as a result of the combination or rearrangement of atoms.

Materials:

McGraw Hill Reading Wonders: Unit 2 Week 1 (Sled Dog STEM) Unit 3 Week 1 (Magnet exploration day)

Sled Dog STEM activity, Other second grade STEM lessons

Ritz Cracker/Oreo Venn Diagram

Exploration activities using unifix cubes, mini solo cups, blocks, etc...where students are building and disassembling/rebuilding new structures

STEM cart exploration day

Key Terminology & Definitions:

- classify
- describe
- gas
- liquid
- matter
- patterns
- solid
- weight
- color
- flexibility
- properties
- texture
- investigations
- argument
- boiling

- cause and effect
- evidence
- freezing
- melting
- reverse
- data
- functions
- test
- construct
- design
- engineer
- problem solving
- solutions

Notes:

Science and Engineering Practices

- Planning and Carrying Out Investigations Plan and conduct an investigation collaboratively to produce data to serve as the basis for evidence to answer a question.
- Analyzing and Interpreting Data Analyze data from tests of an object or tool to determine if it works as intended.
- Constructing Explanations and Designing Solutions Make observations (firsthand or from media) to construct an evidence-based account for natural phenomena.

Crosscutting Concepts

- Patterns: Patterns in the natural and human designed world can be observed.
- Cause and Effect: Simple tests can be designed to gather evidence to support or refute student ideas about causes.
- Energy and Matter: Objects may break into smaller pieces and be put together into larger pieces or change shapes.

STANDARDS

State: Pennsylvania STEELS K-12 - Science (2023)

- 3.2.2.A (Advanced) Plan and conduct an investigation to describe and classify different kinds of materials by their observable properties.
- 3.2.2.B (Advanced) Analyze data obtained from testing different materials to determine which materials have the properties that are best suited for an intended purpose.
- 3.2.2.C (Advanced) 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.
- 3.5.K-2.B (Advanced) Describe qualities of everyday products.
- 3.5.K-2.N (Advanced) Analyze how things work.
- 3.5.K-2.P (Advanced) Discuss that all designs have different characteristics that can be described.
- 3.5.K-2.Q (Advanced) Apply skills necessary for making in design.
- 3.5.K-2.S (Advanced) Apply design concepts, principles, and processes through play and exploration

Topic: Heating & Cooling

Description:

Disciplinary Core Ideas

- Heating or cooling a substance may cause changes that can be observed. Sometimes these changes are reversible, and sometimes they are not.

Student

Learning

Objectives:

1. Students will construct an argument with evidence that some changes caused by heating or cooling can be reversed and some cannot.

Essential Questions:

How do substances combine or change (react) to make new substances? How does one characterize and explain these reactions and make predictions about them?

Big Ideas:

The atoms of some substances combine or rearrange to form new substances that have different properties.

Materials:

McGraw Hill Reading Wonders Unit 4 Week 2 (volcanoes story referring to solid, liquid, gas...an example of the cooling of lava into a hard rock can not be reversed)

[Link to written response for Volcanoes unit - construct an argument with evidence.](#)

Possible Examples of activities to demonstrate reversible changes:

Ice cube tray, ice melting and changing to water, refreezing

Blow up a balloon in the classroom during the winter, take it out with you at recess (it will shrink in the cold air), bring it back in and it will expand again (due to the warm air)

Possible Examples of activities to demonstrate irreversible changes:

St. Patrick's day skittles rainbow activity

cookie dough into cookies (change due to heat)

popcorn kernels into popcorn (change due to heat)

Key Terminology & Definitions:

- construct
- design
- disassemble
- engineer
- problem solving
- solutions

Notes:

Science and Engineering Practices

- Construct an argument with evidence to support a claim.

Crosscutting Concepts

- Cause and Effect: Events have causes that generate observable patterns.

STANDARDS

State: Pennsylvania STEELS K-12 - Science (2023)

[3.2.2.D \(Advanced\)](#) Construct an argument with evidence that some changes caused by heating or cooling can be reversed and some cannot.

Unit: Technology

Unit

Description: In this unit, students will learn how technology helps us with everyday tasks and explore both the positive and negative effects it can have. They will discuss how technology connects to human experiences and changes the way we live and work. Students will also design their own technologies that could make daily life better. By using skills from technology and engineering, they will solve problems and improve their understanding of how technology works. Finally, students will look at how technology has changed the world throughout history and how it continues to shape our lives today.

Unit Big Ideas:

1. Students will explain ways that technology helps with everyday tasks.
2. Students will illustrate helpful and harmful effects of technology.
3. Students will draw connections between technology and human experience.
4. Students will design new technologies that could improve their daily lives.
5. Students will apply concepts and skills from technology and engineering activities that reinforce concepts and skills across multiple areas.
6. Students will discuss how the way people live and work has changed throughout history because of technology.

Unit Notes: These standards will be covered through Library Instruction.

STANDARDS: STANDARDS

State: Pennsylvania STEELS K-12 - Science (2023)

[3.5.K-2.C \(Advanced\)](#) Explain ways that technology helps with everyday tasks.

3.5.K-2.E (Advanced)	Illustrate helpful and harmful effects of technology.
3.5.K-2.J (Advanced)	Design new technologies that could improve their daily lives.
3.5.K-2.R (Advanced)	Draw connections between technology and human experience
3.5.K-2.W (Advanced)	Apply concepts and skills from technology and engineering activities that reinforce concepts and skills across multiple areas.
3.5.K-2.Y (Advanced)	Discuss how the way people live and work has changed throughout history because of technology.

Topic: Technology

Student

Learning

Objectives:

1. Students will explain ways that technology helps with everyday tasks.
2. Students will illustrate helpful and harmful effects of technology.
3. Students will draw connections between technology and human experience.
4. Students will design new technologies that could improve their daily lives.
5. Students will apply concepts and skills from technology and engineering activities that reinforce concepts and skills across multiple areas.
6. Students will discuss how the way people live and work has changed throughout history because of technology.

Notes: These standards will be covered through Library Instruction.

STANDARDS

State: Pennsylvania STEELS K-12 - Science (2023)

3.5.K-2.C (Advanced)	Explain ways that technology helps with everyday tasks.
3.5.K-2.E (Advanced)	Illustrate helpful and harmful effects of technology.
3.5.K-2.J (Advanced)	Design new technologies that could improve their daily lives.
3.5.K-2.R (Advanced)	Draw connections between technology and human experience
3.5.K-2.W (Advanced)	Apply concepts and skills from technology and engineering activities that reinforce concepts and skills across multiple areas.
3.5.K-2.Y (Advanced)	Discuss how the way people live and work has changed throughout history because of technology.

Curriculum Map: Science Grade 3 (2023)

Course: Elem Science 3 Sub-topic: General

Grade(s): None specified

Course

Description: This is the third grade science course that incorporates the STEELS standards. The content of this course will include units on Weather and Climate, Forces and Interactions, and Survival and Evolution of Organisms based on general scientific principles in Earth and Space sciences, Physical Science, and Life Science, as well as Technology and Engineering. This course will be designed to engage students in strengthening their studying skills as well as their confidence in skills necessary to be successful in future scientific exploration.

Course

**Textbooks,
Workbooks,
Materials
Citations:**

Unit: Weather and Climate

Unit

Description:

- In this 3rd-grade unit on Weather and Climate and Natural Hazards, students will learn how weather changes daily and how it affects our lives. They will observe weather patterns, such as temperature, wind, and precipitation, and track these changes over time. Students will explore the difference between weather and climate, understanding that climate refers to long-term weather patterns. They will also study natural hazards like tornadoes, hurricanes, and wildfires, learning about their causes, effects, and how people can prepare for them.

Unit Essential

Questions:

- What regulates weather and climate?
- How do natural hazards affect individuals and societies?

Unit Big Ideas:

- Weather and climate are shaped by complex interactions involving sunlight, the ocean, the atmosphere, ice, landforms, and living things.
- Natural processes can cause sudden or gradual changes to Earth's system, some of which may adversely affect humans.

Unit Key

Terminology & Definitions: Weather conditions(average temperature, precipitation, and wind direction), climates, regions, seasons, weather-related hazard(Heavy rain, snow, strong wind, lightning)

Unit Notes:

[Standards Links](#)

STANDARDS: STANDARDS

State: Pennsylvania STEELS K-12 - Science (2023)

- [3.3.3.A \(Advanced\)](#) Represent data in tables and graphical displays to describe typical weather conditions expected during a particular season.
- [3.3.3.B \(Advanced\)](#) Obtain and combine information to describe climates in different regions of the world.
- [3.3.3.C \(Advanced\)](#) Make a claim supported by evidence about the merit of a design solution that reduces the impacts of a weather-related hazard.

Topic: States of Matter

Description: Students will obtain and combine information that water can change from liquid to gas, but that it is always made up of tiny drops. Clouds are made of water that has evaporated.

Big Ideas:

- Weather and climate are shaped by complex interactions involving sunlight, the ocean,

the atmosphere, ice, landforms, and living things.

STANDARDS

State: Pennsylvania STEELS K-12 - Science (2023)

3.3.3.A (Advanced) Represent data in tables and graphical displays to describe typical weather conditions expected during a particular season.

Topic: Weather Patterns

Description: Students obtain and combine information to identify weather patterns that can be used to make predictions.

Big Ideas:

- Weather and climate are shaped by complex interactions involving sunlight, the ocean, the atmosphere, ice, landforms, and living things.

STANDARDS

State: Pennsylvania STEELS K-12 - Science (2023)

3.3.3.A (Advanced) Represent data in tables and graphical displays to describe typical weather conditions expected during a particular season.

3.3.3.B (Advanced) Obtain and combine information to describe climates in different regions of the world.

Topic: Weather Predictions

Description: Students will observe and collect weather data to make predictions about what kind of weather might happen next. Example: Observe clouds to predict future weather.

Big Ideas:

- Weather and climate are shaped by complex interactions involving sunlight, the ocean, the atmosphere, ice, landforms, and living things.

STANDARDS

State: Pennsylvania STEELS K-12 - Science (2023)

3.3.3.A (Advanced) Represent data in tables and graphical displays to describe typical weather conditions expected during a particular season.

3.3.3.B (Advanced) Obtain and combine information to describe climates in different regions of the world.

Topic: Natural Hazards

Description: Students will develop solutions that reduce the impact of natural hazards. Example: Students will design satellites as a solution to reduce the impact of natural hazards.

Big Ideas:

- Natural processes can cause sudden or gradual changes to Earth's system, some of which may adversely affect humans.

STANDARDS

State: Pennsylvania STEELS K-12 - Science (2023)

3.3.3.C (Advanced) Make a claim supported by evidence about the merit of a design solution that reduces the impacts of a weather-related hazard.

Unit: Forces and Interactions

Unit Description: In this unit, students will explore motion, forces, and magnetism through hands-on investigations and problem-solving activities. They will observe and measure an object's motion to identify patterns and predict future movement. Students will plan and conduct experiments to demonstrate the effects of balanced and unbalanced forces on motion and investigate the cause-and-effect relationships in magnetic and electric interactions between objects that are not in direct contact. Finally, students will apply their understanding by defining and solving a simple design problem using scientific principles of magnetism. This unit fosters critical thinking, inquiry, and real-world application of physical science concepts.

Unit Essential Questions:

- How can one predict an object's continued motion, changes in motion, or stability?
- What underlying forces explain the variety of interactions observed?

Unit Big Ideas:

- A change in motion of interacting objects can be explained and predicted by forces.
- All forces between objects, regardless of size or direction, arise from only a few types of interactions.

Unit Key Terminology & Definitions:

Balanced forces, unbalanced forces, motion(starting, stopping, changing directions), patterns , electric interactions, magnetic interactions, magnet, magnetic force, design, solution, prediction, interaction, forces

Unit Notes: [Standards Links](#)

STANDARDS: STANDARDS

State: Pennsylvania STEELS K-12 - Science (2023)

- 3.2.3.A (Advanced) Make and communicate observations and/or measurements of an object's motion to provide evidence that a pattern can be used to predict future motion.
- 3.2.3.B (Advanced) Plan and conduct an investigation to provide evidence of the effects of balanced and unbalanced forces on the motion of an object.
- 3.2.3.C (Advanced) Ask questions to determine cause and effect relationships of electric or magnetic interactions between two objects not in contact with each other.
- 3.2.3.D (Advanced) Define a simple design problem that can be solved by applying scientific ideas about magnets.

Topic: Balanced and Unbalanced Forces

Description: Students will understand the affects of balanced and unbalanced forces on an object. Example: Tug a War

Essential Questions:

- How can force create motion?
- What is the effect of balanced and unbalanced forces on an object?

Big Ideas:

- - A change in motion of interacting objects can be explained and predicted by forces.

Key Terminology & Definitions:

Forces
balanced
unbalanced
motion

Notes: Builds on 3.2.K.A and 3.2.K.B

STANDARDS

State: Pennsylvania STEELS K-12 - Science (2023)

- 3.2.3.A (Advanced) Make and communicate observations and/or measurements of an object's motion to provide evidence that a pattern can be used to predict future motion.
- 3.2.3.B (Advanced) Plan and conduct an investigation to provide evidence of the effects of balanced and unbalanced forces on the motion of an object.

Topic: Predicting Motion

Description: Students will provide evidence that a pattern will be used to predict future motion. Example: A flying trapeze

Essential Questions: Observe and measure an object's motion to provide evidence of a pattern.
How can a pattern be used to predict future motion?

Big Ideas:

- A change in motion of interacting objects can be explained and predicted by forces.

STANDARDS

State: Pennsylvania STEELS K-12 - Science (2023)

- 3.2.3.A (Advanced) Make and communicate observations and/or measurements of an object's motion to provide evidence that a pattern can be used to predict future motion.
- 3.2.3.B (Advanced) Plan and conduct an investigation to provide evidence of the effects of balanced and unbalanced forces on the motion of an object.

Topic: Magnetic Force

Description: Students will learn that objects can be put into motion without contact. Example: Magnets can create motion.

Essential Questions: What questions can I ask to figure out how magnets make objects move without touching each other?
How do magnets attract and repel?
How can a magnetic field show magnetic force lines at the poles?

Big Ideas:

- All forces between objects, regardless of size or direction, arise from only a few types of interactions.

Key

Terminology & Definitions: magnetic field

STANDARDS

State: Pennsylvania STEELS K-12 - Science (2023)

- 3.2.3.C (Advanced) Ask questions to determine cause and effect relationships of electric or magnetic interactions between two objects not in contact with each other.

Topic: Magnetic Design Solution

Description: Students will define a simple design problem that can be solved using magnets. Example: Magnetic door locks.

Essential Questions: What simple design problem can be solved using ideas about magnets?
How can resources, tools, and machines be used safely in the design process to extend human capabilities and get a job done.
What would happen if you combine simple technologies?

Big Ideas:

- All forces between objects, regardless of size or direction, arise from only a few types of interactions.

STANDARDS

State: Pennsylvania STEELS K-12 - Science (2023)

- 3.2.3.D (Advanced) Define a simple design problem that can be solved by applying scientific ideas about magnets.

Unit: Heridity, Survival, and Selection**Unit****Description:**

- In this unit, students will explore how plants and animals adapt and survive in their environments. They will analyze data to understand how traits are inherited from parents, recognize variations within species, and use evidence to explain how environmental factors influence these traits. Students will construct arguments demonstrating how animals form groups to increase their chances of survival and how variations in characteristics provide advantages in survival, reproduction, and finding mates. Additionally, students will investigate how specific habitats support some organisms better than others, fostering an understanding of the relationships between traits, environments, and survival.

Unit Essential**Questions:**

- How are the characteristics of of generation related to the previous generation?
- How does genetic variation among organisms affect survival and preproduction?
- How does the environment influence populations of organisms over multiple generations?
- How do organisms interact in groups so as to benefit individuals?
- Why do individuals of the same species vary in how they look, function, and behave?

Unit Big Ideas:

- Offspring resemble, but are not identical to, their parents due to traits being passed from one generation to the next via genes.
- In an particular environment individuals with particular traits may be more likely than others to survive and produce offspring.
- When the environment changes, some individuals in a population may have traits that provide a reproductive advantage which over many generations can change the make-up of a population.
- Many species, live in groups which can increase the chances of survival for individuals and their relatives.
- Variation among individuals of the same species can be explained by both genetic and environmental factors.

Unit Key**Terminology & Definitions:**

inherited (traits or characteristics transferred from parent to offspring), variations (genetic and environmental), habitat, survival, organism (a living thing that carries on the activities of life), microscopic organism, reproduce, survive, traits, inheritance

Unit Notes:

[Standards Links](#)

STANDARDS: STANDARDS

State: Pennsylvania STEELS K-12 - Science (2023)

- 3.1.3.B (Advanced) Construct an argument that some animals form groups that help members survive.
- 3.1.3C (Advanced) 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.
- 3.1.3.D (Advanced) Use evidence to support the explanation that traits can be influenced by the environment.
- 3.1.3.F (Advanced) 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.
- 3.1.3.G (Advanced) 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.

Topic: Trait Variation and Inheritance**Description:**

Students will learn that plants and animals have traits inherited from parents and these traits

can vary in a group of similar organisms.

Big Ideas:

- Offspring resemble, but are not identical to, their parents do to traits being passed from one generation to the next via genes.

STANDARDS

State: Pennsylvania STEELS K-12 - Science (2023)

- [3.1.3C \(Advanced\)](#) 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.

Topic: Natural Selection and Survival

Description: Students will learn that sometimes the differences in characteristics between individuals of the same species provide advantages in surviving, finding mates, and reproducing.

Big Ideas:

- In an particular environment individuals with particular traits may be more likely than others to survive and produce offspring.

STANDARDS

State: Pennsylvania STEELS K-12 - Science (2023)

- [3.1.3C \(Advanced\)](#) 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.
- [3.1.3.F \(Advanced\)](#) 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.

Topic: Animal Groups and Survival

Description: Students will learn that being part of a group helps animals survive.

Big Ideas:

- Many species, live in groups which can increase the chances of survival for individuals and their relatives.

STANDARDS

State: Pennsylvania STEELS K-12 - Science (2023)

- [3.1.3.B \(Advanced\)](#) Construct an argument that some animals form groups that help members survive.

Topic: Environmental Change Solution

Description: Students learn that traits can be influenced by the environment. Example: A normally tall plant without enough water will be stunted.

Big Ideas:

- Variation among individuals of the same species can be explained by both genetic and environmental factors.

STANDARDS

State: Pennsylvania STEELS K-12 - Science (2023)

- [3.1.3.D \(Advanced\)](#) Use evidence to support the explanation that traits can be influenced by the environment.

Topic: Adaptations

Description: Students will learn that for any particular environment, some kinds of organisms survive well, some survive less well, some cannot survive at all.

Big Ideas:

- When the environment changes, some individuals in a population may have traits that provide a reproductive advantage which over many generations can change the make-up of a population.

STANDARDS

- 3.1.3.G (Advanced) 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.

Unit: Life Cycles

Unit

Description: In this unit, third-grade students will explore the life cycles of organisms and the impact of environmental changes on living things. Students will learn that all organisms—despite having unique life cycles—share common stages: birth, growth, reproduction, and death. They will also investigate how the environment affects plants and animals, leading to changes in the types of species that can survive in specific habitats. Students will gain an understanding of how life cycles and environmental changes influence ecosystems.

Unit Essential

- Questions:**
- How do the structures of organisms enable life's functions?
 - What is biodiversity, how do humans affect it, and how does it affect humans?

Unit Big Ideas:

- Organisms have characteristic, structures, functions, and behaviors that allow them to grow, reproduce, and die.
- Humans depend on biodiversity, the variety of species and ecosystems, for resources and human actions can impact the diversity of species.

Unit Key

Terminology & Definitions: Organism (any living things usually having 5 basic needs: air, water, food, energy, and a place to live.)

Life cycle (stages or changes a organism goes through in its life: birth, growth, reproducing, death)

Reproduction (limited to plant reproduction)

System (a group of related things or a set that work together to form a whole)

Biodiversity (all the different kinds of life you find in one area)

Diverse

Changes

Unit Notes:

[Standards Links](#)

STANDARDS: STANDARDS

State: Pennsylvania STEELS K-12 - Science (2023)

3.1.3.A (Advanced) Develop models to describe that organisms have unique and diverse life cycles but all have in common birth, growth, reproduction, and death.

3.1.3.H (Advanced) Make a claim supported by evidence 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.

Topic: Structures of Organisms

Description: Students will learn that plants and animals have life cycles with common patterns.

Big Ideas: Organisms have characteristic, structures, functions, and behaviors that allow them to grow, reproduce, and die.

Topic: Biodiversity

Description: Students create solutions for plants and animals when problems are caused by environmental changes. Example: City of the future

Big Ideas: Humans depend on biodiversity, the variety of species and ecosystems, for resources and human actions can impact the diversity of species.

Unit: Fossils and Changing Environment

Unit Description: In this unit, students will **analyze and interpret data from fossils** to uncover evidence about organisms that lived long ago and the environments they inhabited. Through hands-on investigations, students will examine various types of fossils—such as imprints, preserved remains, and trace fossils—and explore what these clues reveal about Earth's history.

Unit Essential Questions:

- What do plants and animals that are no longer found show us about the nature of their environment long ago.

Unit Big Ideas:

- Students who demonstrate understanding can analyze and interpret data from fossils to provide evidence of the organisms and the environments in which they lived long ago.

Unit Key Terminology & Definitions: fossil (remains or traces from plants or animals that lived long ago), organism, environment

Unit Notes: [Standards Links](#)

STANDARDS: STANDARDS
State: Pennsylvania STEELS K-12 - Science (2023)
[3.1.3.E \(Advanced\)](#) Analyze and interpret data from fossils to provide evidence of the organisms and the environments in which they lived long ago.

This Curriculum Map Unit has no Topics to display

Curriculum Map: Science Grade 4 (2023)

Course: Elem Science 4 Sub-topic: General

Grade(s): None specified

Course Description: This is 4th grade science course that incorporates the STEELS Standards. The content of this course will include units on Energy, Life: Structures and Senses, Earth: Features and Processes, and Waves and Information based on general scientific principles in Earth and Space sciences, Physical Science, and Life Science, as well as Technology and Engineering. This course will be designed to engage students in strengthening their study skills as well as their confidence in skills necessary to be successful in future scientific exploration.

Unit: 1- Life: Structures and Senses

Unit Description: The students will learn that plants and animals have both internal and external structures that serve various functions in growth, survival, behavior, and reproduction. 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.

Unit Essential

Questions: How do plants' internal and external structures function to support survival, growth, behavior, and reproduction?

How do animals' internal and external structures function to support survival, growth, behavior, and reproduction?

What are different ways animals receive, process, and respond to information?

How can learning about the natural world help solve human design challenges?

Unit Big Ideas: Structure and Function- Organisms have characteristic structures, functions, and behaviors that allow them to grow, reproduce, and die.

Information Processing-Animals have external and internal sensory receptors that detect different kinds of information that then get processed by the brain.

Unit Key

Terminology & Definitions: internal structures

external structures

behavior

reproduction

senses

process

Unit Notes:

[Standards Link](#)

STANDARDS: STANDARDS

State: Pennsylvania STEELS K-12 - Science (2023)

- 3.1.4.A (Advanced) Construct an argument that plants and animals have internal and external structures that function to support survival, growth, behavior, and reproduction.
- 3.1.4.B (Advanced) 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.
- 3.2.4.F (Advanced) Develop a model to describe that light reflecting from objects and entering the eye allows objects to be seen.
- 3.5.3-5.GG (Advanced) Describe the unique relationship between science and technology, and how the natural world can contribute to the human-made world to foster innovation.

Topic: Plants

Student

Learning

Objectives:

The students will construct an argument that plants have internal and external structures that function to support survival, growth, behavior, and reproduction.

The students will describe the unique relationship between science and technology, and how the natural world can contribute to the human-made world to foster innovation (using plants or animals).

Essential

Questions:

How do plants' internal and external structures function to support survival, growth, behavior, and reproduction?

*How do plants' internal and external structures function to support survival?

*How do plants' internal and external structures function to support growth?

*How do plants' internal and external structures function to support behavior?

*How do plants' internal and external structures function to support reproduction?

How can learning about the natural world help solve human design challenges?

Assessment Task: Describe the unique relationship between science and technology, and how the natural world can contribute to the human-made world to foster innovation."

Big Ideas:

Organisms have characteristic structures, functions, and behaviors that allow them to grow reproduce, and die.

Topic: Animals

Student

Learning

Objectives:

The students will construct an argument that animal have internal and external structures that function to support survival, growth, behavior, and reproduction.

The students will use a model to describe that animals receive different types of information through their senses, process the information through their brain, and respond to the information in different ways.

The students will describe the unique relationship between science and technology, and how the natural world can contribute to the human-made world to foster innovation (using plants or animals).

Essential

Questions:

What are different ways animals receive, process, and respond to information?

*What are different ways animals use their senses and surroundings to process and respond to their environment?

How can learning about the natural world help solve human design challenges?

Assessment Task: Describe the unique relationship between science and technology, and how the natural world can contribute to the human-made world to foster innovation."

Big Ideas:

The students will construct an argument that animals have internal and external structures that function to support survival, growth, behavior, and reproduction.

Animals have external and internal sensory receptors that detect different kinds of information that then gets processed by the brain.

Unit: 2 - Earth: Features and Processes

Unit

Description:

The students will learn that local, regional, and global patterns of rock formations reveal changes over time due to Earth's forces, such as earthquakes. The presence and location of certain fossil types indicate the order in which rock layers were formed. Rainfall helps shape the land and affects the types of living things found in a region. Water, ice, wind, living organisms, and gravity break rocks, solids, and sediments into smaller particles and move them around. Living things affect the characteristics of a region. The locations of mountains, ocean trenches, ocean floor structures, volcanoes, and earthquakes occur in patterns. Most earthquakes and volcanoes occur in bands that are often along the boundaries between continents and oceans. Major mountain chains form near their edges. Maps can help locate the different land and water feature areas of Earth. 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, others are not. A variety of hazards result from natural processes. Humans cannot eliminate the hazard but can take steps to reduce their impact.

Unit Essential Questions:

How do people reconstruct and date events in Earth's planetary history?

How and why is Earth constantly changing?

Why do the continents move, and what causes earthquakes and volcanoes?

How do Earth's surface processes and human activities affect each other?

How do humans depend on Earth's resources?

How do natural hazards affect individuals and societies?

Assessment Task: How do you influence your local community - graph of how class uses renewable vs nonrenewable resources

Unit Big Ideas:

The History of Planet Earth- We can infer Earth's planetary history by features we observe today.

Earth Materials and Systems- Changes we observe on Earth are the result of energy flowing and matter cycling between interconnected systems (the geosphere, hydrosphere, atmosphere, and biosphere).

Plate Tectonics and Large-Scale System Interactions-Plate tectonics explains the past and current movements and features of the rocks at Earth's surface.

Natural Resources - All materials, energy, and fuels that humans use are derived from natural sources, some of which are renewable over time and others are not.

Natural Hazards - Natural processes can cause sudden or gradual changes to Earth's systems, some of which may adversely affect humans.

Unit Key

Terminology & Definitions: rock formations

fossils

rock layers

landscape

weathering

erosion

vegetation

data

earth's features

energy

fuels

natural resources

environment

solutions

reduce

impacts

earth processes

natural hazard

tsunami

volcanic eruption

earthquake

Unit Notes:

[Standards Link](#)

STANDARDS: STANDARDS

State: Pennsylvania STEELS K-12 - Science (2023)

3.3.4.A (Advanced) Identify evidence from patterns in rock formations and fossils in rock layers to support an explanation for changes in a landscape over time.

3.3.4.B (Advanced) Make observations and/or measurements to provide evidence of the effects of weathering or the rate of erosion by water, ice, wind, or vegetation.

3.3.4.C (Advanced) Analyze and interpret data from maps to describe patterns of Earth's features.

3.3.4.E (Advanced) Generate and compare multiple solutions to reduce the impacts of natural Earth processes on humans.

3.5.3-5.K (Advanced) Judge technologies to determine the best one to use to complete a given task or meet a need.

3.5.3-5.W (Advanced) Describe the properties of different materials.

Topic: Earth's History and Systems

Student

Learning

Objectives:

The students will be able to identify evidence from patterns in rock formations and fossils in rock layers to support an explanation for changes in a landscape over time.

The students will make observations and/or measurements to provide evidence of the effects of weathering or the rate of erosion by water, ice, wind, or vegetation.

The students will be able to analyze and interpret data from maps to describe patterns of Earth's features.

Essential

Questions:

How do people reconstruct and date events in Earth's planetary history?

*How do the patterns in rock layers indicate changes in landscape over time?

How and why is Earth constantly changing?

*What systems are changing the Earth's physical features?

*Why will this process of change continue?

Why do the continents move?

*What causes the surface of the Earth to move?

What causes earthquakes and volcanoes?

*What causes earthquakes?

*What causes volcanoes?

Big Ideas:

We can infer Earth's planetary history by features we observe today.

Changes we observe on Earth are the result of energy flowing and matter cycling between interconnected systems (the geosphere, hydrosphere, atmosphere, and biosphere)

Plate tectonics explains the past and current movements and features of the rocks at Earth's surface.

Topic: Natural Resources and Hazards

Student

Learning

Objectives:

Students will be able to obtain and combine information to describe that energy and fuels are derived from natural resources and their uses affect the environment.

Students will be able to generate and compare multiple solutions to reduce the impacts of natural Earth processes on humans.

Students will examine information to assess the trade-offs of using a product or system.

Students will judge technologies to determine the best one to use to complete a given task or meet a need.

Students will describe the properties of different materials.

Students will construct an argument to support whether action is needed on a selected environmental issue and propose possible solutions.

Students will describe the helpful and harmful effects of technology.

Students will classify resources used to create technologies as either renewable or nonrenewable.

Students will explain why responsible use of technology requires sustainable management of resources.

Essential Questions:

How do Earth's surface processes and human activities affect each other?

*How does erosion and human activities affect each other?

*How do earthquakes and human activities affect each other?

*How do volcanoes and human activities affect each other?

How do humans depend on Earth's resources?

*What are some helpful and harmful effects of renewable and non-renewable resources and why is it important to be responsible with our use of these technologies??

How do natural hazards affect individuals and societies?

*How do natural hazards like earthquakes, floods, tsunamis, and volcanic eruptions affect individuals?

*How do natural hazards like earthquakes, floods, tsunamis, and volcanic eruptions affect a community?

*What steps can humans take to reduce the impact of natural hazards?

Big Ideas:

All materials, energy, and fuels that humans use are derived from natural sources, some of which are renewable over time and others are not.

Natural processes can cause sudden or gradual changes to Earth's systems, some of which may adversely affect humans.

Key Terminology & Definitions:

non-renewable (fossil fuels) - Nonrenewable resources are natural resources that cannot be replaced after they are used. This means that they exist in a fixed amount on Earth. Rock, minerals, metals, uranium, and fossil fuels such as petroleum, coal, and natural gas are all nonrenewable resources.

energy- Energy is the ability to do work. Work means moving an object by some distance. For instance, moving your hand requires energy. Energy can be classified as either potential (stored) energy or kinetic energy, which is the energy of movement.

local environment - the ecosystem where we live where living organisms interact in a specific way with its physical surroundings to survive. (Lancaster, Strasburg, Willow Street, the park where you play, your backyard, etc.)

larger local environment (larger - county/state) the BIGGER ecosystem where we live where living organisms interact in a specific way with its physical surroundings to survive. (Lancaster County, Pennsylvania, east coast, etc.)

Unit: 3 - Energy

Timeline: 5 Weeks

Unit Description: The students will learn that the faster a given object is moving, the more energy it possesses. Energy can be moved from place to place by moving objects or through sound, light, or electrical currents. 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.

Unit Essential Questions:

What is energy?

What is meant by conservation of energy?

How is energy transferred between objects or systems?

How are forces related to energy?

How do food and fuel provide energy?

If energy is conserved, why do people say it is produced or used?

Unit Big Ideas: Definition of Energy -Energy can be modeled as either motions of particles or as being stored in force fields.

Conservation of Energy and Energy Transfer - The total change of energy in any system is always equal to the total energy transferred into or out of the system.

Relationship Between Energy and Forces - Forces between objects can result in transfer of energy between these objects.

Energy in Chemical Processes and Everyday Life - Producing energy useful in everyday life means to convert some available energy into a desired form, which is then delivered to users.

Unit Key Terminology & Definitions:

evidence

construct

speed

energy

observations

transferred

sound energy

light energy

heat energy

electric currents

change of energy

collide

scientific ideas

design

refine

converts

Unit Notes:

[Standards Link](#)

STANDARDS: STANDARDS

State: Pennsylvania STEELS K-12 - Science (2023)

[3.3.4.D \(Advanced\)](#) Obtain and combine information to describe that energy and fuels are derived from natural resources and their uses affect

	the environment.
3.4.3-5.C (Advanced)	Examine ways you influence your local environment and community by collecting and displaying data.
3.4.3-5.E (Advanced)	Construct an argument to support whether action is needed on a selected environmental issue and propose possible solutions.
3.2.4.A (Advanced)	Use evidence to construct an explanation relating the speed of an object to the energy of that object.
3.2.4.B (Advanced)	Make and communicate observations to provide evidence that energy can be transferred from place to place by sound, light, heat, and electric currents.
3.2.4.C (Advanced)	Ask questions and predict outcomes about the changes in energy that occur when objects collide.
3.2.4.D (Advanced)	Apply scientific ideas to design, test, and refine a device that converts energy from one form to another.
3.5.3-5.B (Advanced)	Examine information to assess the trade-offs to using a product or system.
3.5.3-5.E (Advanced)	Explain why responsible use of technology requires sustainable management of resources.
3.5.3-5.F (Advanced)	Classify resources used to create technologies as either renewable or nonrenewable.
3.5.3-5.G (Advanced)	Describe the helpful and harmful effects of technology.
3.5.3-5.X (Advanced)	Explain how various relationships can exist between technology and engineering and other content areas.

Topic: A - Types of Energy

Student Learning Objectives: The students will use evidence to construct an explanation relating the speed of an object to the energy of that object.

Essential Questions: What is energy?

*How does the speed of an object relate to the energy of the object?

*What are different types of energy?

Big Ideas: Energy can be modeled as either motions of particles or as being stored in force fields.

Materials:

Key Terminology & Definitions:

Topic: B - Energy Transfer and Conversion

Student Learning Objectives: The students will make and communicate observations to provide evidence that energy can be transferred from place to place by sound, light, heat, and electric currents.

The students will ask questions and predict outcomes about changes in energy that occur when object collide.

The students will apply scientific ideas to design, test, and refine a device that converts energy from one form to another.

Students will explain how various relationships can exist between technology and engineering and other content areas?

Essential Questions: What is meant by conservation of energy?

How is energy transferred between objects or systems?

*How can energy be transferred from place to place by sound? heat? light? electric currents?

How are forces related to energy?

*What changes in energy occur when objects collide?

How do food and fuel provide energy?

*How does food provide energy for animals?

*How does fuel provide energy for machines?

If energy is conserved, why do people say it is produced or used?

Big Ideas:

The total change of energy in any system is always equal to the total energy transferred into or out of the system.

Forces between objects can result in transfer of energy between these objects.

Producing energy useful in everyday life means to convert some available energy into its desired form, which is then delivered to its user.

Materials:

Key Terminology & Definitions:

Notes:

Unit: 4 - Waves and Information Transfer

Timeline: 3 Weeks

Unit Description: The students will learn that waves, which are regular patterns of motion, can be made in water by disturbing the surface. When waves move across the water, the water goes up and down in place; there is no net motion in the direction of the wave. An object can be seen when light reflected from its surface enters the eye. Digitized information can be transmitted over long distances without significant degradation. High-tech devices, such as computers and cell phones, can receive and decode information - convert it from digitized to voice - and vice versa.

Unit Essential

Questions: What are the characteristics and behaviors of waves?

What is light? How can one explain the varied effects that involve light? What other forms of electromagnetic radiation are there?

How are instruments that transmit and detect waves used to extend human senses?

Unit Big Ideas: Wave Properties -Waves are repeating patterns of motion that transfer energy and information without transferring matter.

Electromagnetic Radiation -Electromagnetic radiation (e.g. radio, microwaves, light) can be modeled as a wave pattern of changing electric and magnetic fields that interact with matter.

Information Technologies and Instrumentation - Useful modern technologies and instruments have been designed based on an understanding of waves and their interactions with matter.

Unit Materials:

Mystery Science - Sound Waves and Wavelength - Why are some sounds high and some sounds low?

Pattern Transfer and Technology - How do you send a secret code?

Sound, Vibration, and Engineering - How far can a whisper travel?

Wonders of Science <https://thewonderofscience.com/4ps41#phenomena>

Unit Key

Terminology & Definitions: waves - Waves are regular patterns of motion, which can be made in water by disturbing the surface. Waves of the same type can differ in amplitude and wavelength. Waves can make objects move.

amplitude - height of the wave determines the volume of the sound

wavelength - spacing between wave peaks determines pitch

reflecting-

information transfer - moving a message from one place to another

patterns

Unit Notes:

[Standards Link](#)

STANDARDS: STANDARDS

State: [Pennsylvania STEELS K-12 - Science \(2023\)](#)

[3.2.4.E \(Advanced\)](#) Develop a model of waves to describe patterns in terms of amplitude and wavelength and that waves can cause objects to move.

[3.2.4.G \(Advanced\)](#) Generate and compare multiple solutions that use patterns to transfer information.

[3.5.3-5.P \(Advanced\)](#) Evaluate the strengths and weaknesses of existing design solutions, including their own solutions.

Topic: A - Waves

Student

Learning

Objectives:

Students will be able to develop a model using an analogy, example, or abstract representation to describe a scientific principle.

Students will be able to develop a model to describe that light reflecting from objects and

entering the eye allows objects to be seen.

Students will be able to develop a model of waves to describe patterns in terms of amplitude and wavelength and that waves can cause objects to move.

Students will evaluate the strengths and weaknesses of existing design solutions including their own solutions.

Essential Questions:

What are the characteristics and behaviors of waves?

*How can waves move objects?

What is light?

How can one explain the varied effects that involve light?

What other forms of electromagnetic radiation are there?

Big Ideas:

Waves are repeating patterns of motion that transfer energy and information without transferring matter.

Electromagnetic radiation (e.g. radio, microwaves, light) can be modeled as a wave pattern of changing electric and magnetic fields that interact with matter.

Materials:

Key Terminology & Definitions:

waves - Waves are regular patterns of motion, which can be made in water by disturbing the surface. Waves of the same type can differ in amplitude and wavelength. Waves can make objects move.

amplitude - height of the wave determines the volume of the sound

wavelength - spacing between wave peaks determines pitch

vibration - A vibrating object makes tiny, very fast back-and-forth movements. For example, when a musician strums guitar strings, they vibrate. The vibration moves the surrounding air and produces waves of sound.

Topic: B - Information Transfer

Student Learning Objectives:

Students will be able to generate and compare multiple solutions that use patterns to transfer information.

Essential Questions:

How are instruments that transmit and detect waves used to extend human senses?

*What are several ways in which humans can use patterns and waves to transfer information across a distance?

*What are some strengths and weaknesses of current information transfer systems?

*How would you improve technology to improve daily living?

ASSESSMENT TASK: "Design in Technology and Engineering Education- Evaluate the strengths and weaknesses of existing design solutions, including their own solutions."

Big Ideas: Useful modern technologies and instruments have been designed based on an understanding of waves and their interactions with matter.

Materials:

Key

Terminology & information transfer - moving a message from one place to another

Definitions:

encode - making the message (alphabet, dots and dashes, light flashes)

decode - understanding what was written

Notes:

Curriculum Map: Science Grade 5 (2023)

Course: Elem Science 5 Sub-topic: General

Grade(s): None specified

Course Description: This is the fifth grade science course that incorporates the STEELS standards. The content of this course will include units on Earth and Space sciences, Physical Science, Life Science, as well as Technology and Engineering. The course is designed to engage students in strengthening their studying skills as well as their confidence in skills necessary to be successful in future scientific exploration.

Unit: Earth and Space Science

Timeline: 3 Weeks

Unit

Description: In this unit, students will explore Earth's place in the universe, its systems, and the impact of human activities on the environment. They will learn about Earth's position in the solar system, compare the Sun to other stars, and study patterns such as day and night and seasonal changes. Students will also examine Earth's interconnected systems—geosphere, atmosphere, hydrosphere, and biosphere—and how they support life, with a focus on the water cycle and freshwater resources.

The unit will then address human impact on Earth's systems, including deforestation, pollution, and climate change. Students will explore solutions to environmental issues and discuss ways to conserve and protect Earth's resources. By the end of the unit, students will gain a deeper understanding of Earth's natural processes and their role in preserving the planet for future generations.

Unit Essential

Questions: What is the universe, and what is Earth's place in it?

What are the predictable patterns caused by Earth's movement in the solar system?

Why do the continents move and what causes earthquakes and volcanoes?

What factors influence weather and climate?

How do humans change the planet?

Unit Big Ideas:

We can infer information about characteristics and the movements of stars, sun, planets, moon, and the Earth based on observations.

Plate tectonics explains the past and current movements and features of the rocks at Earth's surface.

Weather and climate are influenced by interactions involving sunlight, the ocean, the atmosphere, ice, landforms, and living things.

Human activities in agriculture, industry, and everyday life have had major impacts on the land, rivers, ocean, and air.

Unit Key

Terminology & Definitions: Apparent brightness, atmosphere, biosphere, data, distribution, Earth, geosphere, graphical display, human impact, hydrosphere, patterns, precipitation, relative distance, representation, research, resources, shadows, stars, Sun, transpiration, water cycle, water system

Unit Notes:

[Link to standards documents](#)

STANDARDS: STANDARDS

State: Pennsylvania STEELS K-12 - Science (2023)

3.3.5.A (Advanced) Support an argument that differences in the apparent brightness of the sun compared to other stars is due to their relative distances from Earth.

3.3.5.B (Advanced) 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.
- 3.3.5.C (Advanced) Develop a model using an example to describe ways the geosphere, biosphere, hydrosphere, and/or atmosphere interact.
- 3.3.5.D (Advanced) Describe and graph the amounts of salt water and fresh water in various reservoirs to provide evidence about the distribution of water on Earth.
- 3.3.5.E (Advanced) Obtain and combine information about ways individual communities use science ideas to protect the Earth's resources and environment.
- 3.3.5.F (Advanced) Generate and design possible solutions to a current environmental issue, threat, or concern.
- 3.4.3-5.B (Advanced) Make a claim about the environmental and social impacts of design solutions and civic actions, including their own actions.
- 3.4.3-5.G (Advanced) Investigate how perspectives over the use of resources and the development of technology have changed over time and resulted in conflict over the development of societies and nations.

Topic: Earth's Place in the Universe

Description: Earth's Place in the Universe topic focuses on students learning about how the Earth is a part of the universe and its position in the universe. Students will also explore the Sun and stars and how brightness of a star can be used to determine the relative distance of the star from Earth. Finally, students will examine how the Earth's position impacts patterns of shadow, day and night sky, and stars in the night sky.

Essential Questions:

- What are key components of the universe and how is Earth connected to it?
- How does the apparent brightness of the Sun and stars relate to its distance from Earth?
- How does the Earth's place in the universe reveal patterns in shadows, day and night sky, and seasonal appearance of some stars in the night sky?

Big Ideas: We can infer information about characteristics and the movements of stars, sun, planets, moon, and the Earth based on observations.

Materials:

Wonders of Science
Mystery Science: Spaceship Earth Lessons 2, 3, 4, 6, & 8

Key Terminology & Definitions:

Apparent brightness, Data, Earth, Graphical Display, Patterns, Relative distance, Representation, Shadows, Stars, Sun

Notes:

Criteria for Success:

Students can use evidence to support an argument that differences in the brightness of the Sun compared to other stars is due to their relative distance from Earth

Students can represent data in graphical displays to reveal patterns in daily changes in length and direction of shadows, day and night, and seasonal appearance of stars in the night sky

Topic: Earth's Systems

Description: Earth's Systems focuses on students learning about the multiple systems that interact to constantly change the earth. After learning about the Earth's systems, students will investigate how the Earth's systems are producing change. Finally, students will explore and examine water on the Earth and determine how water is distributed around the Earth.

Essential Questions:

- What are the Earth's systems and how do they interact with each other to produce the environment we live in?
- How do plate tectonics affect the movement of the Earth's crust?
- How does the geosphere cause changes in the Earth?
- How is water distributed around the Earth?
- What characteristics of the Earth cause weather?

Big Ideas:

Weather and climate are influenced by interactions involving sunlight, the ocean, the atmosphere, ice, landforms, and living things.

Materials:

Wonder of Science

Mystery Science: Watery Planet Unit Lessons 1 & 2

Key Terminology & Definitions:

Atmosphere, Biosphere, Chemical change, Distribution, Energy flow, Geosphere, Hydrosphere, Mode, Physical Change

Notes:

Criteria for Success:

Students can develop a model to describe ways the geosphere, biosphere, hydrosphere, and atmosphere interact

Students can 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

Topic: Earth and Human Activity

Description:

Earth and Human Activity focuses on students learning how humans impact the Earth's systems. Students will study environmental issues and generate possible solutions to those issues. Students will also explore ways that humans can protect the Earth's resources and the environment.

Essential Questions:

- What are current environmental issues, threats, or concerns cause by human activity?
- What are solutions that individuals and communities have developed to address environmental issues and concerns?

Big Ideas:

Human activities in agriculture, industry, and everyday life have had major impacts on the land, rivers, ocean, and air.

Materials:

Wonders of Science

Mystery Science: Ecosystems and the Food Web Lesson 6

Key Terminology & Definitions:

Atmosphere, Human impact, Research, Resources

Notes:

Criteria for Success:

Student can generate and design possible solutions to current environmental issues, threats, or concerns

Students can obtain and combine information about ways individual communities use science ideas to protect the Earth's resources and environment.

Unit: Physical Science**Unit****Description:**

In this unit, students will explore the structure and properties of different types of matter, examining their characteristics and understanding how these properties influence their uses in everyday life. They will investigate solids, liquids, and gases, observing key traits such as density, texture, and conductivity, and analyze how these properties determine the material's function in various contexts. Students will also delve into chemical reactions, studying how different substances interact, combine, and transform. Through hands-on experiments, they will explore the makeup of matter, mix materials, and observe the conservation of mass in reactions, noting how the total mass remains constant despite changes in form.

Additionally, the unit will introduce the concept of gravity, helping students understand the fundamental force that pulls objects toward the Earth. They will explore how gravity affects the motion of objects, with a particular focus on the idea that gravitational forces are always directed downward. Through experiments and observation, students will gain a deeper understanding of how gravity influences the world around them, from everyday experiences to larger physical phenomena. By the end of the unit, students will have a comprehensive understanding of matter's properties, chemical interactions, and the forces that shape our physical world.

Unit Essential**Questions:**

How do particles combine to form a variety of matter?

How do substances combine or change to make new substances?

What underlying forces explain interactions between objects?

Unit Big Ideas:

All forms of matter exist as a result of the combination or the rearrangement of atoms.

The atoms of some substances combine or rearrange to form new substances that have different properties.

All forces between objects, regardless of size or direction arise from only a few types of interactions.

Unit Key**Terminology &****Definitions:**

Characteristics, condensation, evaporation, gravitational force, hardness, mass, matter, Moh's scale, particles, porosity, properties, streak tests, solubility, volume

Unit Notes:

[Link to standards documents](#)

STANDARDS: STANDARDS

State: Pennsylvania STEELS K-12 - Science (2023)

3.2.5.A (Advanced) Develop a model to describe that matter is made of particles too small to be seen.

3.2.5.B (Advanced) Make and communicate observations and measurements to identify materials based on their properties.

3.2.5.C (Advanced) Interpret and analyze data to make decisions about how to utilize materials based on their properties.

3.2.5.D (Advanced) 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.

3.2.5.E (Advanced) Conduct an investigation to determine whether the mixing of two or more substances results in new substances.

3.2.5.F (Advanced) Support an argument that the gravitational force exerted by Earth on objects is directed down.

Topic: Structure and Properties of Matter

Description: Structure and Properties of Matter focuses on students learning about particles arrange to form different states of matter. Students will develop models, make observations, measure, analyze data, and interpret data to identify, classify, and decide how to use materials.

Essential

Questions: -How do particles that are too small to be seen combine to create different forms of matter?
-What characteristics and properties of matter can be used to identify materials?

Big Ideas:

All forms of matter exist as a result of the combination or the rearrangement of atoms.

Key

Terminology & Definitions: Characteristics, condensation, evaporation, matter, particles, properties

Topic: Chemical Reactions

Description: Chemical Reactions focuses on properties and characteristics of substances that occur during various types of change. Students will investigate reactions by observing and measuring when substances are mixed, heated, or cooled. Students will graph and analyze results of investigations.

Essential

Questions: -When changes to substances occur (eg. heating, cooling, mixing), why is the weight of the matter conserved?
-When atoms of substances are combined, how can their properties change?

Big Ideas:

The atoms of some substances combine or rearrange to form new substances that have different properties.

Key

Terminology & Definitions: Characteristics, hardness, mass, matter, Moh's scale, porosity, properties, streak tests, solubility, volume

Topic: Types of Interactions

Description: Types of Interactions focuses on learning the way in which the Earth's gravitational force pulls objects towards the planet's center. Students will conduct experiments using various objects of different size, mass, and shape to observe and support conclusions of gravitational force.

Essential

Questions: -How does the gravitational force of Earth act on an object near Earth's surface?

Big Ideas:

All forces between objects, regardless of size or direction arise from only a few types of interactions.

Key

Terminology & Definitions: Gravitational force

Unit

Description: In this unit, students will explore the flow of energy and the movement of matter through ecosystems, focusing on the roles of plant producers, animal consumers, and decomposers. They will begin by studying how energy from the Sun flows through food chains, starting with plants (producers) that capture sunlight through photosynthesis and convert it into energy. Students will then trace how energy moves through the system as herbivores (primary consumers) eat plants, carnivores (secondary consumers) eat herbivores, and decomposers break down dead organisms, recycling nutrients back into the soil. Students will understand the interconnectedness of living organisms and how energy and matter are continuously exchanged within ecosystems.

The unit will also address how plants obtain the resources they need to grow. Students will explore the process of photosynthesis and learn how plants take in carbon dioxide from the air and water from the soil, using sunlight to create the energy they need. Through this, students will develop a deeper understanding of how plants are vital to the energy flow and nutrient cycling in ecosystems. By the end of the unit, students will gain deeper understanding of energy and matter flow in nature and the essential role plants play in sustaining life on Earth.

Unit Essential Questions:

How is energy transferred and conserved?

How do organisms detect, process, and use information about the environment?

How do organisms interact with the living and non-living environments to obtain matter and energy?

Unit Big Ideas:

Animals have external and internal sensory receptors that detect different kinds of information that then get processed by the brain.

To produce energy typically means to convert some stored energy into a desired form.

Ecosystems are complex systems that include both living (biotic) and non-living (abiotic) components that interact with each other.

Unit Key Terminology & Definitions:

Argument, chiefly, decomposers, decomposition, energy flow, evidence, flow chart, microbes, minerals, model, photosynthesis

Unit Notes: [Link to standards documents](#)

STANDARDS: STANDARDS

State: Pennsylvania STEELS K-12 - Science (2023)

3.1.5.A (Advanced) Support an argument that plants get the materials they need for growth chiefly from air and water.

3.1.5.B (Advanced) Develop a model to describe the movement of matter among plants, animals, decomposers, and the environment.

3.2.5.G (Advanced) 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.

Topic: Matter Use and Transfer Ecosystems

Essential Questions:

How is matter in the form of air, water, and soil used by organisms?

How does matter move among plants, animals, decomposers, and the environment?

Big Ideas:

Ecosystems are complex systems that include both living (biotic) and non-living (abiotic) components that interact with each other.

Key Terminology &

Argument, decomposers, decomposition, evidence, microbes, minerals

Definitions:**Topic: Energy in Chemical Processes****Essential**

Questions: How is energy from the Sun captured, stored, and used by plants?

How does food provide animals with stored energy that is converted to power life functions (body repair, growth, motion, and maintain body warmth)?

Big Ideas:

To produce energy typically means to convert some stored energy into a desired form

Key

Terminology & Energy flow, flow chart, model, photosynthesis

Definitions:**Unit: Technology and Engineering****Unit**

Description: In this unit, students will explore the Engineering Design Process (EDP) and its application in solving real-world problems. They will learn about the essential skills involved in the EDP, such as problem identification, brainstorming, prototyping, testing, and refining designs. Students will gain an understanding of the requirements for designing a product, including the need for functionality, safety, sustainability, and cost-effectiveness. They will also examine the universal principles of design, applying multiple approaches to creating solutions and evaluating their effectiveness through trial and error. Through hands-on activities, students will apply the EDP to design and improve products, considering factors like materials, user needs, and environmental impact.

Additionally, the unit will explore the influence of society's economic, political, and cultural forces on technology. Students will investigate how historical tools and technologies were shaped by the needs and values of different societies, and how these technologies were adapted to address social and cultural demands. They will also analyze how economic resources, political decisions, and cultural priorities influence the development of technology and shape solutions to societal problems. By the end of the unit, students will have a deeper understanding of both the process of engineering design and the ways in which society impacts technological innovation.

Unit Essential

Questions: Why do engineers and designers strive to improve products used in our daily lives?

Why do we use the engineering design process to solve design challenges?

How can the engineering design process benefit us in solving problems in our daily lives?

Unit Big Ideas:

The Engineering Design Process is a method that is used to solve technological challenges to change and improve products for the way we live.

Technology that solves problems and meets needs is shaped by a society's economics, politics, and culture.

Unit Key

Terminology & engineering, Engineering Design Process, society, solution, system, technology

Definitions:**Unit Notes:**

[Link to standards documents](#)

History of Technology standard (create representations of tools) could be included in the social

studies unit on Paleo Indians/Native American tribes.

STANDARDS: STANDARDS

State: Pennsylvania STEELS K-12 - Science (2023)

3.5.3-5.H (Advanced)	Determine factors that influence changes in a society's technological systems or infrastructure.
3.5.3-5.J (Advanced)	Explain how technologies are developed or adapted when individual or societal needs and wants change.
3.5.3-5.M (Advanced)	Demonstrate essential skills of the engineering design process.
3.5.3-5.O (Advanced)	Describe requirements of designing or making a product or system.
3.5.3-5.S (Advanced)	Illustrate that there are multiple approaches to design.
3.5.3-5.T (Advanced)	Apply universal principles and elements of design.
3.5.3-5.V (Advanced)	Interpret how good design improves the human condition.
3.5.3-5.AA (Advanced)	Create representations of the tools people made, how they cultivated to provide food, made clothing, and built shelters to protect themselves.
3.5.3-5.EE (Advanced)	Explain how solutions to problems are shaped by economic, political, and cultural forces.

Topic: Technology and Society

Essential

Questions:

How do the needs of societies shape their uses of technology?

How has technology improved human lives?

Big Ideas:

Technology that solves problems and meets needs is shaped by a society's economics, politics, and culture.

Key

Terminology & Definitions:

engineering society, solution, system, technology

Topic: Engineering Design Process

Essential

Questions:

How does the Engineering Design Process help in developing solutions to solve problems?

What skills are needed to successfully implement the Engineering Design Process?

When designing solutions to a problem, how do constraints and criteria affect the Engineering Design Process?

Big Ideas:

The Engineering Design Process is a method that is used to solve technological challenges to change and improve products for the way we live.

Key

Terminology & Definitions:

engineering, Engineering Design Process, society, solution, system, technology

Curriculum Map: Science Grade 6 (2023)

Course: MS Science 6 Sub-topic: General

Grade(s): None specified

Course Description: As a part of 6th grade science, students will experience a variety of topics involving physical, life, earth, and environmental science by way of hands-on lab activities, exciting demos, interactive computer activities, and a blend of collaborative and independent learning opportunities.

Course Textbooks, Workbooks, Materials Citations:

- CK-12 Online Science Textbook
- Variety of applicable Internet resources

Unit: Weather, Climate and Water Cycling

Unit Description: The unit "Weather, Climate, and Water Cycling" delves into the intricate interactions and processes that govern Earth's atmospheric dynamics, climate patterns, and the movement of water across various reservoirs.

Unit Essential Questions:

What regulates weather and climate?

How do the properties and movements of water shape Earth's surface and affect its systems?

Unit Big Ideas:

Weather and climate are influenced by interactions involving sunlight, the ocean, the atmosphere, ice, landforms, and living things.

Water's presence and properties impact Earth's ecosystems and surface features.

Unit Assignments:

Collect data to provide evidence for how the motion and complex interactions of air masses result in changes in weather conditions.

Develop a model to describe the cycling of water through Earth's systems driven by energy from the sun and the force of gravity.

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.

Unit Key Terminology & Definitions :

- high/low pressure
- temperature
- pressure
- humidity
- precipitation
- wind
- air mass
- hydrologic cycle
- transpiration
- respiration
- glaciers
- aquifers

latitude
altitude
coriolis effect
thermal energy
radiation
input
output
salinity
density
climate

Unit Notes:

Developing and Using Models (SEP)

Develop a model to describe unobservable mechanisms.

Energy and Matter (CCC)

Within a natural or designed system, the transfer of energy drives the motion and/or cycling of matter.

Developing and Using Models (SEP)

Develop and use a model to describe phenomena.

Systems and System Models (CCC)

Models can be used to represent systems and their interactions—such as inputs, processes and outputs—and energy, matter, and information flows within systems.

Planning and Carrying Out Investigations (SEP)

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.

Cause and Effect (CCC)

Cause and effect relationships may be used to predict phenomena in natural or designed systems.

Developing and Using Models (SEP)

- Develop and use a model to describe phenomena.

Systems and System Models (CCC)

Models can be used to represent systems and their interactions—such as inputs, processes and outputs—and energy, matter, and information flows within systems.

Structure and Function

Structures can be designed to serve particular functions

STANDARDS: STANDARDS

State: Pennsylvania STEELS K-12 - Science (2023)

[3.3.6-8.H
\(Advanced\)](#)

Develop a model to describe the cycling of water through Earth's systems driven by energy from the sun and the force

- of gravity.
- 3.3.6-8.I (Advanced) 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.
- 3.3.6-8.J (Advanced) Collect data to provide evidence for how the motion and complex interactions of air masses result in changes in weather conditions.
- 3.4.6-8.C (Advanced) Develop a model to describe how watersheds and wetlands function as systems, including the roles and functions they serve.

This Curriculum Map Unit has no Topics to display

Unit: Cells to Organisms

Unit Description: The unit "From Cells to Organisms" focuses on the fundamental principles governing life at various organizational levels, from individual cells to complex multicellular organisms. Students will explore the structure and function of cells, tissues, organs, and organ systems, gaining insights into the remarkable unity and diversity of life forms on Earth. Through hands-on laboratory investigations, interactive discussions, and multimedia resources, students will develop a deep understanding of biological concepts and their significance in understanding the complexities of living organisms.

Unit Essential Questions:

- How do the structures of organisms enable life's functions?
- How do organisms detect, process, and use information about the environment?

Unit Big Ideas:

- Organisms have characteristic structures that enable functions and behaviors that allow them to grow, reproduce, and die.
- Animals have external and internal sensory receptors that detect different kinds of information that then gets processed by the brain.

Unit Assignments: Conduct an investigation to provide evidence that living things are made of cells, either one cell or many different numbers and types of cells.

Develop and use a model to describe the function of a cell as a whole and the ways that parts of cells contribute to the function.

Use arguments supported by evidence for how the body is a system of interacting subsystems composed of groups of cells.

Gather and synthesize information about how sensory receptors respond to stimuli by sending messages to the brain for immediate behavior or storage as memories.

Unit Key

Terminology & Definitions :

- organism
- unicellular
- multicellular
- tissue
- organ
- osmosis
- diffusion
- cell membrane

nucleus
mitochondria
cell wall
cytoplasm
Golgi
ribosome
endoplasmic reticulum
organelle
cell
tissue
organ
body systems
types of specialized cells
electromagnetic
mechanical
chemical
neurons
synapse
exon
dendrite
receptor
sites
stimuli
response

Unit Notes:

Planning and Carrying Out Investigations (SEP)

Conduct an investigation to produce data to serve as the basis for evidence that meet the goals of an investigation.

Scale, Proportion, and Quantity (CCC)

Phenomena that can be observed at one scale may not be observable at another scale.

Developing and Using Models (SEP)

Develop and use a model to describe phenomena.

Structure and Function (CCC)

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.

Engaging in Argument From Evidence (SEP)

Use an oral and written argument supported by evidence to support or refute an explanation

or a model for a phenomenon.

Systems and System Models (CCC)

Systems may interact with other systems; they may have sub-systems and be a part of larger complex systems.

STANDARDS: STANDARDS

State: Pennsylvania STEELS K-12 - Science (2023)

3.1.6-8.A (Advanced)	Conduct an investigation to provide evidence that living things are made of cells, either one cell or many different numbers and types of cells.
3.1.6-8.B (Advanced)	Develop and use a model to describe the function of a cell as a whole and the ways that parts of cells contribute to the function.
3.1.6-8.C (Advanced)	Use arguments supported by evidence for how the body is a system of interacting subsystems composed of groups of cells.
3.1.6-8.H (Advanced)	Gather and synthesize information about how sensory receptors respond to stimuli by sending messages to the brain for immediate behavior or storage as memories.

This Curriculum Map Unit has no Topics to display

Unit: Thermal Energy

Unit

Description: The unit "Thermal Energy" will explore the fundamental concepts of heat transfer, temperature, and the behavior of thermal energy in various materials and systems. Through hands-on experiments, investigations, and real-life examples, students will develop a deeper understanding of how thermal energy affects our daily lives and the natural world around us.

Unit Essential

Questions: What is energy?

What is meant by conservation of energy? How is energy transferred between objects or systems?

What is meant by conservation of energy? How is energy transferred between objects or systems?

What is meant by conservation of energy? How is energy transferred between objects or systems?

How are forces related to energy?

Unit Big Ideas:

Energy can be modeled as either motions of particles or as being stored in force fields.

The total change of energy in any system is always equal to the total energy transferred into or out of the system.

The total change of energy in any system is always equal to the total energy transferred into or out of the system.

The total change of energy in any system is always equal to the total energy transferred into or out of the system.

Forces between objects can result in transfer of energy between these objects.

Unit

Assignments: Analyzing and Interpreting Data Construct and interpret graphical displays of data to identify linear and nonlinear relationships.

Constructing Explanations and Designing Solutions Apply scientific ideas or principles to design, construct, and test a design of an object, tool, process or system

Planning and Carrying Out Investigations Plan an investigation individually and collaboratively, and in the design: identify independent and dependent variables and controls, what tools are needed to do the gathering, how measurements will be recorded, and how many data are needed to support a claim.

Developing and Using Models Develop a model to predict and/or describe phenomena.

Developing and Using Models Develop a model to describe unobservable mechanisms.

Unit Key

Terminology & Definitions :

speed

velocity

acceleration

mass

thermal energy

temperature

heat conductivity

energy transfer

kinetic energy

potential energy

electric force

magnetic force

gravitational force

Unit Notes:

Developing and Using Models (SEP)

Develop a model to predict and/or describe phenomena.

Cause and Effect (CCC)

Cause and effect relationships may be used to predict phenomena in natural or designed systems.

Constructing Explanations and Designing Solutions (SEP)

Undertake a design project, engaging in the design cycle, to construct and/or implement a solution that meets specific design criteria and constraints.

Energy and Matter (CCC)

The transfer of energy can be tracked as energy flows through a designed or natural system.

3.2.6-8.M, 3.2.6-8.N and 3.2.6-8.O are not out yet.

STANDARDS: STANDARDS

State: Pennsylvania STEELS K-12 - Science (2023)

3.2.6-8.B
(Advanced)

Develop a model that predicts and describes changes in the particle motion, temperature, and state of a pure substance when thermal energy is added or removed.

3.2.6-8.F (Advanced)	Undertake a design project to construct, test, and modify a device that either releases or absorbs thermal energy by chemical processes.
3.2.6-8.M (Advanced)	Apply scientific principles to design, construct, and test a device that either minimizes or maximizes thermal energy transfer.
3.2.6-8.N (Advanced)	Plan an investigation to determine the relationships among the energy transferred, the type of matter, the mass, and the change in the average kinetic energy of the particles as measured by the temperature of the sample.
3.2.6-8.O (Advanced)	Construct, use, and present arguments to support the claim that when the kinetic energy of an object changes, energy is transferred to or from the object.

This Curriculum Map Unit has no Topics to display

Unit: Earth's Resources

Unit Description: The unit "Exploring Earth's Resources" engages middle school students in an exploration of the diverse resources provided by our planet. Through hands-on activities, inquiry-based investigations, and interdisciplinary connections, students will develop a deeper understanding of Earth's natural resources.

Unit Essential Questions: How do Earth's major systems interact?

How do Earth's surface processes and human activities affect each other? How do humans depend on Earth's resources?

Unit Big Ideas: Changes we observe on Earth are the result of energy flowing and matter cycling between interconnected systems (the geosphere, hydrosphere, atmosphere, and biosphere).

All materials, energy, and fuels that humans use are derived from natural sources, some of which are renewable over time and others are not.

Unit Assignments: Developing and Using Models Develop and use a model to describe phenomena.

Constructing Explanations and Designing Solutions Construct a scientific explanation based on valid and reliable evidence obtained from sources (including the students' own experiments) and the assumption that theories and laws that describe the natural world operate today as they did in the past and will continue to do so in the future

Unit Key Terminology & Definitions : chemical/ physical changes

melting

crystallization

weathering

deformation

sedimentation

per-capita consumption

nonrenewable resources

renewable resources

earth's resources (e.g. minerals, energy, groundwater, etc.)

geologic processes (e.g., volcanic activity, sedimentary processes)

Unit Notes:**Developing and Using Models (SEP)**

Develop and use a model to describe phenomena.

Patterns (CCC)

Patterns can be used to identify cause-and-effect relationships.

Developing and Using Models (SEP)

Develop and use a model to describe phenomena.

Systems and System Models (CCC)

Models can be used to represent systems and their interactions.

Analyzing and Interpreting Data (SEP)

Analyze and interpret data to determine similarities and differences in findings.

Scale, Proportion, and Quantity (CCC)

Time, space, and energy phenomena can be observed at various scales using models to study systems that are too large or too small.

Developing and Using Models (SEP)

- Develop and use a model to describe phenomena.

Systems and System Models (CCC)

Models can be used to represent systems and their interactions—such as inputs, processes and outputs—and energy, matter, and information flows within systems.

STANDARDS: STANDARDS

State: Pennsylvania STEELS K-12 - Science (2023)

- 3.3.6-8.A (Advanced) 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.
- 3.3.6-8.B (Advanced) Develop and use a model to describe the role of gravity in the motion within galaxies and the solar system.
- 3.3.6-8.C (Advanced) Analyze and interpret data to determine scale properties of objects in the solar system.
- 3.3.6-8.I (Advanced) 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.

This Curriculum Map Unit has no Topics to display

Unit: History of the Earth**Unit**

Description: In the unit, "History of the Earth", students will explore Earth's dynamic history, spanning billions of years of geological processes. Students will unravel the mysteries of our planet's past, from its formation to the present day. By examining rock formations, fossils, and other geological evidence, students will piece together the story of Earth's evolution and gain insights into processes that have shaped the planet.

Unit Essential

Questions: How do people reconstruct and date events in Earth's planetary history?

How and why is Earth constantly changing?

Why do the continents move, and what causes earthquakes and volcanoes?

Unit Big Ideas:

We can infer Earth's planetary history by features we observe today

Changes we observe on Earth are the result of energy flowing and matter cycling between interconnected systems (the geosphere, hydrosphere, atmosphere, and biosphere).

Plate tectonics explains the past and current movements and features of the rocks at Earth's surface.

Unit

Assignments:

Constructing Explanations and Designing Solutions Construct a scientific explanation based on valid and reliable evidence obtained from sources (including the students' own experiments) and the assumption that theories and laws that describe the natural world operate today as they did in the past and will continue to do so in the future

Constructing Explanations and Designing Solutions Constructing explanations and designing solutions in 6–8 builds on K–5 experiences and progresses to include constructing explanations and designing solutions supported by multiple sources of evidence consistent with scientific ideas, principles, and theories. Construct a scientific explanation based on valid and reliable evidence obtained from sources (including the students' own experiments) and the assumption that theories and laws that describe nature operate today as they did in the past and will continue to do so in the future.

Analyzing and Interpreting Data Analyze and interpret data to provide evidence for phenomena. Connections to Nature of Science: Science findings are frequently revised and/or reinterpreted based on new evidence

Unit Key

Terminology & Definitions :

geologic time scale

strata

relative age

superposition

unconformity

uniformitarianism

weathering

erosion

geosphere

igneous rock

metamorphic rock

sedimentary rock

rock cycle

deposition

sediment

geoscience processes (eg: earthquakes, volcanoes, meteor impacts, etc.)

fossils

ridge

trench

Pangea

seafloor spreading

Unit Notes:**Analyzing and Interpreting Data (SEP)**

Analyze and interpret data to provide evidence for phenomena.

Patterns (CCC)

Patterns in rates of change and other numerical relationships can provide information about natural systems.

Constructing Explanations and Designing Solutions (SEP)

Construct a scientific explanation based on valid and reliable evidence obtained from sources (including the students' own experiments) and the assumption that theories and laws that describe nature operate today as they did in the past and will continue to do so in the future.

Scale, Proportion, and Quantity (CCC)

Time, space, and energy phenomena can be observed at various scales using models to study systems that are too large or too small.

Analyzing and Interpreting Data (SEP)

Analyze and interpret data to provide evidence for phenomena.

Patterns (CCC)

Patterns in rates of change and other numerical relationships can provide information about natural systems.

STANDARDS: STANDARDS

State: Pennsylvania STEELS K-12 - Science (2023)

- | | |
|--------------------------------|--|
| 3.3.6-8.D
(Advanced) | Construct a scientific explanation based on evidence from rock strata for how the geologic time scale is used to organize Earth's 4.6-billion-year- old history. |
| 3.3.6-8.E
(Advanced) | Construct an explanation based on evidence for how geoscience processes have changed Earth's surface at varying time and spatial scales. |
| 3.3.6-8.G
(Advanced) | Analyze and interpret data on the distribution of fossils and rocks, continental shapes, and seafloor structures to provide evidence of past plate motions. |

This Curriculum Map Unit has no Topics to display

Unit: Earth and Space**Unit**

Description: In the unit "Earth and Space," students will explore the dynamic interactions between Earth and the vast expanse of space. Through inquiry-based learning and hands-on activities, students will investigate the relationship and movements of celestial bodies (Earth-Moon-Sun) and the forces shaping our planet and universe. By the end of the unit, students will develop a deeper appreciation for the interconnectedness of Earth and space systems and the significance of Earth's place in the cosmos.

Unit Essential

Questions: What is the universe, and what is Earth's place in it?

What is the universe, and what goes on in stars?

What are the predictable patterns caused by Earth's movement in the solar system?

Unit Big Ideas:

We can infer information about stars based on observations we make from Earth.

Observations of the sky can be explained by predictable patterns of the movement of Earth, moon, sun and planets.

Unit

Assignments: Developing and Using Models Develop and use a model to describe phenomena.

Developing and Using Models 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. Develop and use a model to describe phenomena

Analyzing and Interpreting Data 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. Analyze and interpret data to determine similarities and differences in findings.

Unit Key

Terminology & Definitions : astronomy

satellite

milky way

galaxy

expansion

big bang

composition

spectra

radiation

solar energy

reflection

illuminate

orbital plane

solar system

universe

orbit

gravity

axis

cyclical pattern

revolution

rotation

surface feature

orbital radii

diameter

distance

scale

ratio

proportion

Unit Notes:**Developing and Using Models (SEP)**

Develop and use a model to describe phenomena.

Patterns (CCC)

Patterns can be used to identify cause-and-effect relationships.

Developing and Using Models (SEP)

Develop and use a model to describe phenomena.

Systems and System Models (CCC)

Models can be used to represent systems and their interactions.

Analyzing and Interpreting Data (SEP)

Analyze and interpret data to determine similarities and differences in findings.

Scale, Proportion, and Quantity (CCC)

Time, space, and energy phenomena can be observed at various scales using models to study systems that are too large or too small.

STANDARDS: STANDARDS

State: Pennsylvania STEELS K-12 - Science (2023)

- | | |
|---|---|
| 3.3.6-8.A
(Advanced) | 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. |
| 3.3.6-8.B
(Advanced) | Develop and use a model to describe the role of gravity in the motion within galaxies and the solar system. |
| 3.3.6-8.C
(Advanced) | Analyze and interpret data to determine scale properties of objects in the solar system. |

This Curriculum Map Unit has no Topics to display

Curriculum Map: Science Grade 7 (2023)

Course: MS Science 7 Sub-topic: General

Grade(s): None specified

Course Description: In the 7th grade science curriculum, students will explore topics involving physical, life, earth and environmental science. Students will engage through a variety of topics that will allow them to see the concepts more globally. Students will focus on analyzing, interpreting, and modeling the concepts.

Unit: Forces and motion

Unit

Description: Electric and magnetic forces
gravitational interactions
Collision-Newton's Third Law
Forces, Mass, and motion of an object

Unit Essential

Questions: What underlying forces explain the variety of interactions observed?

How can one predict an object's continued motion, changes in motion, or stability?

Unit Big Ideas:

All forces between objects, regardless of size or direction, arise from only a few types of interactions.

A change in motion of interacting objects can be explained and predicted by forces.

Unit

Assignments: Ask questions about data to determine the factors that affect the strength of electric and magnetic forces.

Construct and present arguments using evidence to support the claim that gravitational interactions are attractive and depend on the masses of interacting objects.

Conduct an investigation and evaluate the experimental design to provide evidence that fields exist between objects exerting forces on each other even though the objects are not in contact.

Apply Newton's Third Law to design a solution to a problem involving the motion of two colliding objects.

Plan an investigation to provide evidence that the change in an object's motion depends on the sum of the forces on the object and the mass of the object.

Unit Key

Terminology & Definitions : magnetic force

electric current

electromagnetic

gravitational forces law of universal gravity

mass

weight

electric force

magnetic force
gravitational
net force
balanced
unbalanced
Newton's 1st law
Newton's 2nd law
Newton's 3rd law
reference point
force
acceleration
motion

Unit Notes:

Constructing Explanations and Designing Solutions (SEP)

Apply scientific ideas or principles to design an object, tool, process or system.

Systems and System Models (CCC)

Models can be used to represent systems and their interactions—such as inputs, processes and outputs—and energy and matter flows within systems.

Planning and Carrying Out Investigations (SEP)

Plan an investigation individually and collaboratively, and in the design: identify independent and dependent variables and controls, what tools are needed to do the gathering, how measurements will be recorded, and how many data are needed to support a claim.

Stability and Change (CCC)

Explanations of stability and change in natural or designed systems can be constructed by examining the changes over time and forces at different scales.

Asking Questions and Defining Problems (SEP)

Ask questions that can be investigated within the scope of the classroom, outdoor environment, and museums and other public facilities with available resources and, when appropriate, frame a hypothesis based on observations and scientific principles.

Cause and Effect (CCC)

Cause and effect relationships may be used to predict phenomena in natural or designed systems.

Engaging in Argument From Evidence (SEP)

Construct and present oral and written arguments supported by empirical evidence and scientific reasoning to support or refute an explanation or a model for a phenomenon or a solution to a problem.

Systems and System Models (CCC)

Models can be used to represent systems and their interactions—such as inputs, processes, and outputs—and energy and matter flows within systems.

Planning and Carrying Out Investigations (SEP)

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.

Cause and Effect (CCC)

Cause and effect relationships may be used to predict phenomena in natural or designed systems.

STANDARDS: STANDARDS

State: Pennsylvania STEELS K-12 - Science (2023)

- [3.2.6-8.G \(Advanced\)](#) Apply Newton's Third Law to design a solution to a problem involving the motion of two colliding objects.
- [3.2.6-8.H \(Advanced\)](#) Plan an investigation to provide evidence that the change in an object's motion depends on the sum of the forces on the object and the mass of the object.
- [3.2.6-8.I \(Advanced\)](#) Ask questions about data to determine the factors that affect the strength of electric and magnetic forces.
- [3.2.6-8.J \(Advanced\)](#) Construct and present arguments using evidence to support the claim that gravitational interactions are attractive and depend on the masses of interacting objects.
- [3.2.6-8.K \(Advanced\)](#) Conduct an investigation and evaluate the experimental design to provide evidence that fields exist between objects exerting forces on each other even though the objects are not in contact.

Topic: electric and magnetic forces

Description:

Student

Learning

Objectives:

3.2.6-8.1

Ask questions about data to determine the factors that affect the strength of electric and magnetic forces.

Key

Terminology &

Definitions:

Electric force
Magnetic force
Attraction and repulsion
Electric charge
Electric current
Magnet
Devices (e.g. electromagnet, electric motor, generator)
Cause and Effect

Topic: gravitational interactions

Student

Learning

Objectives:

3.2.6-8J

Construct and present arguments using evidence to support the claim that gravitational interactions are attractive and depend on the masses of interacting objects.

Key

Terminology &

Definitions:

Gravitational interactions
Gravitational force
Objects
Mass
Attraction
Systems

Topic: electric and magnetic fields

Student Learning Objectives:

3.2.6-8 K

Conduct an investigation and evaluate the experimental design to provide evidence that fields exist between objects exerting forces on each other even though the objects are not in contact.

Key Terminology & Definitions:

Electric field
Magnetic field
Gravitational field
Forces (magnetic, electric, gravitational)
Test object (e.g. magnet, charged pith ball, ball)
Cause and Effect

Unit: Cells

Unit Description:

Review of cell parts and their functions.

Unit Essential Questions:

How do the structures of organisms enable life's functions?

Unit Big Ideas: Organisms have characteristic structures that enable functions and behaviors that allow them to grow, reproduce, and die.

Unit Assignments:

Conduct an investigation to provide evidence that living things are made of cells, either one cell or many different numbers and types of cells.

Develop and use a model to describe the function of a cell as a whole and the ways that parts of cells contribute to the function.

Unit Key Terminology & Definitions :

organism
unicellular
multicellular
tissue
organ
osmosis
diffusion
cell
membrane
nucleus
mitochondria
cell wall
cytoplasm
Golgi
ribosome
endoplasmic reticulum
organelle

Unit Notes:

Planning and Carrying Out Investigations (SEP)

Conduct an investigation to produce data to serve as the basis for evidence that meet the goals of an investigation.

Scale, Proportion, and Quantity (CCC)

Phenomena that can be observed at one scale may not be observable at another scale.

Developing and Using Models (SEP)

Develop and use a model to describe phenomena.

Structure and Function (CCC)

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.

Obtaining, Evaluating, and Communicating Information (SEP)

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.

Cause and Effect (CCC)

Cause and effect relationships may be used to predict phenomena in natural systems.

STANDARDS: STANDARDS

State: Pennsylvania STEELS K-12 - Science (2023)

3.1.6-8.A (Advanced)	Conduct an investigation to provide evidence that living things are made of cells, either one cell or many different numbers and types of cells.
3.1.6-8.B (Advanced)	Develop and use a model to describe the function of a cell as a whole and the ways that parts of cells contribute to the function.
3.1.6-8.H (Advanced)	Gather and synthesize information about how sensory receptors respond to stimuli by sending messages to the brain for immediate behavior or storage as memories.

This Curriculum Map Unit has no Topics to display

Unit: Matter and Energy in Life

Unit

Description: This unit covers the topics of Photosynthesis and Respiration and ecosystems.

Unit Essential Questions:

How do organisms obtain and use the matter and energy they need to live and grow?

How do organisms grow and develop?

How do organisms interact with the living and nonliving environments to obtain matter and energy?

How do matter and energy move through an ecosystem?

How does a change in environment impact ecosystems?

Unit Big Ideas:

The structures, functions, and behaviors of organisms allow them to obtain, use, transport, and remove the matter and energy needed to live.

Offspring resemble, but are not identical to, their parents due to traits being passed from one generation to the next via genes.

As the environment and populations of species change, there are resulting changes in ecosystems.

The cycling of matter and the flow of energy within ecosystems occur through interactions among different organisms and between organisms and the physical environment.

Ecosystems are complex systems that include both living (biotic) and non-living (abiotic) components that interact with each other.

Unit

Assignments: 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.

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.

Develop and use a model to describe why structural changes to genes (mutations) located on chromosomes may affect proteins and may result in harmful, beneficial, or neutral effects to the structure and function of the organism.

Analyze and interpret data to provide evidence for the effects of resource availability on organisms and populations of organisms in an ecosystem.

Construct an explanation that predicts patterns of interactions among organisms across multiple ecosystems.

Develop a model to describe the cycling of matter and flow of energy among living and nonliving parts of an ecosystem

Construct an argument supported by empirical evidence that changes to physical or biological components of an ecosystem affect populations.

Unit Key

Terminology & Definitions :

glucose

energy

CO₂

oxygen

chloroplast

stomata

mitochondria

chemical reaction

energy transformation

atmosphere

cellular respiration

mitochondria

sugar

chemical reaction

conservation of matter

cycle

photosynthesis

fermentation

dominance
recessive
frequency
gene
allele
environmental factors
genetic factors
ecosystem
population
living
non-living
predator
prey
limiting factors
competition
habitat
energy diagram (food web)
producer
consumer
decomposer recycler
ecosystem
conservation of matter
resilience
population
environmental disruptions
symbiotic
parasitism
commensalism
mutualism
competition
predator prey
abiotic factor
biotic factors

Unit Notes:

Constructing Explanations and Designing Solutions (SEP)

Construct a scientific explanation based on valid and reliable evidence obtained from sources (including the students' own experiments) and the assumption that theories and laws that describe the natural world operate today as they did in the past and will continue to do so in the future.

Cause and Effect (CCC)

Phenomena may have more than one cause, and some cause and effect relationships in

systems can only be described using probability

Constructing Explanations and Designing Solutions (SEP)

Construct a scientific explanation based on valid and reliable evidence obtained from sources (including the students' own experiments) and the assumption that theories and laws that describe the natural world operate today as they did in the past and will continue to do so in the future.

Energy and Matter (CCC)

Within a natural system, the transfer of energy drives the motion and/or cycling of matter.

Developing and Using Models (SEP)

Develop a model to describe unobservable mechanisms.

Energy and Matter (CCC)

Matter is conserved because atoms are conserved in physical and chemical processes.

Analyzing and Interpreting Data (SEP)

Analyze and interpret data to provide evidence for phenomena.

Cause and Effect (CCC)

Cause and effect relationships may be used to predict phenomena in natural or designed systems.

Constructing Explanations and Designing Solutions(SEP)

Construct an explanation that includes qualitative or quantitative relationships between variables that predict phenomena

Patterns (CCC)

Patterns can be used to identify cause and effect relationships.

Developing and Using Models (SEP)

Develop a model to describe phenomena.

Energy and Matter (CCC)

The transfer of energy can be tracked as energy flows through a natural system.

Engaging in Argument From Evidence (SEP)

Construct an oral and written argument supported by empirical evidence and scientific reasoning to support or refute an explanation or a model for a phenomenon or a solution to a problem.

Stability and Change (CCC)

Small changes in one part of a system might cause large changes in another part.

STANDARDS: STANDARDS

State: Pennsylvania STEELS K-12 - Science (2023)

[3.1.6-8.E \(Advanced\)](#) Construct a scientific explanation based on evidence for how environmental and genetic factors influence the growth of organisms.

[3.1.6-8.F \(Advanced\)](#) 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.

- 3.1.6-8.G (Advanced) 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.
- 3.1.6-8.I (Advanced) Analyze and interpret data to provide evidence for the effects of resource availability on organisms and populations of organisms in an ecosystem.
- 3.1.6-8.J (Advanced) Construct an explanation that predicts patterns of interactions among organisms across multiple ecosystems.
- 3.1.6-8.K (Advanced) Develop a model to describe the cycling of matter and flow of energy among living and nonliving parts of an ecosystem.
- 3.1.6-8.L (Advanced) Construct an argument supported by empirical evidence that changes to physical or biological components of an ecosystem affect populations.

Topic: photosynthesis

- Student Learning Objectives:** 3.1.6-8F
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.

- Key Terminology & Definitions:**
Matter cycling
Energy flow
Sunlight
Carbon dioxide
Water
Food (e.g. sugar)
Oxygen
Photosynthesis
Plants
Animals

Topic: Food and chemical reactions

- Student Learning Objectives:** 3.1.6-8.G
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.

- Key Terminology & Definitions:**
Organisms (plants and animals)
Food (i.e. carbon-containing molecules)
Oxygen
Chemical reactions (i.e. cellular respiration)
Carbon dioxide
Water
Energy release
Growth

Unit: Heredity, growth, and development

- Unit Description:** Environmental and genetic growth factor
Harmful and beneficial mutations
Animal behaviors and plant structures- reproductive success
Asexual and Sexual Reproduction
Artificial Selection

Unit Essential Questions:

- How do organisms grow and develop?
- How are the characteristics of one generation related to the previous generation?
- Why do individuals of the same species vary in how they look, function, and behave?
- How does genetic variation among organisms affect survival and reproduction?
- How do organisms detect, process, and use information about the environment?

Unit Big Ideas:

- The characteristic structures, functions, and behaviors of organisms change in predictable ways as they progress from birth to old age. (the life cycle)
- Offspring resemble, but are not identical to, their parents due to traits being passed from one generation to the next via genes.
- Variation among individuals of the same species can be explained by both genetic and environmental factors.
- In any environment individuals with particular traits may be more likely than others to survive and produce offspring.
- Animals have external and internal sensory receptors that detect different kinds of information that then gets processed by the brain.

Unit**Assignments:**

- Construct a scientific explanation based on evidence for how environmental and genetic factors influence the growth of organisms.
- Develop and use a model to describe why structural changes to genes (mutations) located on chromosomes may affect proteins and may result in harmful, beneficial, or neutral effects to the structure and function of the organism.
- Develop and use a model to describe why asexual reproduction results in offspring with identical genetic information and sexual reproduction results in offspring with genetic variation.
- Gather and synthesize information about the technologies that have changed the way humans influence the inheritance of desired traits in organisms.
- Gather and synthesize information about how sensory receptors respond to stimuli by sending messages to the brain for immediate behavior or storage as memories

Unit Key**Terminology & Definitions :**

- frequency
- gene
- environmental factors
- genetic factors
- chromosome
- dominant
- recessive
- protein synthesis
- offspring
- trait
- homozygous
- heterozygous
- mutation
- sexual reproduction

inherited
mutation
chromosome
allele
genetic variation
sexual reproduction
trait
genetic engineering
advantageous trait
disadvantageous trait
electromagnetic
mechanical
chemical
neurons
synapse
exon
dendrite
receptor sites
stimuli
response

Unit Notes:

Constructing Explanations and Designing Solutions (SEP)

- Construct a scientific explanation based on valid and reliable evidence obtained from sources (including the students' own experiments) and the assumption that theories and laws that describe the natural world operate today as they did in the past and will continue to do so in the future.

Cause and Effect (CCC)

- Phenomena may have more than one cause, and some cause and effect relationships in systems can only be described using probability.

Obtaining, Evaluating, and Communicating Information (SEP)

- 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.

Cause and Effect (CCC)

- Cause and effect relationships may be used to predict phenomena in natural systems.

Developing and Using Models (SEP)

- Develop and use a model to describe phenomena.

Structure and Function (CCC)

- Complex and microscopic structures and systems can be visualized, modeled, and used to describe how their function depends on the shapes, composition, and relationships among its parts, therefore complex natural structures/systems can be analyzed to determine how they function.

Developing and Using Models (SEP)

- Develop and use a model to describe phenomena.

Cause and Effect (CCC)

- Cause and effect relationships may be used to predict phenomena in natural systems.

Obtaining, Evaluating, and Communicating Information (SEP)

- 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.

Cause and Effect (CCC)

- Phenomena may have more than one cause, and some cause and effect relationships in systems can only be described using probability.

STANDARDS: STANDARDS

State: Pennsylvania STEELS K-12 - Science (2023)

3.1.6-8.E (Advanced)	Construct a scientific explanation based on evidence for how environmental and genetic factors influence the growth of organisms.
3.1.6-8.H (Advanced)	Gather and synthesize information about how sensory receptors respond to stimuli by sending messages to the brain for immediate behavior or storage as memories.
3.1.6-8.M (Advanced)	Develop and use a model to describe why structural changes to genes (mutations) located on chromosomes may affect proteins and may result in harmful, beneficial, or neutral effects to the structure and function of the organism.
3.1.6-8.N (Advanced)	Develop and use a model to describe why asexual reproduction results in offspring with identical genetic information and sexual reproduction results in offspring with genetic variation.
3.1.6-8.R (Advanced)	Gather and synthesize information about the technologies that have changed the way humans influence the inheritance of desired traits in organisms.

Topic: Environmental and Genetic Growth Factors

Student

Learning Objectives:

3.1.6-8.E

Construct a scientific explanation based on evidence for how environmental and genetic factors influence the growth of organisms.

Key

Environmental factors (e.g. food, light, space, and water)

Terminology &

Genetic factors (e.g., specific breeds of plants and animals and their typical sizes)

Definitions:

Growth of organisms

Cause and Effect

Topic: Harmful and beneficial mutations

Student

Learning Objectives:

3.1.6-8.M

Develop and use a model to describe why structural changes to genes (mutations) located on chromosomes may affect proteins and may result in harmful, beneficial, or neutral effects to the structure and function of the organism.

Key Terminology & Definitions: Chromosomes
Genes
Proteins
Traits of organisms
Mutations
- Harmful
- Beneficial
- Neutral
Structure and function

Topic: Animal Behaviors and Plant Structures - Reproductive Success

Student Learning Objectives: 3.1.6-8.D

Use argument based on empirical evidence and scientific reasoning to support an explanation for how characteristic animal behaviors and specialized plant structures affect the probability of successful reproduction of animals and plants respectively.

Key Terminology & Definitions: Animal behaviors (e.g. nest building, migration)
Animal structures (e.g. colorful plumage in birds, turtle shell)
Plant structures (e.g. flowers, nectar, hard shells on nuts)
Reproductive success
Cause and Effect

Topic: Artificial Selection

Student Learning Objectives: 3.1.6-8.R

Gather and synthesize information about the technologies that have changed the way humans influence the inheritance of desired traits in organisms.

Essential Questions: Artificial selection (genetic modification, gene therapy)
Organisms
Inheritance
Desired traits
Technology
Cause and Effect

Unit: Environmental impacts

Unit Description: Pest Management

Resource Management and environmental laws

Pennsylvania Environmental impacts

Analyzing local environments

Unit Essential Questions:

How do human activities affect Earth's systems?

What role do resources play in shaping our environment and technology?

How can technology help address climate change?

How do ecosystems provide benefits to humans, and how are they impacted by environmental changes?

How can engineering and design minimize environmental impacts?

How can we use data to understand and solve environmental issues?

Unit Big Ideas:

Human Impact on the Environment

Renewable and Nonrenewable Resources

Climate Change and Technological Solutions

Ecosystem Services and the Balance of Nature

Engineering for Environmental Sustainability

Environmental Monitoring and Data Analysis

Unit Key

Terminology & Definitions :

- **Deforestation:** The removal of large areas of forests for human activities.
- **Urbanization:** The process of making an area more urban through the development of cities.
- **Industrialization:** The development of industries on a wide scale.
- **Biodiversity:** The variety of life in a particular habitat or ecosystem.
- **Ecosystem:** A community of interacting organisms and their environment.
- **Carbon Footprint:** The total greenhouse gas emissions caused by an individual or activity.

- **Renewable Resource:** A natural resource that can be replenished over time (e.g., solar, wind).
- **Nonrenewable Resource:** A resource that cannot be readily replaced (e.g., coal, oil).
- **Sustainability:** Meeting present needs without compromising future generations' ability to meet theirs.
- **Energy Conservation:** The practice of reducing energy use to preserve resources.
- **Fossil Fuels:** Nonrenewable energy sources formed from ancient organic material.
- **Hydropower:** Electricity generated from the movement of water.

- **Climate Change:** Long-term changes in temperature and weather patterns on Earth.
- **Greenhouse Effect:** The trapping of heat in Earth's atmosphere by greenhouse gases.
- **Global Warming:** The increase in Earth's average temperature due to human activities.
- **Carbon Sequestration:** The process of capturing and storing atmospheric carbon dioxide.
- **Mitigation:** Actions taken to reduce the impact of environmental issues.
- **Adaptation:** Adjusting to changes in the environment to reduce vulnerability.
- **Ecosystem Services:** Benefits provided by ecosystems to humans (e.g., pollination, water purification).
- **Pollination:** The transfer of pollen that allows plants to reproduce.
- **Natural Resources:** Materials provided by Earth used to support life and meet human needs.
- **Habitat:** The natural home or environment of an organism.
- **Restoration Ecology:** The study and practice of restoring damaged ecosystems.
- **Invasive Species:** Non-native species that disrupt local ecosystems.
-
- **Biomimicry:** Design inspired by nature to solve human problems sustainably.
- **Green Building:** Structures designed to minimize environmental impact.
- **Life Cycle Analysis:** Evaluation of the environmental impact of a product throughout its life.
- **Carbon Neutral:** Achieving net-zero carbon emissions through offsetting or reduction.
- **Sustainable Design:** Creating products and systems that minimize environmental impact.
- **Upcycling:** Reusing discarded objects to create higher-value products.
- **Geographic Information System (GIS):** A tool for mapping and analyzing spatial data.
- **Satellite Imagery:** Pictures of Earth taken from space for monitoring changes.
- **Data Analysis:** The process of examining and interpreting data to find patterns.
- **Pollutant:** A harmful substance introduced into the environment.
- **Watershed:** The land area that drains into a specific body of water.
- **Baseline Data:** Initial data collected to compare future environmental changes.

Unit Notes:

Obtaining, Evaluating, and Communicating Information (SEP)

- 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.

Cause and Effect (CCC)

- Cause and effect relationships may be used to predict phenomena in natural or designed

systems.

Stability and Change (CCC)

- Small changes in one part of a system might cause large changes in another part.

Analyzing and Interpreting Data Analyzing (SEP)

- Analyze and interpret data to determine similarities and differences in findings.

Patterns (CCC)

- Patterns in rates of change and other numerical relationships can provide information about natural systems.

Obtaining, Evaluating, and Communicating Information (SEP)

- 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 now supported by evidence.

Stability and Change (CCC)

- Small changes in one part of a system might cause large changes in another part.

Cause and Effect (CCC)

- Cause and effect relationships may be used to predict phenomena in natural or designed systems.

Obtaining, Evaluating, and Communicating Information (SEP)

- 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 now supported by evidence

Cause and Effect (CCC)

- Cause and effect relationships may be used to predict phenomena in natural or designed systems.

Stability and Change (CCC)

- Small changes in one part of a system might cause large changes in another part.

STANDARDS: STANDARDS

State: Pennsylvania STEELS K-12 - Science (2023)

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| 3.4.6-8.D
(Advanced) | Gather, read, and synthesize information from multiple sources to investigate how Pennsylvania environmental issues affect Pennsylvania's human and natural systems. |
| 3.4.6-8.E
(Advanced) | Collect, analyze, and interpret environmental data to describe a local environment. |
| 3.4.6-8.F
(Advanced) | Obtain and communicate information on how integrated pest management could improve indoor and outdoor environments. |
| 3.4.6-8.G
(Advanced) | Obtain and communicate information to describe how best resource management practices and environmental laws are designed to achieve environmental sustainability. |

Topic: Pest management

Student Learning Objectives: 3.4.6-8.F

Obtain and communicate information on how integrated pest management could improve indoor and outdoor environments.

Topic: resource management and environmental laws

Student Learning Objectives: 3.4.6-8.G

obtain and communicate information to describe how best resource management practices and environmental laws are designed to achieve environmental sustainability.

Topic: Pennsylvania Environmental Issues

Student Learning Objectives: 3.4.6-8.D

Gather, read, and synthesize information from multiple sources to investigate how Pennsylvania environmental issues affect Pennsylvania's human and natural systems.

Topic: analyzing local environments

Student Learning Objectives: 3.4.6-8.E

Collect, analyze, and interpret environmental data to describe a local environment.

Unit: Plants, Pollinators, and Ecosystems**Unit Essential Questions:**

How do humans affect biodiversity, and how does it affect humans? Mutually impact?

How does a change in environment impact ecosystems?

How do organisms interact with the living and nonliving environments to obtain matter and energy?

How do organisms grow and develop?

How do humans change the planet?

How do humans change the planet?

Unit Big Ideas:

Ecosystems are complex systems that include both living (biotic) and non-living (abiotic) components that interact with each other.

As the environment and populations of species change, there are resulting changes in ecosystems.

Humans depend on biodiversity, the variety of species and ecosystems, for resources. Human actions can impact the diversity of species.

The characteristic structures, functions, and behaviors of organisms change in predictable ways as they progress from birth to old age. (the life cycle)

Human activities in agriculture, industry, and everyday life has an impact on the land, rivers, ocean, and air.

Human activities in agriculture, industry, and everyday life has an impact on the land, rivers, ocean, and air.

Unit

Assignments: Evaluate competing design solutions for maintaining biodiversity and ecosystem services.

Construct an argument supported by empirical evidence that changes to physical or biological components of an ecosystem affect populations.

Construct an explanation that predicts patterns of interactions among organisms across multiple ecosystems.

Use arguments based on empirical evidence and scientific reasoning to support an explanation for how characteristic animal behaviors and specialized plant structures affect the probability of successful reproduction of animals and plants, respectively.

Apply scientific principles to design a method for monitoring and minimizing human impact on the environment.

Construct an argument supported by evidence for how increases in human population and per capita consumption of natural resources impact Earth's systems.

Unit Key

Terminology & Definitions : biodiversity

design solutions

ecosystem services

resilience

ecosystem

population

environmental disruptions

symbiotic

parasitism

commensalism

mutualism

competition

predator

prey

abiotic factor

biotic factors

asexual

sexual

water usage

land usage

pollution

per-capita consumption

population

natural resources

Unit Notes:**Constructing Explanations and Designing Solutions (SEP)**

- Apply scientific principles to design an object, tool, process or system.

Cause and Effect (CCC)

- Relationships can be classified as causal or correlational, and correlation does not necessarily imply causation.

Engaging in Argument From Evidence (SEP)

Construct an oral and written argument supported by empirical evidence and scientific reasoning to support or refute an explanation or a model for a phenomenon or a solution to a problem.

Cause and Effect (CCC)

- Cause and effect relationships may be used to predict phenomena in natural or designed systems.

Energy and Matter (CCC)

- The transfer of energy can be tracked as energy flows through a designed or natural system.

Engaging in Argument From Evidence (SEP)

- Use an oral and written argument supported by empirical evidence and scientific reasoning to support or refute an explanation or a model for a phenomenon or a solution to a problem.

Cause and Effect (CCC)

- Phenomena may have more than one cause, and some cause and effect relationships in systems can only be described using probability

Constructing Explanations and Designing Solutions (SEP)

- Construct an explanation that includes qualitative or quantitative relationships between variables that predict phenomena.

Patterns (CCC)

- Patterns can be used to identify cause and effect relationships.

Engaging in Argument From Evidence (SEP)

- Construct an oral and written argument supported by empirical evidence and scientific reasoning to support or refute an explanation or a model for a phenomenon or a solution to a problem.

Stability and Change (CCC)

- Small changes in one part of a system might cause large changes in another part.

Engaging in Argument From Evidence (SEP)

- Evaluate competing design solutions based on jointly developed and agreed-upon design criteria.

Stability and Change (CCC)

- Small changes in one part of a system might cause large changes in another part.

STANDARDS: STANDARDS

State: Pennsylvania STEELS K-12 - Science (2023)

- | | |
|-------------------------|--|
| 3.3.6-8.M
(Advanced) | Apply scientific principles to design a method for monitoring and minimizing human impact on the environment. |
| 3.3.6-8.N
(Advanced) | Construct an argument supported by evidence for how increases in human population and per capita consumption of natural resources impact Earth's systems. |
| 3.1.6-8.D
(Advanced) | Use arguments based on empirical evidence and scientific reasoning to support an explanation for how characteristic animal behaviors and specialized plant structures affect the probability of successful reproduction of animals and plants, respectively. |
| 3.1.6-8.J (Advanced) | Construct an explanation that predicts patterns of interactions among organisms across multiple ecosystems. |
| 3.1.6-8.L
(Advanced) | Construct an argument supported by empirical evidence that changes to physical or biological components of an ecosystem affect populations. |
| 3.1.6-8.U
(Advanced) | Evaluate competing design solutions for maintaining biodiversity and ecosystem services. |

This Curriculum Map Unit has no Topics to display

Curriculum Map: Science Grade 8

Course: MS Science 8 Sub-topic: General

Grade(s): None specified

Course Description: Welcome to 8th-grade science! In this dynamic and interactive course, students will embark on a fascinating exploration of key scientific concepts, fostering a deep understanding of the world around us. The curriculum is designed to engage students through hands-on experiments, collaborative projects, and inquiry-based learning, encouraging them to think critically and develop a passion for science.

Unit: Chemical Reactions and Matter

Unit Description: Chemical Properties and Reactions
Conservation of Atoms in Reactions
Thermal Energy Design Project

Unit Essential Questions: How do particles combine to form the variety of matter one observes?
How do substances combine or change (react) to make new substances?
How does one characterize and explain these reactions and make predictions about them?

Unit Big Ideas: All forms of matter exist as a result of the combination or rearrangement of atoms.

The atoms of some substances combine or rearrange to form new substances that have different properties.

Unit Assignments: Develop models to describe the atomic composition of simple molecules and extended structures.

Analyze and interpret data on the properties of substances before and after the substances interact to determine if a chemical reaction has occurred

Develop and use a model to describe how the total number of atoms does not change in a chemical reaction and thus mass is conserved.

Undertake a design project to construct, test, and modify a device that either releases or absorbs thermal energy by chemical processes.

Develop a model that predicts and describes changes in the particle motion, temperature and state of a pure substance when thermal energy is added or removed.

Unit Key Terminology & Definitions : Atoms
Molecules
Bonding
Compounds
elements
reactants
products
precipitate
chemical change
mixture
compounds
yields

physical properties
chemical properties
chemical equation
conservation of mass
open vs. close system
electrical
endothermic
exothermic
gas
liquid
solid
molecular motion
temperature
thermal energy
heat

Unit Notes:

Developing and Using Models (SEP)

- Develop a model to predict and/or describe phenomena.

Scale, Proportion, and Quantity (CCC)

- Time, space, and energy phenomena can be observed at various scales using models to study systems that are too large or too small.

Developing and Using Models (SEP)

- Develop a model to predict and/or describe phenomena

Cause and Effect (CCC)

- Cause and effect relationships may be used to predict phenomena in natural or designed systems.

Analyzing and Interpreting Data (SEP)

- Analyze and interpret data to determine similarities and differences in findings.

Patterns (CCC)

- Macroscopic patterns are related to the nature of microscopic and atomic-level structure.

Analyzing and Interpreting Data (SEP)

- Analyze and interpret data to determine similarities and differences in findings.

Patterns (CCC)

- Macroscopic patterns are related to the nature of microscopic and atomic-level structure.

Constructing Explanations and Designing Solutions (SEP)

- Undertake a design project, engaging in the design cycle, to construct and/or implement a solution that meets specific design criteria and constraints.

Energy and Matter (CCC)

- The transfer of energy can be tracked as energy flows through a designed or natural system.

STANDARDS: STANDARDS

State: Pennsylvania STEELS K-12 - Science (2023)

3.2.6-8.A (Advanced)	Develop models to describe the atomic composition of simple molecules and extended structures.
3.2.6-8.B (Advanced)	Develop a model that predicts and describes changes in the particle motion, temperature, and state of a pure substance when thermal energy is added or removed.
3.2.6-8.D (Advanced)	Analyze and interpret data on the properties of substances before and after the substances interact to determine if a chemical reaction has occurred.
3.2.6-8.E (Advanced)	Develop and use a model to describe how the total number of atoms does not change in a chemical reaction and thus mass is conserved.
3.2.6-8.F (Advanced)	Undertake a design project to construct, test, and modify a device that either releases or absorbs thermal energy by chemical processes.

This Curriculum Map Unit has no Topics to display

Unit: Waves and Information**Unit**

Description: Wave Properties

Wave Reflection, Absorption, Transmission

Digital Wave Signals

Unit Essential Questions: What are the characteristic properties and behaviors of waves?

What is light? How can one explain the varied effects that involve light? What other forms of electromagnetic radiation are there?

How are instruments that transmit and detect waves used to extend human senses?

Unit Big Ideas: Waves are repeating patterns of motion that transfer energy and information without transferring matter.

Electromagnetic radiation (e.g., radio, microwaves, light) can be modeled as a wave pattern of changing electric and magnetic fields that interact with matter.

Useful modern technologies and instruments have been designed based on an understanding of waves and their interactions with matter

Unit Assignments: 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

Develop and use a model to describe how waves are reflected, absorbed, or transmitted through various materials.

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.

Unit Key Terminology & Definitions : Wave:
Energy:
Medium:

Mechanical wave:
Vibration:
Transverse wave:
Crest:
Trough:
Longitudinal wave:
Compression:
Rarefaction:
Amplitude:
Wavelength:
Frequency:
Hertz (Hz):
Reflection:
Law of Reflection:
Refraction:
Diffraction:
Interference:
Standing wave:
Node:
Antinode:
Resonance:

Unit Notes:

Using Mathematics and Computational Thinking (SEP)

- Use mathematical representations to describe and/or support scientific conclusions and design solutions.

Patterns (CCC)

- Graphs and charts can be used to identify patterns in data.

Developing and Using Models (SEP)

- Develop and use a model to describe phenomena.

Structure and Function (CCC)

- Structures can be designed to serve particular functions by taking into account properties of different materials, and how materials can be shaped and used.

Obtaining, Evaluating, and Communicating Information (SEP)

- Integrate qualitative scientific and technical information in written text with that contained in media and visual displays to clarify claims and findings.

Structure and Function (CCC)

- Structures can be designed to serve particular functions.

STANDARDS: STANDARDS

State: Pennsylvania STEELS K-12 - Science (2023)

[3.2.6-8.Q](#)
(Advanced) 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.

[3.2.6-8.R](#)
(Advanced) Develop and use a model to describe how waves are reflected, absorbed, or transmitted through various materials.

[3.2.6-8.S](#)
(Advanced) 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.

This Curriculum Map Unit has no Topics to display

Unit: Natural Selection and Common Ancestry

Unit

Description: Fossil Evidence of Common Ancestry and Diversity
Anatomical Evidence of Evolutionary Relationships
Embryological Evidence of Common Ancestry
natural selection
Adaptation of Populations over Time

Unit Essential

Questions: What evidence supports that different species are related?
How does genetic variation among organisms affect survival and reproduction?
How does the environment influence populations of organisms over multiple generations?

Unit Big Ideas:

Comparisons between species provides evidence that species evolved from common ancestors which explains the similarities and differences between species.

In any environment individuals with particular traits may be more likely than others to survive and produce offspring.

When the environment changes, some individuals in a population may have traits that provide a reproductive advantage which over many generations can change the make-up of a population.

Unit

Assignments: Analyze and interpret data for patterns in the fossil record that document the existence, diversity, extinction, and change of life forms throughout the history of life on Earth under the assumption natural laws operate today as in the past.

Apply scientific ideas to construct an explanation for anatomical similarities and differences among modern organisms and between modern and fossil organisms to infer evolutionary relationships.

Analyze displays of pictorial data to compare patterns of similarities in anatomical structures across multiple species to identify relationships not evident in the fully formed anatomy.

Construct an explanation based on evidence that describes how genetic variations of traits in a population increase some individuals' probability of surviving and reproducing in a specific environment.

Use mathematical representations to support explanations of how natural selection may lead to increases and decreases of specific traits in populations over time.

Unit Key

Terminology & Definitions :

fossil
radioactive
extinct
sedimentary
metamorphic
erosion
fossil
evolutionary relationships

anatomical
infer
embryo
anatomy
embryological
development
advantageous trait
disadvantageous trait
genetic variations
sexual reproduction
natural selection
systems
probability
camouflage
mimicry
adaptation

Unit Notes:

Analyzing and Interpreting Data (SEP)

- Analyze and interpret data to determine similarities and differences in findings.

Patterns (CCC)

- Graphs, charts, and images can be used to identify patterns in data.

Constructing Explanations and Designing Solutions (SEP)

- Apply scientific ideas to construct an explanation for real-world phenomena, examples, or events.

Patterns (CCC)

- Patterns can be used to identify cause and effect relationships.

Analyzing and Interpreting Data (SEP)

- Analyze displays of data to identify linear and nonlinear relationships.

Patterns (CCC)

- Graphs, charts, and images can be used to identify patterns in data.

Constructing Explanations and Designing Solutions (SEP)

- Construct an explanation that includes qualitative or quantitative relationships between variables that describe phenomena.

Cause and Effect (CCC)

- Phenomena may have more than one cause, and some cause and effect relationships in systems can only be described using probability.

Using Mathematics and Computational Thinking (SEP)

- Use mathematical representations to support scientific conclusions and design solutions.

Cause and Effect (CCC)

- Phenomena may have more than one cause, and some cause and effect relationships in systems can only be described using probability

STANDARDS: STANDARDS

State: Pennsylvania STEELS K-12 - Science (2023)

3.1.6-8.O (Advanced)	Analyze and interpret data for patterns in the fossil record that document the existence, diversity, extinction, and change of life forms throughout the history of life on Earth under the assumption that natural laws operate today as in the past.
3.1.6-8.P (Advanced)	Apply scientific ideas to construct an explanation for anatomical similarities and differences among modern organisms and between modern and fossil organisms to infer evolutionary relationships.
3.1.6-8.Q (Advanced)	Analyze displays of pictorial data to compare patterns of similarities in anatomical structures across multiple species to identify relationships not evident in the fully formed anatomy.
3.1.6-8.S (Advanced)	Construct an explanation based on evidence that describes how genetic variations of traits in a population increase some individuals' probability of surviving and reproducing in a specific environment.
3.1.6-8.T (Advanced)	Use mathematical representations to support explanations of how natural selection may lead to increases and decreases of specific traits in populations over time.

This Curriculum Map Unit has no Topics to display

Unit: Earth's Systems

Unit

Description: Synthetic Materials

Agriculture and Food Systems

Unit Essential

Questions: How do substances combine or change (react) to make new substances?

How does one characterize and explain these reactions and make predictions about them?

Unit Big Ideas: The atoms of some substances combine or rearrange to form new substances that have different properties.

Unit Assignments: Gather and make sense of information to describe how synthetic materials come from natural resources and impact society.

Unit Key

Terminology & reactants

Definitions :

molecules

substance

synthetic material

natural resource

Unit Notes:

Developing and Using Models (SEP)

- Develop and use a model to describe phenomena.

Systems and System Models (CCC)

- Models can be used to represent systems and their interactions—such as inputs, processes and outputs—and energy, matter, and information flows within systems.

Obtaining, Evaluating, and Communicating Information (SEP)

- Communicate scientific and/or technical information orally and/or in written formats, including various forms of media as well as tables, diagrams, and charts.

Constructing Explanations and Designing Solutions (SEP)

- Use evidence (e.g., observations, patterns) to support an explanation.

Cause and Effect (CCC)

- Cause and effect relationships are routinely identified, tested, and used to explain change.

STANDARDS: STANDARDS

State: Pennsylvania STEELS K-12 - Science (2023)

[3.4.6-8.A](#)
(Advanced) Develop a model to describe how agricultural and food systems function, including the sustainable use of natural resources and the production, processing, and management of food, fiber, and energy.

[3.2.6-8.C](#)
(Advanced) Gather and make sense of information to describe how synthetic materials come from natural resources and impact society.

This Curriculum Map Unit has no Topics to display

Unit: Human Impacts

Unit

Description: Natural Hazards

Human Impact on the Environment

Human Consumption of Natural Resources

Climate Change

Unit Essential

Questions: How do natural hazards affect individuals and societies?

How do humans change the planet?

What regulates weather and climate?

Unit Big Ideas:

Natural processes can cause sudden or gradual changes to Earth's systems, some of which may adversely affect humans.

Human activities in agriculture, industry, and everyday life has an impact on the land, rivers, ocean, and air.

Weather and climate are influenced by interactions involving sunlight, the ocean, the atmosphere, ice, landforms, and living things.

Unit

Assignments: Analyze and interpret data on natural hazards to forecast future catastrophic events and inform the development of technologies to mitigate their effects

Apply scientific principles to design a method for monitoring and minimizing human impact on the environment.

Construct an argument supported by evidence for how increases in human population and per capita consumption of natural resources impact Earth's systems.

Ask questions to clarify evidence of the factors that have caused the rise in global temperatures over the past century.

Unit Key

Terminology & Definitions : ecosystem

natural hazards

geologic processes (e.g., volcanic activity, sedimentary processes)

water usage

land usage

pollution

per-capita

consumption

population

natural resources

human activities (e.g.: fossil fuel combustion, cement production, and agricultural activity)

natural processes (e.g.: solar radiation or volcanic activity)

greenhouse gas

carbon dioxide

Unit Notes:**Asking Questions and Defining Problems (SEP)**

- Ask questions to identify and clarify evidence of an argument.

Stability and Change (CCC)

- Stability might be disturbed either by sudden events or gradual changes that accumulate over time.

Analyzing and Interpreting Data Analyzing (SEP)

- Analyze and interpret data to determine similarities and differences in findings.

Patterns (CCC)

- Graphs, charts, and images can be used to identify patterns in data.

Constructing Explanations and Designing Solutions (SEP)

- Apply scientific principles to design an object, tool, process or system.

Cause and Effect (CCC)

- Relationships can be classified as causal or correlational, and correlation does not necessarily imply causation.

Engaging in Argument From Evidence (SEP)

- Construct an oral and written argument supported by empirical evidence and scientific reasoning to support or refute an explanation or a model for a phenomenon or a solution to a problem.

Cause and Effect (CCC)

- Cause and effect relationships may be used to predict phenomena in natural or designed systems.

Energy and Matter (CCC)

- The transfer of energy can be tracked as energy flows through a designed or natural system.

STANDARDS: STANDARDS

State: Pennsylvania STEELS K-12 - Science (2023)

3.3.6-8.O (Advanced)	Ask questions to clarify evidence of the factors that have caused the rise in global temperatures over the past century.
3.3.6-8.L (Advanced)	Analyze and interpret data on natural hazards to forecast future catastrophic events and inform the development of technologies to mitigate their effects.
3.3.6-8.M (Advanced)	Apply scientific principles to design a method for monitoring and minimizing human impact on the environment.
3.3.6-8.N (Advanced)	Construct an argument supported by evidence for how increases in human population and per capita consumption of natural resources impact Earth's systems.

This Curriculum Map Unit has no Topics to display

Unit: Environmental

Unit

Description: Stewardship

Regional

Unit Notes:

Constructing Explanations and Designing Solutions (SEP)

- Design, evaluate, and/or refine a solution to a complex real-world problem, based on scientific knowledge, student-generated sources of evidence, prioritized criteria, and tradeoff considerations.

Science Addresses Questions About the Natural and Material World

(CCC) Connections to Nature of Science

- Scientific knowledge can describe the consequences of actions but does not necessarily prescribe the decisions that society takes.

Obtaining, Evaluating, and Communicating Information (SEP)

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.

Cause and Effect (CCC)

- Cause and effect relationships may be used to predict phenomena in natural or designed systems.

STANDARDS: STANDARDS

State: Pennsylvania STEELS K-12 - Science (2023)

[3.4.6-8.H \(Advanced\)](#) Design a solution to an environmental issue in which individuals and societies can engage as stewards of the environment.

[3.4.6-8.I \(Advanced\)](#) Construct an explanation that describes regional environmental conditions and their implications on environmental justice and social equity.

Topic: Stewardship

Student

Learning

3.4.6-8.H

Objectives:

Design a solution to an environmental issue in which individuals and societies can engage as stewards of the environment.

Topic: Regional

Student

Learning

3.4.6-8.I

Objectives:

Construct an explanation that describes regional environmental conditions and their implications on environmental justice and social equity.

Agreement to Participate in the Lancaster-Lebanon Virtual Solutions (LLVS) Between the Lancaster-Lebanon Intermediate Unit 13 and Lampeter-Strasburg School District

The following Agreement, hereinafter referred to as Agreement, to participate in the Lancaster-Lebanon Virtual Solutions, hereinafter referred to as LLVS, is entered into as of 2025, by and between the Lancaster-Lebanon Intermediate Unit 13, a Pennsylvania Intermediate Unit, with administrative offices located at 1020 New Holland Ave, Lancaster PA 17601, hereinafter referred to as IU13, and Lampeter-Strasburg School District, a Pennsylvania school district with administrative offices located at 1600 Book Road, Lancaster, PA 17602, hereinafter referred to as District.

Background

- 1.1 An analysis of online learning needs in the Lancaster-Lebanon County region conducted through the IU13 concluded that there is a substantial and rapidly increasing demand for student instruction that incorporates technology using online courses.
- 1.2 School districts in the Lancaster-Lebanon County area desire to come together in an association format to enter into contracts for services and administer a viable, cost effective, and quality online learning solution.
- 1.3 IU13 will serve as the entity that contracts for services and administers LLVS on behalf of the participating school districts.
- 1.4 The District is entering into this Agreement to participate in LLVS and thus is empowering IU13 to negotiate contracts for services and to administer the program.

2.0 Actions to Occur

- 2.1 IU13 will coordinate planning for a full scale and expanded implementation of online learning in the Lancaster-Lebanon county region.
- 2.2 IU13 will contract, directly or indirectly, with one or more vendors to provide the District access to a full featured web-based online learning system with services, benefits, and courses as detailed in the [LLVS Pricing Guide](#). Prices of courseware are listed for the 2024-2025 school year. These prices may change if vendor pricing increases/decreases. Updated pricing guide will be provided.
- 2.3 Online courses are to be offered beginning at the start of the 2025-2026 school year (fall term).

3.0 Term of Agreement

- 3.1 The term of this Agreement shall run from the date hereof through June 30, 2028 (the "Expiration Date").

4.0 Cost of Agreement and Payment

- 4.1 The District will not be required to pay an annual membership fee as long as course purchases exceed the minimum established for program sustainability. Districts with a secondary census of 300 - 1,000 must annually purchase \$6,000 of courses. Districts with a secondary census of 1,001 and higher must annually purchase \$12,000 of courses. If course costs are not met, the district will be responsible for the full membership fee of \$6,000 with a secondary census of 300 - 1,000 or \$12,000 with a secondary census of 1,001 and higher.
- 4.2 A program support, content and collaboration 7.5% fee will be added to the total quarterly course fees to support, content, and collaboration including the following:
- **LLVS Monthly Advisor Meetings** to stay current on vendor changes/additions and interact with cross-districts advisor discussions and collaboration.
 - **Internet Reimbursements** (up to \$40 per month) for learners enrolled in four courses or more at a time.
 - **Email/Phone/Zoom with LLVS staff** for support, questions, comments available for advisors and district cyber teachers.
 - **LLVS Schoology Group** for collaboration and to resource documents, procedures, and ongoing communication.
 - **Knowledge Base Support Services** to provide support for advisors, district cyber teachers, parents, learners of all vendor programs, training, and orientations.
 - **Enriched Virtual Forum** to support and grow district cyber programs partnering with [Quality Matters](#), [Distance Learning Collaborative](#), and use of [National Standards for Quality Online Learning](#) to support creation of online courses using both district created and vendor content.
 - **Virtual Teacher Collaborative** quarterly meetings for district cyber teachers to connect and collaborate sharing best practices for online teaching and learning.
 - **LLVS Partnership with Varsity Tutors** to provide online 24/7 tutoring options and academic support for all online learners.
 - **Course and Platform Content Support** via LLVS Hotline/Email for district advisors, district teachers, learners, and parents including some evening hours.
 - **Vendor/Curriculum Searches** including curriculum content reviews and Quality Matters alignment.
 - **Professional Development and Training/Teacher Training** for district advisors, district teachers, learners, and parents.
 - **Learner Engagement Program** provides your learners with access to regularly scheduled virtual and in-person field trips, community building events and opportunities, and academy support connections to vendor tutoring services.
 - **Genius Enhancements** to provide ongoing vendor integrations, course and student management, access, SSO, and customized attendance reporting.
 - **CAOLACon** offers complimentary registrations for any district cyber academy advisor(s) and district cyber teachers for an exclusive, unique conference experience where attendees gain access to industry-specific professional development sessions focused on the current K-12 online learning environment,

as well as, opportunities to network with their peers and colleagues from across Pennsylvania (contingent upon CAOLA's provision).

- **Elementary Secondary Technology Conferences (ESTC)** complimentary registrations for district advisors, administrators, and teachers for online learning track.
- **LLVS Summer Academy** for credit recovery, enrichment & review, and acceleration.

4.3 As a LLVS Member, the District will pay the costs for courses in effect during the applicable academic year of this Agreement, as described in the [LLVS Pricing Guide](#).

4.4 Costs for services and courses that are not identified in the Pricing Guide will be negotiated.

4.5 Charges for courses accessed by the District and any other charges will be invoiced separately and on a quarterly basis.

4.6 All invoices are due within forty-five (45) days of the date of the invoice. IU13 reserves the right to stop providing services under this Agreement if payment is not received within sixty (60) days of the date of the invoice, unless such payment is the subject of a bona fide dispute and the District has paid all non-disputed amounts. All amounts not paid by the District when due shall bear interest at the rate of 1.5% per month, or (if lower) at the highest rate permitted by law.

4.7 The District understands and agrees to comply with the Pricing Guide and the LLVS Handbook.

5.0 Representations, Warranties and Limitations

5.1 IU13 is acting as a conduit only for an online portal for online courses provided by a third party vendor. AS SUCH, IU13 MAKES NO REPRESENTATIONS OR WARRANTIES OF ANY KIND, WHETHER EXPRESS OR IMPLIED, WITH RESPECT TO LLVS, THE CONTENT, FUNCTIONALITY, EFFECTIVENESS, APPROPRIATENESS, AVAILABILITY OR RESPONSIVENESS OF ANY COURSES, PRODUCTS, SERVICES OR GOODS PROVIDED BY IU13 HEREUNDER, INCLUDING, BUT NOT LIMITED TO, ANY EXPRESS OR IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS OR A PARTICULAR PURPOSE, OR CONFORMITY TO ANY REPRESENTATION OR DESCRIPTION. SECTION 6.0 STATES THE DISTRICT'S SOLE AND EXCLUSIVE REMEDY HEREUNDER. IN NO EVENT SHALL IU13 BE LIABLE FOR ANY DAMAGES WHATSOEVER, WHETHER FORESEEABLE OR NOT (INCLUDING, WITHOUT LIMITATION, DAMAGES FOR LOSS OF BUSINESS PROFITS, BUSINESS INTERRUPTION, LOSS OF BUSINESS INFORMATION, OR ANY OTHER PECUNIARY LOSS, OR CONSEQUENTIAL OR SPECIAL DAMAGES) ARISING OUT OF THE USE OR PERFORMANCE OF, OR INABILITY TO USE, LLVS OR ANY SERVICES OR COURSES OF OR TO BE PROVIDED BY LLVS OR IU13, EVEN IF THE POSSIBILITY OF SUCH DAMAGES IS KNOWN OR FORESEEABLE.

- 5.2 The District agrees to comply with the terms outlined in the End User License Agreement (Attachment A) and indemnify IU13 from all disputes, issues, legal claims, lawsuits, and legal judgments that result from the District's own acts and omissions relating to the use of any online learning product/course or the District's membership or participation in LLVS.
- 5.3 Neither the IU13 nor the District shall be responsible for delays or failures in performance resulting from matters beyond their reasonable control, including (without limitation) acts of God, strikes, lockouts, riots, war, terrorist strikes, vandalism, epidemics, changes to governmental regulations, fire, flood or other casualty, communication line failures, power failures or surges, earthquakes, etc.

6.0 Termination of Agreement

- 6.1 If the District desires to terminate the Agreement before its Expiration Date without cause, then, at least forty-five (45) days prior to the expected date of termination, the District must notify IU13 in writing and must pay a termination fee equal to the remaining membership fees that would otherwise be due under the full term of the Agreement.
- 6.2 If IU13 desires to terminate the Agreement before its Expiration Date without cause, IU13 must provide a minimum of nine (9) months advance written notice to the District and work with the District to transition its participation in LLVS to an alternate provider as may be designated by the District. If IU13 desires to terminate this Agreement before its Expiration Date for cause, IU13 must provide at least forty-five (45) days advance written notice to the District and the District, upon invoice, shall pay a termination fee equal to the remaining membership fees that would otherwise be due under the full term of the Agreement.
- 6.3 As used in Section 6.2 above, "for cause" shall include, without limitation, any of the following events:
- (a) the District fails to pay any invoice issued hereunder when due;
 - (b) the District breaches or fails to comply with any other terms of this Agreement and does not remedy such breach or failure within thirty (30) days after receiving notice thereof;
 - (c) the District violates any laws or regulations in connection with its participation in the LLVS;
 - (d) the District takes any action or engages in any operation or activity which places IU13, LLVS or the funding of any LLVS activities or services in jeopardy or exposes IU13, LLVS or any other LLVS members or participants to liability or penalty under the laws of any jurisdiction to which it is subject;
 - (e) the District is or becomes suspended or debarred by the Commonwealth of Pennsylvania or the federal government; or

- (f) the District takes any act or there occurs any other event or occurrence that IU13 reasonably considers just cause for termination.

7.0 Renewal of Agreement

- 7.1 Six months in advance of the Expiration Date of the Agreement, the District shall notify IU13 of its intention to either renew or not renew its participation in LLVS through a new agreement with revised costs and terms. This will allow the District and IU13 time to properly plan for renewal of contracts and continuation of LLVS.

8.0 Miscellaneous

- 8.1 Confidentiality and Security of Student Data – IU13 will maintain a high level of security over and provide controls for only authorized employees to access District student data in accordance with federal and state laws and regulations (Attachment B).
- 8.2 Independent Contractor – It is understood that the services provided by IU13 are done on an independent contractor basis and that nothing in this Agreement is to be construed as creating an employee/employer, partnership or any other relationship between the parties.
- 8.3 Governing Law, Venue, and Jurisdiction – This Agreement is governed under the internal laws of the Commonwealth of Pennsylvania. Venue for all legal disputes arising out of this Agreement will be in the Pennsylvania state court sitting in Lancaster or Lebanon Counties, Pennsylvania. In any action in which IU13 seeks to enforce this Agreement, IU13 shall be entitled to collect its reasonable attorneys' fees and other expenses.
- 8.4 No Waiver – No delay or failure by either party to this Agreement to exercise or enforce at any time any right or provision of this Agreement shall be considered a waiver thereof or of its right thereafter to exercise or enforce each and every right and provision of this Agreement. All waivers under this Agreement to be valid must be made in writing by an authorized representative of the respective party.
- 8.5 Severability – If any provision of this Agreement is held invalid or unenforceable, in whole or in part, such provision shall be modified to the minimum extent necessary to make it valid and enforceable, and the enforceability of all other provisions of this Agreement shall not be affected.
- 8.6 Entire Agreement – This Agreement constitutes the entire agreement between the parties and supersedes and previous oral and written representations, negotiations and understandings between the parties.
- 8.7 Amendments – All amendments to this Agreement must be made in writing and signed by an authorized representative of each party.
- 8.8 Other – Captions used herein are solely for convenience and shall not in any manner alter or vary the interpretation or construction hereof. The word "including" as used herein is intended to be exemplary only, and not limiting, of the word or phrase it modifies. The

District may not, without IU13's prior written consent, transfer or assign any rights or obligations under this Agreement. This Agreement shall be binding upon and shall benefit IU13, the District and their respective successors and permitted assigns. This Agreement may be executed in any number of counterparts, each of which shall be considered an original, and all of which together shall constitute one and the same instrument.

- 8.9** Both parties are protected under the Commonwealth of Pennsylvania's Tort Claims Act (Act), and as such, cannot and shall not be held responsible or otherwise liable for those actions or inactions specifically enumerated under the Act. Based on the foregoing, each party agrees to protect, indemnify, and hold harmless the other party and its agents, employees, directors, officers, affiliates, consultants, and/or contractors from and against any and all damages, injuries (including bodily injury dismemberment, and/or death), claims, liabilities, and costs (including reasonable attorneys' fees), which arise or may be suffered or incurred in whole or in part as a result of the acts or omissions of the indemnifying party, its agents, employees, directors, officers, affiliates, consultants, and/or contractors, and whether arising under this Agreement, to the extent permitted by law.
- 8.10** The Customer shall not use, issue or release for publication any articles, photographs, or similar materials including or implying the name of IU13, or any advertising or publicity matter including or implying the name of IU13 or relating to the subject matter of this engagement, without first securing written consent from IU13, which consent may be withheld in the IU13's sole discretion.
- 8.11** **Force Majeure.** Neither party will incur any liability to the other if its performance of any obligation under this Agreement is prevented or delayed by causes beyond its control and without the fault or negligence of either party. Causes beyond a party's control may include, but are not limited to, acts of God, war or terrorism, changes in controlling law, regulations, orders or the requirements of any governmental entity, severe weather conditions, civil disorders, natural disasters, fire, a national or Commonwealth of Pennsylvania emergency, disease, **plague, epidemic, pandemic, outbreaks of infectious disease or any other public health crisis, including quarantine or other employee restrictions**, general strikes throughout the trade, work stoppages, accidents and freight embargos and interruptions, loss or malfunctions of utilities, communications or computer (software and hardware) services; other unforeseeable circumstances beyond the control of the Parties against which it would have been unreasonable for the affected party to take precautions and which the affected party cannot avoid even by using its best efforts. The Contractor shall orally notify IU13 within forty-eight (48) hours and notify in writing within five (5) days of the date on which the Contractor becomes aware, or should have reasonably become aware, that such cause would prevent or delay its performance. Such notification shall (i) describe fully such cause(s) and its effects on performance, (ii) state whether performance under the Agreement is prevented or delayed and (iii) if performance is delayed, state a reasonable estimate of the duration of the delay. After receipt of such notification, IU13 may elect to cancel this Agreement, or to extend the time for performance as reasonably necessary to compensate for the Contractor's delay.

8.12 The person signing this Agreement on behalf of the Contractor individually warrants that he or she has full legal power to execute this Agreement on behalf of the Contractor, and to bind and obligate the Contractor with respect to all provisions contained in this Agreement.

8.13 This contract cannot be modified or changed without a contract Amendment signed by both the Customer and the Contractor.

9.0 Notifications

9.1 All notifications required under or relating to this Agreement are to be made in writing and sent by U.S. certified mail, return receipt requested, or by electronic mail to the following representative(s) of the respective party. Either party may change its address(es) for notices below, by giving notice to the other party pursuant hereto.

10.0 Contract Terms (select any additional optional services below)

Optional Support Services: (check any of the boxes below for additional services requested):

Technical Support on District Devices

Yes, the District would like technical support for students using District equipment at a \$125 charge per student. The following must be provided by the start of the contract:

- A list of student names from the District of which IU13 will provide technical support.
- TeamViewer installed on student devices or provided access to the district's similar solution.
- Administrative account with password for IU13 to update browsers and other necessary changes.
- Support provided via LLVS Hotline (717-606-1762) or via LLVS email (llvs-support@iu13.org)
- If this option is not selected, the District agrees to provide all the technical support for all district cyber advisors, teachers, students, and families.

LLVS Supplied Devices

- Laptops provided via LLVS
- Laptop and browser updates
- Ability to remote in and replicate issues
- Provide step by step how-tos with student visualization
- Set homepage, save passwords, clear cookies and cache

LLVS Advisor Support Services (select Basic or Premium below)

- Course Enrollments
- Attendance Monitoring
- Progress and Pace Monitoring
- Grade Requests

- Course Completion/Close Out Courses
- Promote Students to Next Grade Level/Alumni
- Contact Students via Email

Basic Advisor Services (as outlined in [Advisor Support Services](#)) - \$60/student/quarter

Premium Advisor Services (as outlined in [Advisor Support Services](#)) - \$75/student/quarter

The District has the right to change the option it selects pursuant to this Section 10.0 above with such change becoming effective as of July 1 following IU13's receipt of the District's written notice to the IU13 of its election to change the option selected pursuant to this Section 10.0. The District agrees to execute an addendum to this Contract confirming the District's change pursuant to this Section 10.0 on a form prepared by IU13. The IU13 must receive the District's written notice of its election to change the option selected pursuant to this Section 10.0 and the executed addendum to this Contract on or before June 30 for the change to become effective for the time period beginning as of July 1 following IU13's receipt of the aforementioned documentation from the District.

Agreement and Signatures

By signing below, each party acknowledges that it has read this Agreement in full and agrees to the terms and conditions contained herein. By signing, each person represents that they have the authority to execute the Agreement on behalf of their respective party.

In witness whereof, intending to be legally bound, the parties hereto have caused this Agreement to be executed by a duly authorized representative as of the date first stated above.

Lancaster-Lebanon Intermediate Unit 13

Lampeter-Strasburg School District

Printed Name of Authorized IU13 Agent

Printed Name of Customer

Signature of Authorized IU13 Agent

Signature of Customer

Date

Date

ATTACHMENT A

END USER LICENSE AGREEMENT

This End User License Agreement, hereinafter referred to as Agreement is a legal agreement between LLIU 13 and Lampeter-Strasburg School District hereinafter referred to as Licensee, the subject matter of which concerns the use of computer software, content, and any applicable updates or upgrades thereto, as well as any associated media and printed or electronic (retrievable via computer networks such as the Internet or otherwise) materials, collectively referred to herein as Products. By using or continuing to use the Products (“Licensee’s Acceptance”), Licensee agrees to be bound by the terms and conditions of this Agreement. If Licensee does not agree to the terms and conditions of this Agreement, Licensee must not use, or continue to use, the Products.

1. Grant of License. Subject to the terms and conditions of this Agreement and Licensee’s acceptance thereof, including, but not limited to, Licensee’s continued payment of fees, LLIU 13 hereby grants to Licensee and Licensee hereby accepts a personal, non-transferable, non exclusive license (which shall be revocable pursuant to the terms of this Agreement) to use the Products. The rights granted herein shall include the right to permit students, teachers, employees and agents (each, an "End User") to use and access the Products, subject to Licensee's rights herein.

2. Limitations and Restrictions. Except as expressly permitted herein, neither Licensee nor any End Users may: (i) copy, alter, adapt, modify, translate, or create derivative works of the Products or any portion thereof; (ii) reverse engineer, decompile, disassemble, or attempt to derive the source code of the Products or any portion thereof, unless and only to the extent any of the foregoing is expressly permitted by applicable law and may not be restricted thereunder; (iii) separate the Products into component parts for transfer to or use by a third party (other than End Users in accordance with the terms hereof); (iv) rent, lease, loan, sell, distribute, sublicense or lend the Products to any third party (other than End Users in accordance with the terms hereof); (v) remove, alter or obscure any proprietary notices on or in the Products; or (vi) otherwise use the Products.

3. Reservation of Rights. LLIU 13 does not grant and Licensee does not obtain any implied licenses under this Agreement. LLIU 13 reserves all rights, title and interests of any kind that are not expressly granted to Licensee in this Agreement.

4. Intellectual Property Rights. LLIU 13 and its providers retain title to and all ownership interests in all proprietary rights, including without limitation all copyrights, trademark rights, patent rights, trade secret rights, and any other intellectual or industrial property rights throughout the world (“IPR”), with respect to the Products and all copies or portions thereof, whether or not incorporated into or used in connection with any other products, including without limitation software or documentation materials. Licensee acknowledges that the Products are licensed and not sold under this Agreement, that nothing in this Agreement shall constitute or be construed to constitute a sale of any of the Products or any portion or copy thereof and that no title to or ownership interest in any rights, including without limitation IPR, with respect to any of the Products or any components thereof is transferred to Licensee or any End User.

5. Dual-Media. Licensee may receive the Products in more than one medium. Regardless of the type or

size of medium Licensee receives, Licensee may use, subject to the terms and conditions of this Agreement, only one medium that is appropriate for use under this Agreement. Licensee may not loan, rent, lease, or otherwise transfer the other medium to another user, except as part of the permanent transfer of the Product to a third party.

6. LIMITED WARRANTY. For a period of ninety (90) days (the "Warranty Period") from the later of (i) the date of purchase or (ii) the date of availability of the Products, LLIU 13 warrants to Licensee that the Products, when installed, configured, used and maintained in accordance with the then-current published installation, configuration, use and maintenance specifications, will, in their unaltered form, conform substantially to the then-current published functional specifications for such Products. Licensee's sole and exclusive remedy, and LLIU 13's sole obligation, for a breach of this warranty shall be for the replacement of the media in the case of breach of this Warranty. LLIU 13 does not warrant that the Products will meet Licensee's requirements, that the Products will operate in combinations selected for use by Licensee or that use of the Products will be uninterrupted or error-free. Because not all errors in the Products can or need be corrected, LLIU 13 does not warrant that the Products are error-free or that all of the Products' errors will be corrected.

LLIU 13 AND ITS PROVIDERS DISCLAIM ALL OTHER REPRESENTATIONS AND WARRANTIES, WHETHER EXPRESS OR IMPLIED (EITHER IN FACT OR BY OPERATION OF LAW), WITH RESPECT TO OR RELATING TO THE PRODUCTS OR THIS AGREEMENT. LLIU 13 AND ITS PROVIDERS EXPRESSLY DISCLAIM ALL IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, ALL WARRANTIES OF ACCURACY, MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, AND ALL WARRANTIES THAT MAY ARISE FROM COURSE OF DEALING, COURSE OF PERFORMANCE OR USAGE OF TRADE. THIS SECTION 6 SHALL BE ENFORCEABLE TO THE MAXIMUM EXTENT ALLOWED BY APPLICABLE LAW. Some jurisdictions prohibit the exclusion of implied warranties or limitations on how long an implied warranty may last, so the above limitations may not apply fully to Licensee. In this case Licensee's sole and exclusive remedy for a breach of warranty shall be, at LLIU 13's or its providers' option and in their sole discretion, replacement or repair of the Products or return thereof for a refund of the purchase price, if any.

7. LIMITATIONS OF LIABILITY. IN NO EVENT SHALL LLIU 13, ITS AFFILIATES, PROVIDERS, SUPPLIERS OR RESELLERS BE LIABLE TO LICENSEE, ITS END USERS, AFFILIATES OR CUSTOMERS FOR ANY INCIDENTAL, CONSEQUENTIAL, INDIRECT, SPECIAL OR PUNITIVE DAMAGES WHATSOEVER, INCLUDING WITHOUT LIMITATION DAMAGES FOR LOST PROFITS OR REVENUE, LOST BUSINESS OPPORTUNITIES, LOST OR INACCESSIBLE DATA OR INFORMATION, UNAUTHORIZED ACCESS TO DATA OR INFORMATION OR OTHER PECUNIARY LOSS, ARISING OUT OF OR RELATED TO THIS AGREEMENT, THE SUBJECT MATTER HEREOF OR THE AUTHORIZED OR UNAUTHORIZED USE OF OR INABILITY TO USE THE PRODUCTS, WHETHER SUCH LIABILITY IS ASSERTED IN CONTRACT OR TORT (INCLUDING NEGLIGENCE AND STRICT PRODUCT LIABILITY) OR OTHERWISE, AND IRRESPECTIVE OF WHETHER LLIU 13, ITS AFFILIATES, PROVIDERS, SUPPLIERS OR RESELLERS HAVE BEEN ADVISED OF THE POSSIBILITY OF ANY SUCH LOSS OR DAMAGE. SOME JURISDICTIONS DO NOT ALLOW THE LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES SO THIS LIMITATION MAY NOT APPLY FULLY TO LICENSEE, BUT SUCH LIMITATION SHALL APPLY TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW. LICENSEE ACKNOWLEDGES THAT THE PRICING OF THE PRODUCTS AND OTHER TERMS AND CONDITIONS OF THIS AGREEMENT REFLECT THE ALLOCATION OF RISK SET FORTH IN THIS AGREEMENT AND THAT LLIU 13 WOULD NOT ENTER INTO THIS AGREEMENT WITHOUT THESE LIMITATIONS ON ITS LIABILITY.

8. Termination. This Agreement is effective until terminated. Without prejudice to any other rights or remedies available at law or in equity, LLIU 13 may terminate this Agreement if Licensee fails to comply with any term or condition of this Agreement and such failure is not cured within forty-five (45) days after Licensee's receipt of written notice thereof, which notice specifies the failure with particularity. Upon any termination of this Agreement, Licensee shall immediately discontinue the use of the Products and, at LLIU 13's option, return to LLIU 13 and/or certify destruction of the Products and any related materials provided to Licensee by LLIU 13, and all full or partial copies thereof (whether in tangible or intangible form), in Licensee's possession or control. Licensee may also terminate this Agreement at any time by providing written notice to LLIU 13 and certifying destruction of the Products and all full or partial copies thereof (whether in tangible or intangible form) in Licensee's possession or control.

9. General. With Licensee's Acceptance, Licensee agrees to be bound by the terms and conditions set forth in this Agreement and Licensee acknowledges that it has read and understands this Agreement. Licensee further agrees that this Agreement is the complete and exclusive statement of the understanding between LLIU 13 and Licensee which supersedes any proposal or prior agreement, oral or written, and any other communication between LLIU 13 and Licensee relating to the subject matter of this Agreement. This Agreement may not be modified except in a writing duly signed by authorized representatives of LLIU 13 and Licensee. If any provision of this Agreement is held to be unenforceable for any reason, the remaining provisions hereof shall be unaffected and shall remain in full force and effect. This Agreement shall be governed by and construed in accordance with the laws of the United States and the Commonwealth of Pennsylvania as such laws are applied to contracts between Pennsylvania residents entered into and to be performed entirely within Pennsylvania. The United Nations Convention on Contracts for the International Sale of Goods shall not apply to this Agreement. Licensee hereby submits to the sole and exclusive jurisdiction of, and waives any venue objections against, the United States District Court for the Middle District of Pennsylvania and the Dauphin County, Pennsylvania Court of Common Pleas in regard to all disputes and litigation arising under or relating to this Agreement. Licensee's rights and obligations under this Agreement shall not be assignable, delegable, sub licensable or otherwise transferable, whether voluntarily, by operation of law or otherwise, without LLIU 13's prior written approval except as provided herein. LLIU 13 may freely assign this Agreement and/or its rights and obligations hereunder.

10. U.S. Government Restricted Rights. If Licensee is an agency or instrumentality of the United States Government, the Software and the Documentation are "commercial computer software" and "commercial computer software documentation", and pursuant to FAR 12.212 or DFARS 227.7202, and their successors, as applicable, use, reproduction and disclosure of the Software and the Documentation are governed by the terms of this Agreement.

11. Export Law Assurances. Licensee will not use or otherwise export or res export the Products from the United States, except as authorized by United States laws and regulations, including without limitation those of the U.S. Department of Commerce, and, as applicable, the laws and regulations of other jurisdictions.

ATTACHMENT B

Confidentiality

Confidentiality: IU13 and contracted providers, in order to fulfill IU13's responsibilities under this Contract, may have a legitimate educational interest in reviewing certain personally identifiable information regarding students ("Student Information"). IU13 and contracted providers shall be bound by and shall comply with the Family Educational Rights and Privacy Act ("FERPA"), Protection of Pupil Rights Act ("PPRA"), the State Board of Education Guidelines, the Health Insurance Portability and Accountability Act ("HIPAA"), to the extent applicable, and any other applicable federal, state, and/or local legislation regarding the creation of, protection and dissemination of Student Information.

IU13 and contracted providers agree that it shall use Student Information solely for the purpose of delivering educational services as an educational agency as defined by FERPA in accordance with the terms of this Agreement. IU13 and contracted providers further agree that Student Information will be kept confidential and that it will not disclose any of the Student Information in any manner whatsoever; provided, however, that any such information may be disclosed to IU13's employees and representatives who need to know such information for the sole purpose of delivering educational services as an educational agency in accordance with the terms of this Agreement. IU13 and contracted providers' employees or representatives must agree to be bound by the terms hereof to the same extent as if they were parties hereto.

In the event that IU13 and contracted providers are requested or required (by oral questions, interrogatories, requests for information or documents in legal proceedings, subpoena, civil investigative demand or other similar process) to disclose any Student Information, IU13 shall provide the District with prompt written notice of any such request or requirement so that the District may seek a protective order or other appropriate remedy. If, in the absence of a protective order or other remedy, IU13 is nonetheless legally compelled to disclose Student Information to any tribunal, regulatory authority, or agency, IU13 may, without liability hereunder, disclose to such tribunal, regulatory authority, or agency only that portion of the Student Information which is legally required to be disclosed, provided that IU13 exercises reasonable efforts to preserve the confidentiality of the Student Information.

Upon expiration or termination of this Agreement, IU13 shall return promptly all Student Information to the District and no copy thereof shall be retained. IU13 shall certify in writing to the District that such action has been taken. Notwithstanding the return of the Student Information, IU13 shall continue to be bound by its confidentiality obligations hereunder.

It is further understood and agreed that money damages will not be sufficient remedy for any breach of IU13's confidentiality obligations and that the District shall be entitled to equitable relief, including injunction and specific performance, as a remedy for any such breach. Such remedies shall not be deemed to be the exclusive remedies for a breach by IU13, but shall be in addition to all other remedies available by law or equity to the District. **This agreement designates the IU13 as our authorized representatives and the duties contained in this agreement promote a legitimate educational interest. A copy of the IU13's breach policy must be included with the finalized contract.**

Reporting Data Theft or Exposure:

Pursuant to Pennsylvania's Breach of Personal Information Notification Act, IU13 agrees to immediately (within 24 hours) notify District of any unauthorized access and/or acquisition of computerized data that materially compromises the security or confidentiality of any personal information maintained by IU13. IU13 must provide a description of what occurred to District and investigate all thefts and/or exposure and determine if a law enforcement agency is to be contacted. A copy of any police reports shall be provided to District. Providers that maintain specific data for evaluation purposes shall remove all access to the source as soon as possible so further breaches of security or confidentiality of personal information do not occur.

DRAFT

Book	School District for PNN+
Section	800 Operations
Title	Emergency Preparedness and Response
Code	805 Vol III 2024
Status	Active

Purpose

The Board recognizes its responsibility for the safety of students, staff, visitors and facilities. Therefore, the Board shall provide facilities, equipment and training necessary to protect against hazards and emergencies, including but not limited to natural disasters, hazardous chemicals, fires, weapons, bomb threats, intruders, terrorism, communicable diseases and pandemics. Advance planning, training, practice and comprehensive implementation are key components in protecting the safety and security of the school community.[1]

Authority

The district, in cooperation with the county Emergency Management Agency and the Pennsylvania Emergency Management Agency (PEMA), shall develop and implement a comprehensive disaster response and emergency preparedness plan, consistent with the guidelines developed by PEMA and other applicable state requirements.[2][3]

The Board shall also utilize the resources of and comply with the requirements of the Pennsylvania Department of Health, the Pennsylvania Department of Education and **law** enforcement agencies.[4]

The Board requires that emergency preparedness, emergency evacuation and school security drills be conducted at intervals required by state law.[3][5][6]

Definitions

School security drill – a planned exercise, other than a fire drill or natural disaster drill, designed to practice procedures to respond to an emergency situation that may include, but is not limited to, an act of terrorism, armed intruder situation or other violent threat.[5]

School Safety and Security Assessment – a strategic evaluation of a school entity’s facilities and programs used to identify potential safety and security threats.[7]

Delegation of Responsibility

The Superintendent or designee shall collaborate with relevant stakeholders, including parents/guardians, students, staff, community agencies, **law** enforcement agencies and first responders, during the development and implementation of the emergency preparedness plan.

The Superintendent or designee shall implement a communication system to notify parents/guardians of the evacuation or sheltering of students and to alert the entire school community when necessary.

Annually, on or before April 10, the Superintendent shall certify that emergency evacuation drills and school security drills have been conducted in the manner prescribed by law.[\[5\]](#)

In accordance with state law and regulations, the Superintendent shall execute a memorandum of understanding with each **law enforcement agency** that has jurisdiction over school property.[\[4\]](#)[\[8\]](#)[\[9\]](#)[\[10\]](#)

The Board directs the School Safety and Security Coordinator to periodically complete a School Safety and Security Assessment in accordance with the provisions of law and established criteria, based on the needs of the district and availability of funding and resources.[\[7\]](#)[\[11\]](#)

Guidelines

Emergency Planning

The emergency preparedness plan shall be accessible in each district building, be reviewed at least annually, and be modified as necessary. A copy of the plan shall be made accessible to the county Emergency Management Agency, each **law enforcement agency** and each local fire department that have jurisdiction over school property. The district shall obtain assurances from each appropriate agency that the emergency preparedness plan will be safeguarded and maintained confidentially.[\[2\]](#)[\[3\]](#)[\[9\]](#)

Appropriate information regarding the emergency preparedness plan shall be communicated to students, parents/guardians, staff, the community and other relevant stakeholders.

Annually, by September 30, the district shall assemble information required to assist **law enforcement agencies** and fire departments in responding to an emergency. The required information shall be deployed immediately to the Incident Command Post in the event of an emergency incident or disaster.[\[2\]](#)[\[3\]](#)[\[4\]](#)

Schools and school buses or transportation vehicles owned or leased by the district shall be made available to local, county and state officials for emergency planning and exercises.[\[3\]](#)

Continuity of Student Learning/Core Operations

In the event of an emergency, local, county or state officials may require that schools be made available to serve as mass-care facilities. Local, county or state officials may also utilize district-owned buses and other transportation vehicles. The Superintendent or designee shall determine whether schools shall be closed, or the educational program suspended, to safeguard student and staff health and safety.[\[3\]](#)[\[12\]](#)

State officials may also direct schools to close in order to mitigate the spread of infection or illness in designated emergencies.[\[13\]](#)

The district shall make provisions in the emergency preparedness plan and any applicable health and safety plan for the continuity of student learning during school closings or excessive absences, in accordance with law. This may include, as appropriate, activities qualifying as instructional days **or hours** for fulfilling the minimum required days **or hours** of instruction under the law. Instructional activities may include:[\[14\]](#)[\[15\]](#)[\[16\]](#)[\[17\]](#)[\[18\]](#)[\[19\]](#)[\[20\]](#)

1. Web-based instruction.

The continuity of core operations such as payroll and ongoing communication with staff, students and parents/guardians shall be an essential part of the emergency preparedness plan.

Education and Training

Students and staff members shall be instructed and shall practice how to respond appropriately to emergency situations.[\[5\]](#)[\[6\]](#)[\[21\]](#)

Effective infection control and prevention education and procedures, such as frequent hand washing and cough/sneeze etiquette, shall be encouraged continually to help limit the spread of germs at district schools.[\[22\]](#)[\[23\]](#)

The district shall provide mandatory training for school staff on school safety and security, in accordance with law and the standards specified by the state's School Safety and Security Committee:[\[21\]](#)[\[24\]](#)[\[25\]](#)[\[26\]](#)

1. Two (2) hours of required training addressing any combination of one (1) or more of the following areas shall be completed each year, in person or virtually:
 - a. Situational awareness.
 - b. Trauma-informed approaches.[\[25\]](#)[\[27\]](#)
 - c. Behavioral health awareness.
 - d. Suicide and bullying awareness.[\[28\]](#)[\[29\]](#)
 - e. Substance use awareness.[\[30\]](#)[\[31\]](#)
2. One (1) hour of **required** training in the following areas shall be completed each year:
 - a. Emergency training drills, including fire, natural disaster, active shooter, hostage situation and bomb threat. This training must be conducted in person.[\[32\]](#)
 - b. Identification or recognition of student behavior that may indicate a threat to the safety of the student, other students, school employees, other individuals, school facilities, or the community. This training may be conducted in person or virtually.[\[33\]](#)[\[34\]](#)

The required school safety and security training shall be credited toward professional education requirements, in accordance with law and the district's Professional Education Plan.[\[21\]](#)[\[25\]](#)[\[35\]](#)

Required Drills

Emergency Preparedness Drill -

The Board directs district schools to conduct a disaster response or emergency preparedness plan drill at least annually, in accordance with the provisions of law.[\[3\]](#)

Fire Drills -

The Board directs each district school to conduct fire drills at least once a month during the school year, in accordance with the provisions of law.[\[5\]](#)[\[6\]](#)

School Security Drills -

The Board directs each district school to conduct a school security drill within ninety (90) days of the beginning of each school year. The school security drill shall be conducted while school is in session, with students present.[\[5\]](#)

The school security drill may take the place of a fire drill for the month in which it is conducted.

The Superintendent or designee may conduct additional school security drills in district schools after the first ninety (90) days of the school year. Up to two (2) additional school security drills per school year may be conducted in place of the required fire drills for the month in which they are conducted.[\[5\]](#)

The Superintendent or designee shall:[\[5\]](#)

1. Oversee instruction and training of students and school employees in procedures for conducting school security drills and responding to emergency situations.
2. Notify and request assistance from local law enforcement and the emergency management agency prior to conducting a school security drill.
3. Notify parents/guardians of the students attending the school building where the school security drill is scheduled in advance of conducting the drill.

Bus Evacuation Drills -

Bus evacuation and safety drills shall be conducted twice a year, in accordance with the provisions of law.[\[5\]](#)[\[36\]](#)

Safe2Say Something Program

The Board directs the Superintendent or designee to develop procedures for assessing and responding to reports received from the Safe2Say Something anonymous reporting program, in accordance with law. The procedures shall establish a framework within which district administration and staff will respond to program reports, coordinate with the county emergency dispatch center(s) and **law** enforcement, and provide appropriate assessment and response for the safety and security of students, staff and school facilities, in accordance with applicable law and Board policy and administrative regulations.[\[4\]](#)[\[26\]](#)[\[32\]](#)[\[34\]](#)[\[37\]](#)

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Legal References

1. Pol. 705
2. [22 PA Code 10.24](#)
3. [35 Pa. C.S.A. 7701](#)
4. Pol. 805.1
5. [24 P.S. 1517](#)
6. [24 P.S. 1518](#)
7. [24 P.S. 1301-B](#)
8. [22 PA Code 10.11](#)
9. [24 P.S. 1306.2-B](#)
10. [24 P.S. 1319-B](#)
11. [24 P.S. 1303-B](#)
12. Pol. 804
13. [35 Pa. C.S.A. 7301 et seq](#)
14. [24 P.S. 133](#)
15. [24 P.S. 520.1](#)
16. [24 P.S. 1501](#)
17. [24 P.S. 1505](#)
18. [24 P.S. 1506](#)
19. [22 PA Code 11.2](#)
20. Pol. 803
21. [24 P.S. 1310-B](#)
22. Pol. 203
23. Pol. 203.1
24. [24 P.S. 102](#)
25. Pol. 333
26. Pol. 805.2
27. Pol. 146.1
28. Pol. 249
29. Pol. 819
30. Pol. 227
31. Pol. 351
32. Pol. 805
33. [24 P.S. 1302-E](#)
34. Pol. 236.1
35. [24 P.S. 1205.2](#)
36. [75 Pa. C.S.A. 4552](#)
37. [24 P.S. 1303-D](#)
- [24 P.S. 1205.7](#)
- [20 U.S.C. 7112](#)
- [20 U.S.C. 7118](#)
- [20 U.S.C. 7801](#)
- Pol. 146
- Pol. 236
- Pol. 709
- Pol. 810
- Pol. 909

LAMPETER-STRASBURG SCHOOL DISTRICT

ADMINISTRATIVE REGULATION

APPROVED:

REVISED:

805-AR-0. EMERGENCY PREPAREDNESS INFORMATION – INCIDENT COMMAND POST

In an emergency, the district will follow the procedures in its comprehensive emergency preparedness plan.

Annually, by September 30, the district will assemble information required to assist local police and fire departments responding to an emergency. The following information will be deployed immediately to the established Incident Command Post in the event of an emergency incident or disaster:

1. Blueprints or floor plans of the school buildings.
2. Aerial photo, map or layout of the school campus, adjacent properties and surrounding streets or roads.
3. Locations of predetermined or prospective command posts.
4. Current teacher/employee roster.
5. Current student roster.
6. Most recent school yearbook.
7. School fire-alarm shutoff location and procedures.
8. School sprinkler system shutoff location and procedures.
9. Gas/Utility line layouts and shutoff valve locations.
10. Cable/Satellite television shutoff location and procedures.
11. Other information the school entity deems pertinent to assist local police and fire departments in responding to an emergency.

LAMPETER-STRASBURG SCHOOL DISTRICT

ADMINISTRATIVE REGULATION

APPROVED:

REVISED:

805-AR-1. EMERGENCY PREPAREDNESS, REQUIRED DRILLS AND ASSESSMENTS

Emergency Preparedness Plan

The district will coordinate with the Pennsylvania Emergency Management Agency (PEMA), county emergency management agency(ies), local police and fire departments, and emergency medical services in developing and implementing the district's emergency preparedness plan, in accordance with the requirements of law and Board policy.

The district will comply with the National Incident Management System (NIMS) in developing and implementing the emergency preparedness plan, and providing training to designated district staff.

The district's emergency preparedness plan will be documented and made available to designated individuals in a secure online system.

In developing and reviewing the emergency preparedness plan, the district's designated school safety and security team or committee will use the resources and recommendations available through [PEMA for school emergency preparedness planning](#):

[PEMA Model EOP](#)

[PEMA School Functional Annexes](#)

[PEMA Threat Hazard Annex Worksheet](#)

[PEMA Threat Hazard Evaluation Worksheet](#)

[PEMA Reunification Annex](#)

[Sample School District EOP](#)

[Sample School Vital Information Plan](#)

The designated school safety and security team or committee will:

1. Review the emergency preparedness plan annually.
2. Modify the plan as necessary.
3. Communicate changes in the plan to the Board, applicable staff, county emergency management agency(ies), other designated agencies, local police and fire departments and emergency medical services, and provide updated information as applicable to students and parents/guardians.
4. Update documentation as necessary based on modifications to the emergency preparedness plan, and include a record of the revisions within the plan.
5. Ensure appropriate training and drills are completed with designated staff and students for implementation of the emergency preparedness plan.

Required Drills

The district will coordinate and cooperate with local fire departments, law enforcement officials, emergency medical services and county and state emergency management committees and agencies, when planning and conducting emergency preparedness, emergency evacuation and school security drills at district schools.

Each school building is required to conduct or participate in fire drills, school security drills, bus evacuation drills and emergency preparedness drills in accordance with law and Board policy, and with the procedures designated in the emergency preparedness plan.

Required Drill	Frequency
Fire Drill	One (1) each month, except in months where a School Security Drill is authorized to take the place of a fire drill.
School Security Drill	One (1) required within the first ninety (90) days of the beginning of each school year. Up to two (2) additional per school year are at the discretion of the district. School Security Drills take the place of the required monthly fire drill for the month in which they are conducted.
Bus Evacuation Drill	At least two (2) each school year: one (1) during the first week of the school year, and the second during the month of March.
Emergency Preparedness Drill	At least one (1) annually.

The building principal will coordinate with the School Safety and Security Coordinator in planning and conducting drills at a variety of times that minimize disruption of the educational program.

Fire drills will include instruction in the use of fire escapes, appliances and exits.

Bus evacuation drills will include practice and instruction concerning the location, use and operation of emergency exit doors and fire extinguishers, and the proper evacuation of buses in the event of fires or accidents. The district will provide bus operators with proper training and instructions to enable them to carry out the necessary procedures for bus evacuation and may require drivers to attend classes and drills.

Required drills will include specific plans for qualified individuals with disabilities who may need assistance or alternative methods for evacuation or sheltering in place.

The building principal or designee will complete and file the Emergency/School Security Drill Reporting Form for each drill and forward a copy of the report to the School Safety and Security Coordinator within one (1) week after the drill.

School Safety and Security Assessments

The School Safety and Security Coordinator will ensure an appropriate School Safety and Security Assessment is completed periodically in accordance with the criteria established by the state's School Safety and Security Committee:

[School Safety and Security Committee: Safety and Security Assessment Criteria](#)

The School Safety and Security Assessment may be conducted for physical security and/or student assistance and behavioral health support, in accordance with established criteria, and will include an assessment of applicable policy and training elements.

The School Safety and Security Assessment may be conducted by designated district staff and/or a Pennsylvania State Police Risk and Vulnerability Assessment Team (RVAT) and results of the assessment will be documented and included with the annual School Safety and Security Board report.

_____ **School District**
Emergency/School Security Drill Reporting Form
 _____ **Academic Year**

Date of Drill:**Time of Drill:****School Building:****Number of Students Participating:****Number of Staff Participating:****Additional Participants (Check all that apply)**

School Security Personnel

Law Enforcement

Fire Department

Emergency Medical Services

District Administrators

Other (List)

Type of Drill Being Exercised:

Emergency Preparedness (e.g., severe weather, natural disaster, nuclear)

Evacuation Shelter-in-Place

Fire Drill

School Security Drill

Bus Evacuation Drill

Notification/Alert Method:

Bell/Buzzer

Intercom

Phone

Voice Notification

Other (List)

Situation at Start of Drill:

Before School/At Arrival

During Class

Lunch Time

Assembly

After School/At Departure

Other (List)

Panic Button Tested:

Yes

No

N/A

Was drill scheduled?

Yes No

Were parents/guardians notified of drill?

Yes No

Length of Drill:

Time to Evacuate Building:

Time to Lockdown Facility:

Problems Encountered (Check all that apply):

- | | | |
|----------------------------------|--|---------------------------|
| Hallway Congestion | Alarm Not Heard | Weather Related |
| Students Unsure of Procedures | Staff Unsure of Procedures | |
| Unable to Lock Doors | Windows Not Covered | Windows Left Open |
| Doors Left Open | Lights Left On | Confusion |
| Students/Staff Not Accounted For | Difficulties with Evacuating Disabled Students | |
| Communication Problems | Network/Computer Problems | Incident Command Problems |
| Long Time to Evacuate | People Not Out of Sight (Lockdown) | |
| Frightened Students/Staff | Doors/Exits Blocked | Faulty Facilities |
| Insufficient Supplies | Other (List) | |

Lessons Learned/Concerns From Drill (Identify any maintenance issues):

Person Completing Report:

Name:

Position:

Signature:

***Scan/Send Final Report to:** School Safety and Security Coordinator

Book School District for PNN+
Section 800 Operations
Title Relations With Law Enforcement Agencies
Code 805.1 Vol III 2024
Status Active

Purpose

The Board recognizes that cooperation with law enforcement agencies is considered essential for protecting students and staff, maintaining a safe environment in schools and safeguarding district property.

Authority

It shall be the policy of the Board to establish and maintain a cooperative relationship between the school district and **law enforcement agencies with jurisdiction over school property of the school district** in maintaining school safety and security; responding to school safety and security reports; and reporting and resolution of incidents that occur on school property, at any school-sponsored activity or on any conveyance providing transportation to or from a school or school-sponsored activity.[\[1\]\[2\]\[3\]\[4\]\[5\]](#)

The Board directs the Superintendent to execute and update, on a biennial basis, a memorandum of understanding with each **law enforcement agency that** has jurisdiction over school property in accordance with state law and regulations.[\[1\]\[2\]\[6\]](#)

Definition

Incident - an instance involving an act of violence; the possession of a weapon by any person; the possession, use or sale of a controlled substance or drug paraphernalia as defined in the Pennsylvania Controlled Substance, Drug, Device and Cosmetic Act; the possession, use or sale of alcohol or tobacco **products** by any person on school property; or conduct that constitutes an offense listed **in the school safety and security provisions of School Code.**[\[2\]\[7\]\[8\]\[9\]\[10\]\[11\]\[12\]\[13\]\[14\]\[15\]\[16\]](#)

Guidelines

Memorandum of Understanding

In accordance with state law and regulations, the Superintendent shall **form an advisory committee composed of relevant school staff to assist in the development of a memorandum of understanding with law enforcement. The Superintendent shall** execute and update, every two (2) years, a memorandum of understanding with each **law enforcement agency** that has jurisdiction over school property. The memorandum of understanding shall be signed by the Superintendent, chief of police **of the law enforcement agency with jurisdiction over the relevant school property** and each building principal, and be filed with the **PA Department of Education.**[\[1\]\[2\]\[6\]](#)

In developing and updating the memorandum of understanding, the district shall consult and consider the **model memorandum of understanding, in accordance with applicable law and regulations.**[\[1\]\[2\]\[6\]](#)

The memorandum of understanding shall comply with state law and regulations and set forth:[\[1\]\[2\]\[6\]](#)

1. **A procedure for law enforcement agency review of the district's annual incident report required by law, prior to the Superintendent filing the report with the PA Department of Education.**
2. **A procedure for the resolution of incident data discrepancies in the report prior to filing the report.**
3. **Additional matters pertaining to crime prevention agreed to between the Superintendent and the law enforcement agency.**

Students With Disabilities

The district shall provide a copy of its administrative regulations and procedures for behavior support, developed in accordance with the Special Education Plan, to each **law enforcement agency** that has jurisdiction over school property. Updated copies shall be provided each time the administrative regulations and procedures for behavior support are revised by the district.[\[17\]\[18\]\[19\]\[20\]](#)

The district shall invite representatives of each **law enforcement agency** that has jurisdiction over school property to participate in district training on the use of positive behavior supports, de-escalation techniques and appropriate responses to student behavior that may require intervention, as included in the district's Special Education Plan and positive behavior support program.[\[17\]\[18\]\[19\]\[20\]\[21\]](#)

Training

The district shall invite representatives of each **law enforcement agency** that has jurisdiction over school property to participate in district training related to subjects that enhance understanding of and build positive relationships with students, which may include but not be limited to training on trauma-informed approaches, restorative practices, suicide awareness and prevention, child abuse recognition and reporting, maintaining confidentiality of students' personally identifiable information and maintaining professional adult/student boundaries.[\[4\]\[22\]\[23\]\[24\]\[25\]\[26\]\[27\]](#)

Referral to Law Enforcement

The Superintendent or designee shall immediately report required incidents and may report discretionary incidents committed on school property, at any school-sponsored activity or on a conveyance providing transportation to or from a school or school-sponsored activity, to the **law enforcement agency** that has jurisdiction over the school's property, in accordance with state law and regulations, the procedures set forth in the memorandum of understanding with **law enforcement** and Board policies.[\[1\]\[2\]\[7\]\[9\]\[10\]\[11\]\[12\]\[13\]\[14\]\[15\]\[16\]\[20\]\[28\]\[29\]\[30\]\[31\]](#)

School Safety and Security Incidents Report

Annually, by July 31, the Superintendent shall report on the designated form, to the **PA Department of Education**, all new incidents as required by state law.[\[2\]](#)

Prior to submitting the **incidents** report, the Superintendent and each **law enforcement agency** having jurisdiction over school property shall do all of the following:[\[2\]](#)

1. No later than thirty (30) days prior to the deadline for submitting the report to the **PA Department of Education**, the Superintendent shall submit the report to the **law enforcement agency** that has jurisdiction over the relevant school property. The **law enforcement agency** shall review the report and compare the data regarding criminal offenses and notification of law enforcement to determine whether the report accurately reflects **law enforcement** incident data.
2. No later than fifteen (15) days prior to the deadline for the Superintendent to submit the report to the **PA Department of Education**, the **law enforcement agency** shall notify the Superintendent, in writing, whether the report accurately reflects **law enforcement** incident data. Where the **law enforcement agency** determines that the report accurately reflects **law enforcement** incident data, the chief of police shall sign the report. Where the **law enforcement agency** determines that the report does not accurately reflect **law enforcement** incident data, the **law enforcement agency** shall indicate any discrepancies between the report and **law enforcement** incident data.
3. **Prior to submitting the report to the PA Department of Education, the Superintendent and the law enforcement agency shall attempt to resolve any discrepancy between the report and law enforcement incident data. If a discrepancy remains unresolved, the law enforcement agency shall notify the Superintendent and the PA Department of Education in writing.**
4. Where a **law enforcement agency** fails to take action as required above, the Superintendent shall submit the report to the **PA Department of Education** and indicate that the **law enforcement agency** failed to take the required action.

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Legal References

1. [24 P.S. 1306.2-B](#)

2. [24 P.S. 1319-B](#)

3. [22 PA Code 10.1](#)

4. Pol. 805

5. Pol. 805.2

6. [22 PA Code 10.11](#)

7. [22 PA Code 10.2](#)

8. [35 P.S. 780-102](#)

9. Pol. 218

10. Pol. 218.1

11. Pol. 218.2

12. Pol. 222

13. Pol. 227

14. Pol. 323

15. Pol. 351

16. Pol. 904

[17. 22 PA Code 10.23](#)
[18. 22 PA Code 14.104](#)
19. Pol. 113
20. Pol. 113.2
[21. 22 PA Code 14.133](#)
22. Pol. 113.4
23. Pol. 216
24. Pol. 333
25. Pol. 806
26. Pol. 819
27. Pol. 824
[28. 22 PA Code 10.21](#)
[29. 22 PA Code 10.22](#)
30. Pol. 103.1
31. Pol. 113.1
[22 PA Code 10.24](#)
[75 Pa. C.S.A. 3345.1](#)
Pol. 909

LAMPETER-STRASBURG SCHOOL DISTRICT

ADMINISTRATIVE REGULATION

APPROVED:

REVISED:

805.1-AR-0. INCIDENT REPORT – IMMEDIATE NOTIFICATION

The Superintendent or designee, including the School Safety and Security Coordinator, building principals, administrators, school safety and security personnel or district employees in charge of school field trips, will immediately report, as required, incidents committed by students on school property, at any school-sponsored activity or on a conveyance providing transportation to or from a school or school-sponsored activity to the **law enforcement agency** that has jurisdiction over the school's property or the property where the school-sponsored activity takes place, in accordance with state law and regulations and with the procedures set forth in the memorandum of understanding with law enforcement.

Incident - an instance involving an act of violence; the possession of a weapon by any person; the possession, use or sale of a controlled substance or drug paraphernalia as defined in the Pennsylvania Controlled Substance, Drug, Device and Cosmetic Act; the possession, use or sale of alcohol or tobacco **products** by any person on school property; or conduct that constitutes an offense listed **in the school safety and security provisions of School Code. (24 P.S. Sec. 1319-B)**

Incidents involving the following criminal offenses will require immediate notification to the **law enforcement agency**:

1. The following offenses under 18 Pa. C.S. (relating to crimes and offenses):
 - a. Section 908 (relating to prohibited offensive weapons).
 - b. Section 912 (relating to possession of weapon on school property).
 - c. Chapter 25 (relating to criminal homicide).
 - d. Section 2702 (relating to aggravated assault).
 - e. Section 2709.1 (relating to stalking).
 - f. Section 2901 (relating to kidnapping).
 - g. Section 2902 (relating to unlawful restraint).
 - h. Section 3121 (relating to rape).

- i. Section 3122.1 (relating to statutory sexual assault).
 - j. Section 3123 (relating to involuntary deviate sexual intercourse).
 - k. Section 3124.1 (relating to sexual assault).
 - l. Section 3124.2 (relating to institutional sexual assault).
 - m. Section 3125 (relating to aggravated indecent assault).
 - n. Section 3126 (relating to indecent assault).
 - o. Section 3301 (relating to arson and related offenses).
 - p. Section 3307 (relating to institutional vandalism) when the **offense** is a felony of the third degree.
 - q. Section 3502 (relating to burglary).
 - r. Section 3503(a) and (b)(1)(v) (relating to criminal trespass).
 - s. Section 5501 (relating to riot).
 - t. Section 6110.1 (relating to possession of firearm by minor).
2. The possession, use or sale of a controlled substance or drug paraphernalia as defined in The Controlled Substance, Drug, Device and Cosmetic Act.
 3. Attempts, solicitation or conspiracy to commit any of the offenses listed in 1 and 2 above.
 4. An offense for which registration is required under 42 Pa. C.S. Sec. **9799.55** (relating to registration).

Notification will be made to the **law enforcement agency** by the most expeditious means practicable, which may include a phone call.

In notifying the **law enforcement agency** of the incident, the Superintendent or designee will provide as much of the following information as is available at the time of the notification; however, the gathering of this information **should** not unnecessarily delay notification:

1. Whether the incident is in-progress or has concluded.
2. Nature of the incident.
3. Exact location of the incident.
4. Number of persons involved in the incident.

5. Names and ages of the individuals involved.
6. Weapons, if any, involved in the incident.
7. Whether the weapons, if any, have been secured and, if so, the custodian of the weapons.
8. Injuries, if any.
9. Whether emergency medical services or the fire department were notified.
10. Identity of the school contact person.
11. Identity of the witnesses, if any.
12. Whether the incident involves a student with a disability and, if so, the type of disability and its impact on the student's behavior.
13. Other such information as is known to the school district and believed to be relevant to the incident.

In responding to students who commit an incident listed above, the district may consider using available school-based diversion programs, including school-wide positive behavior supports, to address the student's behavior and will notify the **law enforcement agency** of the student's placement in the program.

The Superintendent or designee will also notify the parent/guardian of any student directly involved in an incident as a victim or suspect immediately, as soon as practicable. The Superintendent or designee will inform the parent/guardian whether or not the **law enforcement agency** has been or may be notified of the incident. The Superintendent or designee will document attempts made to reach the parent/guardian.

Required Reporting

The Superintendent or designee will comply with all applicable reporting requirements, including mandated reporting in accordance with the Child Protective Services Law and submission of the **annual school safety and security incident report to the PA Department of Education**, in accordance with applicable law, regulations and Board policies.

LAMPETER-STRASBURG SCHOOL DISTRICT

ADMINISTRATIVE REGULATION

APPROVED:

REVISED:

805.1-AR-1. INCIDENT REPORT – DISCRETIONARY NOTIFICATION

The Superintendent or designee, including the School Safety and Security Coordinator, building principals, administrators, school safety and security personnel or district employees in charge of school field trips, will use their discretion and may report specified incidents committed by students on school property, at any school-sponsored activity or on a conveyance providing transportation to or from a school or school-sponsored activity to the **law enforcement agency** that has jurisdiction over the school's property or the property where the school-sponsored activity takes place, in accordance with state law and regulations and with the procedures set forth in the memorandum of understanding with law enforcement.

Incident - an instance involving an act of violence; the possession of a weapon by any person; the possession, use or sale of a controlled substance or drug paraphernalia as defined in the Pennsylvania Controlled Substance, Drug, Device and Cosmetic Act; the possession, use or sale of alcohol or tobacco **products** by any person on school property; or conduct that constitutes an offense listed **in the school safety and security provisions of School Code. (24 P.S. Sec. 1319-B).**

Incidents involving the following criminal offenses may be reported to the **law enforcement agency**:

1. The following offenses under 18 Pa. C.S., and any attempt, solicitation or conspiracy to commit any of these offenses:
 - a. Section 2701 (relating to simple assault).
 - b. Section 2705 (relating to recklessly endangering another person).
 - c. Section 2706 (relating to terroristic threats).
 - d. Section 2709 (relating to harassment).
 - e. Section 3127 (relating to indecent exposure).
 - f. Section 3307 (relating to institutional vandalism) when the penalty is a misdemeanor of the second degree.
 - g. Section 3503(b)(1)(i), (ii), (iii) and (iv), (b.1) and (b.2) (relating to criminal trespass).

- h. Chapter 39 (relating to theft and related offenses).
- i. Section 5502 (relating to failure of disorderly persons to disperse upon official order).
- j. Section 5503 (relating to disorderly conduct).
- k. Section 6305 (relating to sale of tobacco **products**).
- l. Section 6306.1 (relating to use of tobacco **products** in schools prohibited).
- m. Section 6308 (relating to purchase, consumption, possession or transportation of liquor or malt or brewed beverages).

In determining whether to notify the **law enforcement agency** of an incident, the Superintendent or designee may consider the following factors:

1. The seriousness of the situation.
2. The school's ability to defuse or resolve the situation.
3. The student's intent.
4. The student's age.
5. Whether the student has a disability and, if so, the type of disability and its impact on the student's behavior.
6. Other factors believed to be relevant.

In making a determination of whether to notify the **law enforcement agency** of an incident listed above, and to the extent the district has the authority, the district may consider using available school-based diversion programs and available school-wide positive behavior supports to address the student's behavior.

In notifying the **law enforcement agency** of the incident, the Superintendent or designee will provide as much of the following information as is available at the time of the notification; however, the gathering of this information **should** not unnecessarily delay notification:

1. Whether the incident is in-progress or has concluded.
2. Nature of the incident.
3. Exact location of the incident.
4. Number of persons involved in the incident.
5. Names and ages of the individuals involved.

6. Weapons, if any, involved in the incident.
7. Whether the weapons, if any, have been secured and, if so, the custodian of the weapons.
8. Injuries, if any.
9. Whether emergency medical services or the fire department were notified.
10. Identity of the school contact person.
11. Identity of the witnesses, if any.
12. Whether the incident involves a student with a disability and, if so, the type of disability and its impact on the student's behavior.
13. Other such information as is known to the school district and believed to be relevant to the incident.

The Superintendent or designee will also notify the parent/guardian of any student directly involved in an incident as a victim or suspect immediately, as soon as practicable. The Superintendent or designee will inform the parent/guardian whether or not the **law enforcement agency** has been or may be notified of the incident. The Superintendent or designee will document attempts made to reach the parent/guardian.

Required Reporting

The Superintendent or designee will comply with all applicable reporting requirements, including **mandated reporting in accordance with the Child Protective Services Law** and submission of the **annual school safety and security incident report to the PA Department of Education**, in accordance with applicable law, regulations and Board policies.

LAMPETER-STRASBURG SCHOOL DISTRICT

ADMINISTRATIVE REGULATION

APPROVED:

REVISED:

805.1-AR-2. RECORD OF LAW ENFORCEMENT OFFICERS IN SCHOOL

In the event outside law enforcement personnel, other than a School Resource Officer(s) or school security personnel, are engaged with student(s) or staff on school property, the building principal will ensure the Superintendent or designee is notified and record the following information as applicable and appropriate:

1. Date.
2. Building.
3. Officer name, rank, agency.
4. Time of Officer's arrival.
5. Type of Court Order presented, if applicable.
6. Name(s) of student(s)/staff involved.
7. Nature of incident, if known.
8. Time parent/guardian notified, if applicable, and who contacted the parent/guardian.
9. Persons present during the interview.
10. Place interview was held.
11. Reason for interview, if known.
12. If student/staff was removed from school, including time.

13. Witness(es) present, where applicable.

School personnel will cooperate with law enforcement **agencies** and will not impede their actions or investigations. **The Superintendent or designee will contact the school solicitor, when necessary, to address questions or concerns regarding interactions with law enforcement officers.**

School security personnel, including School Resource Officer(s), operating under Board policy will comply with requirements of Board policy, **administrative regulations** and procedures.

Book	School District for PNN+
Section	800 Operations
Title	School Security Personnel
Code	805.2 Vol V 2024
Status	Active

Authority

The Board shall employ, contract for and/or assign staff to coordinate the safety and security of district students, staff, visitors and facilities.

The district shall employ or contract for at least one (1) full-time school security personnel who has completed the training required by law and this Board policy to be on duty during the school day.[\[1\]](#)

The district shall certify to the state School Safety and Security Committee annually that it has met the requirements for school security personnel or has received a waiver, in accordance with applicable law.[\[1\]](#)

Definitions

School security personnel - school police officers, school resource officers and school security guards.[\[2\]](#)

Independent contractor - an individual, including a retired federal agent or retired state, municipal or military police officer or retired sheriff or deputy sheriff, whose responsibilities, including work hours, are established in a written contract with the district for the purpose of performing school security services.[\[2\]](#)

School day - the hours between the morning opening of a school building and the afternoon dismissal of students on a day which classes are in session.[\[1\]](#)

Third-party vendor - a company or entity approved by the PA Commission on Crime and Delinquency that provides school security services in accordance with law.[\[2\]](#)

Delegation of Responsibility

The Superintendent shall appoint a school administrator to serve as the School Safety and Security Coordinator, in accordance with law. When a vacancy occurs in the role of the School Safety and Security Coordinator, the Superintendent shall appoint another school administrator to serve as the School Safety and Security Coordinator within thirty (30) days of the vacancy and shall notify the Board regarding the appointment.[\[3\]](#)

The Superintendent or designee shall submit the name and contact information for the appointed School Safety and Security Coordinator to the state's School Safety and Security Committee within thirty (30) days of the appointment.[\[3\]](#)

The School Safety and Security Coordinator shall report directly to the Superintendent, and shall be responsible for the following:[\[3\]](#)

1. Oversee all School Resource Officers (SROs)
2. Review and provide oversight of all Board policies, administrative regulations and procedures related to school safety and security, and ensure compliance with federal and state laws and regulations regarding school safety and security.
3. Coordinate training and resources for students and staff related to situational awareness, trauma-informed approaches, behavioral health awareness, suicide and bullying awareness, substance use awareness, emergency procedures and training drills, and identification or recognition of student behavior that may indicate a threat to the safety of the student, other students, school employees, other individuals, school facilities or the community, in accordance with the standards established by the state's School Safety and Security Committee and the requirements of applicable law and regulations.[\[4\]](#)[\[5\]](#)[\[6\]](#)[\[7\]](#)[\[8\]](#)[\[9\]](#)[\[10\]](#)[\[11\]](#)[\[12\]](#)[\[13\]](#)
4. Coordinate a tour of the district's buildings and grounds biennially, or when a building is first occupied or reconfigured, with law enforcement and first responders responsible for protecting and securing the district to discuss and coordinate school safety and security matters.
5. Serve as the liaison with law enforcement and other state committees and agencies on matters of school safety and security.
6. Serve on the district's threat assessment team(s) and participate in required training and the threat assessment process.[\[7\]](#)[\[14\]](#)
7. Coordinate School Safety and Security Assessments, School Safety and Security grant requirements and respond to School Safety and Security surveys, as applicable.[\[11\]](#)[\[15\]](#)

The School Safety and Security Coordinator shall, within one (1) year of appointment, complete required training as specified by the state's School Safety and Security Committee for serving in the role of a School Safety and Security Coordinator. This training shall be in addition to other training requirements for school administrators, but shall count toward professional education credit, where applicable.[\[3\]](#)[\[16\]](#)[\[17\]](#)[\[18\]](#)

By June 30 of each year, the School Safety and Security Coordinator shall make a report to the Board at an executive session on the district's current safety and security practices, and identify strategies to improve school safety and security.[\[3\]](#)[\[19\]](#)

The Board directs the School Safety and Security Coordinator to include the following information in the annual report:

1. Threat assessment team information, including verification of compliance with law and regulations, the number and composition of the district's threat assessment team(s), the total number of threats assessed in the past year and additional information on threat assessment required by the Superintendent or designee, in accordance with Board policy.[\[7\]](#)[\[14\]](#)

2. **The number and type(s) of school security personnel contracted or employed by the district, including:[3]**
 - a. **The number of school security personnel that are armed, listed by type(s) of personnel.**
 - b. **The school building at which each school security personnel is assigned, listed by type(s) of personnel.**
 - c. **The training, including the type of training and completion dates, of each school security personnel, listed by type(s) of personnel.**
 - d. **A listing of other individuals utilized by the district for school safety-related duties.**
3. Reports of required emergency preparedness, fire, bus evacuation and school security drills.[11]
4. Information on required school safety and security training and resources provided to students and staff.[11]
5. Safe2Say Something aggregate data, including a breakdown of Life Safety and Non-Life Safety reports received.
6. Behavioral health and school climate information, including aggregate data from surveys and assessments issued in the district, information on referrals and services accessed by students and families, and identification of additional resources needed in the district.[20]
7. School safety and security incident reports for the previous year(s) and/or data collected to date for the current year.[21]
8. Updates regarding the district's memorandum of understanding with law enforcement agencies.[21]
9. Updates to laws, regulations and/or Board policies related to school safety and security.
10. Information on tours, inspections and/or School Safety and Security Assessments of school facilities and programs.
11. Information on grants or funding applied for and/or received in support of school safety and security efforts.

A copy of the report, **including the required information on threat assessment and school security personnel**, shall be submitted to the state's School Safety and Security Committee.[3]

The Superintendent or designee shall implement job descriptions and procedures to address the responsibilities and requirements specific to each category of school security personnel in carrying out their duties.

School security personnel shall carry weapons, including firearms, in performance of their duties only if, and to the extent, authorized by the Board, including as provided in an agreement with a law enforcement agency for the stationing of a School Resource Officer or in a contract with an independent contractor or third-party vendor approved by the Board.

[NOTE: Select the applicable option(s) below with the appropriate corresponding language for each option, based on the district's school security personnel.]

Guidelines

School Resource Officers (SROs)

The district shall establish an agreement with West Lampeter Township Police Department, in accordance with the provisions of law, for the assignment of a School Resource Officer(s) to specified district schools.[\[2\]](#)[\[45\]](#)

School Resource Officer (SRO) - a law enforcement officer commissioned and employed by a law enforcement agency whose duty station is located in the district and whose stationing is established by an agreement between the law enforcement agency and the district. The term includes an active certified sheriff or deputy sheriff whose stationing in the district is established by a written agreement between the county, the sheriff's office and the district.[\[2\]](#)

The agreement shall address the powers and duties conferred on SROs, which shall include but not be limited to:[\[46\]](#)

1. Assist in identification of physical changes in the environment which may reduce crime in or around a school.
2. Assist in developing Board policy, administrative regulations or procedures which address crime, and recommending procedural changes.
3. Develop and educate students in crime prevention and safety.
4. Train students in conflict resolution, restorative justice and crime awareness.
5. Address crime and violence issues, gangs and drug activities affecting or occurring in or around a school.
6. Develop or expand community justice initiatives for students.
7. Other duties as agreed upon between the district and municipal agency.

Prior to assignment in the district, the district shall confirm that the law enforcement agency has completed a law enforcement agency background investigation and received the SRO's separation record, when required, in compliance with applicable law and regulations. The district shall coordinate with the law enforcement agency in making required reports regarding hiring and separation, and maintaining all required records, in accordance with applicable law and regulations.[\[32\]](#)[\[36\]](#)

SROs shall successfully complete required training, in accordance with law.[\[46\]](#)

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Legal References

- [1. 24 P.S. 1316-C](#)
- [2. 24 P.S. 1301-C](#)
- [3. 24 P.S. 1309-B](#)
4. Pol. 146.1
5. Pol. 227
6. Pol. 236
7. Pol. 236.1
8. Pol. 249
9. Pol. 333
10. Pol. 351
11. Pol. 805
12. Pol. 819
- [13. 24 P.S. 1310-B](#)
- [14. 24 P.S. 1302-E](#)
- [15. 24 P.S. 1305-B](#)
- [16. 24 P.S. 1316-B](#)
- [17. 24 P.S. 1205.1](#)
- [18. 24 P.S. 1205.5](#)
19. Pol. 006
20. Pol. 235.1
21. Pol. 805.1
- [22. 24 P.S. 1302-C](#)
- [23. 24 P.S. 1310-C](#)
- [24. 24 P.S. 1311-C](#)
25. Pol. 304
26. Pol. 818
- [27. 24 P.S. 111](#)
- [28. 24 P.S. 111.1](#)
- [29. 23 Pa. C.S.A. 6344](#)
- [30. 23 Pa. C.S.A. 6344.3](#)
- [31. 37 PA Code 241.5](#)
- [32. 44 Pa. C.S.A. 7301 et seq](#)
- [33. 37 PA Code 241.6](#)
- [34. 44 Pa. C.S.A. 7310](#)
- [35. 24 P.S. 1303-C](#)
- [36. 37 PA Code 241.1 et seq](#)
- [37. 24 P.S. 1304-C](#)
- [38. 24 P.S. 1305-C](#)
- [39. 22 PA Code 10.23](#)
- [40. 22 PA Code 14.104](#)
- [41. 22 PA Code 14.133](#)
42. Pol. 113.2
- [43. 24 P.S. 1306-C](#)
- [44. 24 P.S. 1307-C](#)
45. Pol. 909
- [46. 24 P.S. 1313-C](#)
- [47. 24 P.S. 1314-C](#)
48. Pol. 907
- [49. 24 P.S. 1309-C](#)
- [50. 42 Pa. C.S.A. 8953](#)

51. 53 Pa. C.S.A. 2303
24 P.S. 1306.2-B
24 P.S. 1319-B
53 Pa. C.S.A. 2301 et seq
Pol. 705
Pol. 709

Field Trip & Vehicle Request Form

The attached is an overnight trip request.

You have been requested to review the following:

Requestor:	erik_welchans@l-spioneers.org
Will this be an overnight trip?:	Yes
Which building is this request from?:	High School
Teacher in Charge (LSHS):	Erik Welchans
Today's Date:	1/8/2025
Name of Group:	NAfME All-East Conference and Eastern Division Honors Ensembles
Students Attending (Please include Name & Grade):	File Upload 1
Date of Trip:	April 24-27, 2025
Additional Chaperones:	None
Departure Time from School:	7:00 AM
Departure Location from School:	Band Room Entrance
Arrival time to Destination:	12:00 PM
Departure Time from Destination:	1:00 PM
Arrival Time to School:	6:00 PM
Arrival Location to School:	Band Room Entrance
Trip Destination (List as much information as possible, if multiple stops, list in order):	Sheraton Rocky Hill - 100 Capital Blvd, Rocky Hill, CT 06067 (Student Housing) Concert will take place at The Bushnell Performing Arts Center, 166 Capitol Avenue, Hartford, CT 06106
Explain the significance of the trip to planned course of study. Include information relevant to class objectives, curriculum integration and activities or assessments which demonstrate the student's ability to make meaningful use of	Ellie Rhinier was selected to perform with the National Association for Music Education (NAfME), Eastern Division Honors Ensembles. This will be in conjunction with the NAfME Eastern Division Music Educator's conference in Hartford, CT. She will be performing with the

the knowledge or experience. (You can include the link to your google doc here if you prefer):

Treble Choir and will be working under the leadership of Dr. Jessica Napoles from the University of North Texas. The concert will be held at the Bushnell Performing Arts Center in Connecticut on Sunday, April 27th, at 11 am.

Number of Students Attending:

1

Number of Adults Attending:

1

Substitutes Needed (Periods):

All Day

Type of Vehicle Requested:

School Van (max. 9 students plus driver)

Number of vehicles needed:

1

Who is paying the trip cost?:

Paid by District

Which party if responsible for payment?:

Department Funds

Approval history

In progress

Approved by benjamin_feeney@l-spioneers.org

Field Trip & Vehicle Request Form

The attached is an overnight trip request.

You have been requested to review the following:

Requestor:	robert_schaubach@l-spioneers.org
Will this be an overnight trip?:	Yes
Which building is this request from?:	High School
Teacher in Charge (LSHS):	Robert Schaubach
Today's Date:	1/3/25
Name of Group:	PMEA District 7 Orchestra Festival
Students Attending (Please include Name & Grade):	File Upload 1
Date of Trip:	1/10/25 to 1/11/25
Additional Chaperones:	None
Departure Time from School:	7:00 AM
Departure Location from School:	HS Music Wing
Arrival time to Destination:	7:30 AM
Departure Time from Destination:	7:00 PM
Arrival Time to School:	7:30 PM
Arrival Location to School:	HS Music Wing
Trip Destination (List as much information as possible, if multiple stops, list in order):	Manheim Township HS
Explain the significance of the trip to planned course of study. Include information relevant to class objectives, curriculum integration and activities or assessments which demonstrate the student's ability to make meaningful use of the knowledge or experience. (You can include the link to your google doc here if you prefer):	PMEA Honors Ensemble Festival
Number of Students Attending:	1

Number of Adults Attending:	1
Substitutes Needed (Periods):	All Day
Type of Vehicle Requested:	Other
If other, please describe:	No vehicle is needed because student will be transported to and from the festival by parent who is a music educator from another participating school.
Number of vehicles needed:	0
Who is paying the trip cost?:	Paid by District
Which party is responsible for payment?:	Department Funds

Approval history

In progress

Approved by benjamin_feeney@l-spioneers.org