Wall Township Public Schools	Board Approval Date: 8/18/26
Course Title: Kindergarten Math	
Course Description: This Kindergarten Mathematics course develops foundational skills in number sense, operations, geometry, measurement, and problem-solving through hands-on, real-world learning.	

Course Sequence & Pacing

Unit Title	MP/Weeks
Unit 1: Position, Length, Height, and Sorting This unit introduces students to foundational math concepts by exploring spatial relationships, comparing and measuring objects, and sorting and counting items. Through hands-on activities, students develop early reasoning, observation, and classification skills while building the mathematical vocabulary needed for future learning.	MP 1 - Wks 1 - 5 (24 days)
Unit 2: Numbers to 5, Shapes, and Weight This unit builds foundational number sense by helping students count, represent, compare, and write numbers to 5 while exploring three-dimensional shapes and comparing the weight of objects. Through hands-on learning, students strengthen early mathematical reasoning, observation, and problem-solving skills.	MP 1 - Wks 6 - 9 (19 days)
Unit 3: Addition and Subtraction Within 5 and Shapes This unit develops students' understanding of addition and subtraction within 5 while reinforcing the identification and attributes of two-dimensional shapes. Through hands-on activities and real-world applications, students build fluency with early operations, strengthen mathematical reasoning, and connect number concepts to geometry.	MP 2 - Wks 10 -14 (24 days)
Unit 4: Numbers to 10 and Shapes This unit extends students' number sense by developing fluency with counting, comparing, composing, and decomposing numbers to 10 while exploring how shapes can be combined to create new figures. Through hands-on investigations, students strengthen early addition concepts, number relationships, and geometric reasoning.	MP 3 - Wks 15-20 (29 days)
Unit 5: Numbers to 100 This unit expands students' understanding of numbers by developing skills in counting, reading, and writing numbers through 20, counting within 100, and composing and decomposing numbers. Through hands-on activities and real-world applications, students build number sense, recognize number relationships, and strengthen place value foundations.	MP 3 - Wks 20-24 (24 days)

Unit 6: Addition and Subtraction Within 10 This unit develops students' fluency with addition and subtraction within 10 while applying these skills to solve real-world word problems. Through hands-on learning and mathematical reasoning, students strengthen computational fluency, problem-solving strategies, and confidence with early operations.	MP 4 - Wks 25-28 (19 days)
Unit 7: Teen Numbers and Shapes This unit deepens students' understanding of teen numbers by composing and decomposing numbers using models, drawings, and symbols while strengthening spatial reasoning through building with shapes. Through hands-on exploration, students develop place value concepts, mathematical reasoning, and problem-solving skills.	MP 2 - Wks 29-30 (20 days)

Unit 1

Desired Results

Unit 1 Title: Position, Length, Height, and Sorting

Unit Summary: This unit introduces students to foundational math concepts by exploring spatial relationships, comparing and measuring objects, and sorting and counting items. Through hands-on activities, students develop early reasoning, observation, and classification skills while building the mathematical vocabulary needed for future learning.

Learning Standards

NJSLS:

- K.G.A.1 Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as above, below, beside, in front of, behind, and next to.
- K.M.A.1 Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.
- K.M.A.2 Directly compare two objects with a measurable attribute in common, to see which object has “more of” /”less of” the attribute, and describe the difference. For example, directly compare the heights of two children and describe one child as taller/shorter.
- K.DL.A.1 Classify objects into given categories; count the numbers of objects in each category and sort the categories by count. (Clarification: Limit category counts to be less than or equal to 10)

Interdisciplinary Connections

Career Readiness, Life Literacies, & Key Skills *(CLKS)*:

- 9.4.2.CI.1: Demonstrate openness to new ideas and perspectives
- 9.4.2.CT.2 Identify possible approaches and resources to execute a plan

Computer Science & Design Thinking (*CS & DT***):**

- 8.1.2.DA.1 Collect and organize data to answer questions about the world.
- 8.2.2.ED.1 Communicate ideas through the design process using drawings or models.

Interdisciplinary Connections:

English Language Arts (2023 NJSLS-ELA)

- L.KL.K.1 With prompting and support, develop knowledge of language and its conventions when speaking and listening.
- L.VL.K.2 With prompting and support, ask and answer questions to determine or clarify the meaning of unknown and multiple-meaning words and phrases based on kindergarten reading and content.
- L.VI.K.3 With guidance and support from adults, explore word relationships and nuances in word meanings, including sorting common objects into categories.

Learning Targets

Unit Essential Questions:

- How can we use words to describe the position of objects?
- How can we compare objects by their length and height?
- Why do we sort objects, and how can objects be grouped in different ways?
- How does using mathematical vocabulary help us describe and explain what we observe?

Unit Enduring Understandings:

- Objects can be described using positional words to communicate where they are located.
- Objects can be compared by measurable attributes, such as length and height.
- Objects can be sorted into groups based on shared attributes, and those groups can be counted and compared.
- Mathematical vocabulary helps us observe, describe, compare, and communicate our thinking clearly.

Mathematical Vocabulary

- Above
- Below
- Longer
- Shorter
- Sort

Academic Vocabulary

- Different
- Notice

Additional Vocabulary

- Behind
- Beside
- In front of
- Inside
- Next to
- Outside

Students will be able to:

- Describe the position of objects using positional words (e.g., above, below, beside, behind, next to, in front of).
- Place objects in specified positions using positional vocabulary.
- Describe and compare measurable attributes of objects, including length and height.
- Compare two objects to determine which is longer or shorter.
- Compare two objects to determine which is taller or shorter.
- Sort objects into groups based on common attributes.
- Explain the rule used to sort objects into groups.
- Count the number of objects in each sorted group.
- Compare groups by determining which has more, fewer, or the same number of objects.
- Use appropriate mathematical vocabulary to describe the position, length, height, and attributes of objects.
- Observe, describe, and communicate mathematical thinking using words, pictures, objects, and models.

Assessment Evidence

Formative Assessments:

- **Show What You Know (Pre-Assessment):** Students draw and explain what they know about position, length, height, and sorting before instruction begins.
- **Teacher Observation:** Monitor students' use of mathematical vocabulary, participation in discussions, and hands-on activities.

- **Questioning and Class Discussions:** Check understanding through oral responses and mathematical reasoning.
- **Performance Tasks:** Students demonstrate understanding by placing, comparing, sorting, counting, and explaining their thinking during lesson activities.
- **Vocabulary Checks:** Ongoing monitoring of students' use of mathematical and academic vocabulary.
- **Math in Action: Imagine a Rainforest:** Authentic application task requiring students to apply concepts of position, comparison, sorting, and counting in a real-world context.
- **Student Self-Reflection:** Students reflect on their learning and growth at the end of the unit.

Summative Assessments:

- **Unit 1 Assessment or Digital Comprehension Check:** Measures students' mastery of the unit standards and skills.
- **Show What You Learned (Post-Assessment):** Students revisit the opening task by drawing and explaining what they have learned about position, length, height, and sorting, allowing comparison to their initial understanding.

Common Benchmark Assessments:

- iReady Beginning of Year Diagnostic
- USNS Fall Assessment

Core Instructional & Supplemental Materials

- i-Ready Classroom Mathematics Student Worktext
- Teacher's Guide
- Teacher Toolbox digital resources
- Interactive whiteboard or document camera
- Vocabulary cards and visual word wall
- Picture cards and sorting cards
- Classroom objects for sorting and comparing
- Counters and connecting cubes
- Pattern blocks and attribute blocks
- Linking cubes or other nonstandard measuring tools
- Real-world objects for comparing length and height
- Chart paper and anchor charts
- Math journals or recording sheets
- Crayons, pencils, scissors, and glue
- Manipulatives for hands-on exploration
- Digital resources and interactive activities (when available)

Accommodations and Modifications:
Students with Disabilities, English Language Learners,
Students at Risk of Failure, Students with 504s, Gifted & Talented Students

Specific Strategies and Practices that Support Students with Disabilities:

Students receiving Special Education programming have specific goals and objectives, as well as accommodations and modifications outlined within their Individualized Education Plans (IEP) due to an identified disability and/or diagnosis. In addition to exposure to the general education curriculum, the instruction is differentiated based upon the student's needs. The IEP acts as a supplemental curriculum guide inclusive of instructional strategies that support each learner.

- Provide additional manipulatives to support instruction
- Allow for alternative strategies to solve algorithms or tasks
- Provide the steps needed to complete the task
- Model frequently
- Use visuals to demonstrate/model the processes
- Visual Animation Plus
- Reteaching opportunities if applicable through differentiated centers
- Checklists - Immediate feedback

Specific Strategies and Practices that Support Gifted & Talented Students:

- Problem based learning
- Pre-Assess to condense curriculum in order to do more authentic problem solving/projects
- Differentiated centers with extension activities

Specific Strategies and Practices that Support English Language Learners:

- Develop basic vocabulary
- Demonstrate listening comprehension by retelling
- Use prior experience to understand meanings
- Visual learning bridge
- Visual learning Animation Plus
- Personal glossary
- Text-to-speech
- Extended time
- Simplified / verbal instructions

Specific Strategies and Practices that Support English Language Learners

English language learner (ELL) is a national-origin-minority student who is limited-English-proficient. This term is often preferred over limited-English-proficient (LEP) as it highlights accomplishments rather than deficits.

- Pre-teaching of vocabulary and concepts
- Personal Glossary

- Extended Time
- Simplified/Verbal Instructions
- Visual learning, including graphic organizers
- Use of cognates to increase comprehension
- Pairing students with beginning English language skills with students who have more advanced English language skills
- Scaffolding - Word walls - Think-pair-share - Cooperative learning groups

Students at Risk of Failure

- Home/School Connection
- Alternative Assessments
- Learning Contracts
- Homogeneous Grouping
- Supplemental Instruction
- Tiered Activities - Small Group Instruction
- Work Alone Choice - Group Work Choice

Students with 504 Plans

- Teachers are responsible for implementing designated services and strategies identified on a student's 504 Plan.
- 504 plans are formal plans that schools develop to give kids the support they need and covers any condition that limits daily activities in a major way.
- Students' accommodations are outlined in their individual 504 plan.

Specific Strategies and Practices that Support Gifted & Talented Students

It is critical that all teachers are able to recognize a high-ability student who may need more depth and complexity in instruction.

- Homogeneous Grouping - Small Group In-Depth Instruction
- Differentiated Online Practice - Alternative Assessments
- Pre-Assess to provide Differentiated Instruction to Accelerate Learning

Unit 2

Desired Results

Unit 2 Title: Numbers to 5, Shapes, and Weight

Unit Summary: This unit builds foundational number sense by helping students count, represent, compare, and write numbers to 5 while exploring three-dimensional shapes and comparing the weight of objects. Through hands-on learning, students strengthen early mathematical reasoning, observation, and problem-solving skills.

Learning Standards

NJSLS:

- K.CC.A.3 Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects)
- K.CC.B.4 Understand the relationship between numbers and quantities; connect counting to cardinality.
    - a. When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only oneRL.K.4. Ask and answer questions about unknown words in a text
    - b. Understand that the last number name said, tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted.
    - c. Understand that each successive number name refers to a quantity that is one larger.
- K.CC.B.5 Count to answer "how many?" questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1–20, count out that many objects.
- K.CC.C.6 Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies
- K.CC.C.7 Compare two numbers between 1 and 10 presented as written numerals.
- K.M.A.1 Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.
- K.M.A.2 Directly compare two objects with a measurable attribute in common, to see which object has "more of" /"less of" the attribute, and describe the difference. For example, directly compare the heights of two children and describe one child as taller/shorter.
- K.G.A.1 Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as above, below, beside, in front of, behind, and next to.
- K.G.A.2 Correctly name shapes regardless of their orientations or overall size.
- K.G.B.4 Analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides and vertices/"corners") and other attributes (e.g., having sides of equal length).

Interdisciplinary Connections

Career Readiness, Life Literacies, & Key Skills *(CLKS)*:

- 9.4.2.CT.3: Use a variety of types of thinking to solve problems
- 9.4.2.CI.1: Demonstrate openness to new ideas and perspectives

Computer Science & Design Thinking *(CS & DT)*:

- 8.1.2.DA.1 Collect and organize data to answer questions.
- 8.2.2.ED.1 Communicate design ideas through sketches, models, or other representations.

Interdisciplinary Connections:

English Language Arts (2023 NJSLS-ELA)

- L.KL.K.1 Develop knowledge of language and its conventions when speaking and listening.
- L.VL.K.2 Ask and answer questions to determine or clarify the meaning of unknown words and phrases.
- L.VI.K.3 Explore word relationships and nuances in word meanings, including categorizing objects and describing attributes.

Science (2026 NJSLS-Science)

- **K-PS1-1** Plan and conduct an investigation to describe and classify different kinds of materials by their observable properties.
- **K-PS2-1** Plan and conduct an investigation to compare the effects of different strengths or directions of pushes and pulls (supports comparing measurable attributes such as weight through hands-on investigations).

Visual and Performing Arts (2020 NJSLS-VPA)

- **1.5.2.Cr1a** Engage in individual and collaborative art-making to explore shapes, forms, and spatial relationships.

Learning Targets

Unit Essential Questions:

- How does counting help us know how many objects are in a group?
- How can we compare groups and numbers?
- How can shapes and their attributes help us describe the world around us?
- How can we compare the weight of objects?

Unit Enduring Understandings:

- Counting with one-to-one correspondence determines the number of objects in a group.
- Numbers can be represented, written, compared, and ordered.
- Objects can be compared using attributes such as quantity and weight.
- Three-dimensional shapes can be identified and described by their attributes.

Mathematical Vocabulary

- Count
- Less
- More
- Number

Academic Vocabulary

- Arrange
- Compare

Additional Vocabulary

- Zero
- One
- Two
- Three
- Four
- Five

Students will be able to:

- Count objects using one-to-one correspondence.
- Show, write, read, and count numbers 0–5.
- Demonstrate that 0 represents no objects.
- Compare two groups using the terms more, less, and same.

- Identify the number that is one more than a given number.
- Name and describe three-dimensional shapes.
- Compare two objects to determine which is heavier or lighter.
- Use mathematical vocabulary to describe numbers, shapes, and weight.
- Explain mathematical thinking using words, pictures, objects, and models.

Assessment Evidence

Formative Assessments:

- Show What You Know (Pre-Assessment)
- Teacher observations
- Classroom discussions and questioning
- Hands-on counting and comparison activities
- Shape identification and sorting tasks
- Weight comparison investigations
- Vocabulary checks
- Math in Action: **Play with Puppets**
- Student self-reflection

Summative Assessments:

- Unit 2 Assessment or Digital Comprehension Check\
- Show What You Learned (Post-Assessment)

Core Instructional & Supplemental Materials

- i-Ready Classroom Mathematics Student Worktext
- Teacher's Guide
- Teacher Toolbox digital resources
- Interactive whiteboard or document camera
- Vocabulary cards and visual word wall
- Number cards (0–5)
- Counters and connecting cubes
- Five frames
- Three-dimensional shape models
- Balance scale
- Classroom objects for comparing weight
- Pattern blocks
- Manipulatives for counting and comparing
- Recording sheets or math journals
- Chart paper and anchor charts
- Crayons, pencils, scissors, and glue

- Digital interactive resources
- 0-10, chart paper, craft sticks

Accommodations and Modifications: Students with Disabilities, English Language Learners, Students at Risk of Failure, Students with 504s, Gifted & Talented Students

Specific Strategies and Practices that Support Students with Disabilities:

Students receiving Special Education programming have specific goals and objectives, as well as accommodations and modifications outlined within their Individualized Education Plans (IEP) due to an identified disability and/or diagnosis. In addition to exposure to the general education curriculum, the instruction is differentiated based upon the student's needs. The IEP acts as a supplemental curriculum guide inclusive of instructional strategies that support each learner.

- Provide additional manipulatives to support instruction
- Allow for alternative strategies to solve algorithms or tasks
- Provide the steps needed to complete the task
- Model frequently
- Use visuals to demonstrate/model the processes
- Visual Animation Plus
- Reteaching opportunities if applicable through differentiated centers
- Checklists - Immediate feedback

Specific Strategies and Practices that Support Gifted & Talented Students:

- Problem based learning
- Pre-Assess to condense curriculum in order to do more authentic problem solving/projects
- Differentiated centers with extension activities

Specific Strategies and Practices that Support English Language Learners:

- Develop basic vocabulary
- Demonstrate listening comprehension by retelling
- Use prior experience to understand meanings
- Visual learning bridge
- Visual learning Animation Plus
- Personal glossary
- Text-to-speech
- Extended time
- Simplified / verbal instructions

Specific Strategies and Practices that Support English Language Learners

English language learner (ELL) is a national-origin-minority student who is limited-English-proficient. This term is often preferred over limited-English-proficient (LEP) as it highlights accomplishments rather than deficits.

- Pre-teaching of vocabulary and concepts
- Personal Glossary
- Extended Time
- Simplified/Verbal Instructions
- Visual learning, including graphic organizers
- Use of cognates to increase comprehension
- Pairing students with beginning English language skills with students who have more advanced English language skills
- Scaffolding - Word walls - Think-pair-share - Cooperative learning groups

Students at Risk of Failure

- Home/School Connection
- Alternative Assessments
- Learning Contracts
- Homogeneous Grouping
- Supplemental Instruction
- Tiered Activities - Small Group Instruction
- Work Alone Choice - Group Work Choice

Students with 504 Plans

- Teachers are responsible for implementing designated services and strategies identified on a student's 504 Plan.
- 504 plans are formal plans that schools develop to give kids the support they need and covers any condition that limits daily activities in a major way.
- Students' accommodations are outlined in their individual 504 plan.

Specific Strategies and Practices that Support Gifted & Talented Students

It is critical that all teachers are able to recognize a high-ability student who may need more depth and complexity in instruction.

- Homogeneous Grouping - Small Group In-Depth Instruction
- Differentiated Online Practice - Alternative Assessments
- Pre-Assess to provide Differentiated Instruction to Accelerate Learning

Unit 3

Desired Results

Unit 3 Title: Addition and Subtraction Within 5 and Shapes

Unit Summary: This unit develops students' understanding of addition and subtraction within 5 while reinforcing the identification and attributes of two-dimensional shapes. Through hands-on activities and real-world applications, students build fluency with early operations, strengthen mathematical reasoning, and connect number concepts to geometry.

Learning Standards

NJSLS:

- K.OA.A.1 Represent addition and subtraction up to 10 with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.
- K.OA.A.2 Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.
- K.OA.A.3 Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a drawing or equation (e.g., 5 =2 + 3 and 5 = 4 + 1).
- K.G.A.1 Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as above, below, beside, in front of, behind, and next to.
- K.G.A.2 Correctly name shapes regardless of their orientations or overall size.
- K.G.B.4 Analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides and vertices/"corners") and other attributes (e.g., having sides of equal length).

Interdisciplinary Connections

Career Readiness, Life Literacies, & Key Skills *(CLKS)*:

- 9.4.2.CI.1 Demonstrate creativity and imagination in solving problems.
- 9.4.2.CT.1 Identify problems and develop possible solutions.

Computer Science & Design Thinking (*CS & DT***):**

- 8.1.2.DA.1 Collect and organize data to answer questions.
- 8.2.2.ED.1 Communicate ideas through sketches, models, or other representations.

Interdisciplinary Connections:

English Language Arts (2023 NJSLS-ELA)

- L.KL.K.1 Develop knowledge of language and its conventions when speaking and listening.
- L.VL.K.2 Ask and answer questions to determine or clarify the meaning of unknown words and phrases.
- L.VI.K.3 Explore word relationships and nuances in word meanings.

Science (2020 NJSLS-Science)

- K-PS1-1 Plan and conduct investigations to describe and classify materials by their observable properties.

Visual and Performing Arts (2020 NJSLS-VPA)

- 1.5.2.Cr1a Engage in individual and collaborative art-making experiences using shapes and designs.

Learning Targets

Unit Essential Questions:

- How can we use addition and subtraction to solve everyday problems?
- How do we know when to add and when to subtract?
- How can we identify and describe two-dimensional shapes?
- How can models and mathematical language help us explain our thinking?

Unit Enduring Understandings:

- Addition combines groups to make a larger quantity, while subtraction represents taking away from a group.
- Story problems can be solved by determining whether addition or subtraction is needed.
- Two-dimensional shapes can be identified and described by their attributes regardless of size or orientation.
- Mathematical models, vocabulary, and representations help communicate mathematical thinking.

Mathematical Vocabulary

- Add
- Circle
- Square
- Triangle
- Take away

Academic Vocabulary

- Model
- Record

Additional Vocabulary

- Flat
- Plus
- Rectangle
- Side
- Subtract
- Total

Students will be able to:

- Use manipulatives, drawings, or fingers to add numbers within 5.
- Solve add-to story problems using models and mathematical reasoning.
- Identify and name two-dimensional shapes regardless of size or orientation.
- Describe the attributes of two-dimensional shapes.
- Use manipulatives, drawings, or fingers to subtract numbers within 5.
- Solve take-away story problems using models and mathematical reasoning.
- Determine whether a story problem requires addition or subtraction.
- Use mathematical vocabulary to describe addition, subtraction, and two-dimensional shapes.
- Explain mathematical thinking using words, pictures, objects, and models.

Assessment Evidence

Formative Assessments:

- Show What You Know (Pre-Assessment)
- Teacher observations
- Classroom discussions and questioning

- Hands-on addition and subtraction activities using manipulatives
- Shape identification and attribute activities
- Story problem solving
- Vocabulary checks
- Math in Action: **Make a Mobile**
- Student self-reflection

Summative Assessments:

- Unit 3 Assessment or Digital Comprehension Check
- Show What You Learned (Post-Assessment)

Common Benchmark Assessments:

- iReady Mid-Year Assessment
- USNS Winter Assessment

Core Instructional & Supplemental Materials

- i-Ready Classroom Mathematics Student Worktext
- Teacher's Guide
- Teacher Toolbox digital resources
- Interactive whiteboard or document camera
- Vocabulary cards and visual word wall
- Counters and connecting cubes
- Two-color counters
- Five frames
- Pattern blocks and shape manipulatives
- Geometric shape cards
- Story problem picture cards
- Recording sheets or math journals
- Chart paper and anchor charts
- Crayons, pencils, scissors, and glue
- Manipulatives for modeling addition and subtraction
- Digital interactive resources

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- Develop basic vocabulary
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- Visual learning bridge
- Visual learning Animation Plus
- Personal glossary
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- Personal Glossary
- Extended Time

- Simplified/Verbal Instructions
- Visual learning, including graphic organizers
- Use of cognates to increase comprehension
- Pairing students with beginning English language skills with students who have more advanced English language skills
- Scaffolding - Word walls - Think-pair-share - Cooperative learning groups

Students at Risk of Failure

- Home/School Connection
- Alternative Assessments
- Learning Contracts
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- Homogeneous Grouping - Small Group In-Depth Instruction
- Differentiated Online Practice - Alternative Assessments
- Pre-Assess to provide Differentiated Instruction to Accelerate Learning

Unit 4

Desired Results

Unit 4 Title: **Numbers to 10 and Shapes**

Unit Summary: This unit extends students' number sense by developing fluency with counting, comparing, composing, and decomposing numbers to 10 while exploring how shapes can be combined to create new figures. Through hands-on investigations, students strengthen early addition concepts, number relationships, and geometric reasoning.

Learning Standards

NJSLS:

- K.CC.A.3 Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects).
- K.CC.B.4 Understand the relationship between numbers and quantities; connect counting to cardinality.
    - a. When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one
    - b. Understand that the last number name said, tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted.
    - c. Understand that each successive number name refers to a quantity that is one larger. ● K.CC.B.5 Count to answer "how many?" questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1–20, count out that many objects.
- K.CC.C.6 Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies.
- K.CC.C.7 Compare two numbers between 1 and 10 presented as written numerals.
- K.OA.A.3 Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a drawing or equation (e.g., 5 =2 + 3 and 5 = 4 + 1).
- K.OA.A.4 For any number from 1 to 9, find the number that makes 10 when added to the given number.
- K.OA.A.5 Demonstrate fluency for addition and subtraction within 5.
- K.G.B.5 Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes.
- K.G.B.6 Compose simple shapes to form larger shapes. For example, "Can you join these two triangles with full sides touching to make a rectangle?"

Interdisciplinary Connections

Career Readiness, Life Literacies, & Key Skills *(CLKS)*:

- 9.4.2.CI.1 Demonstrate creativity and imagination in solving problems.
- 9.4.2.CT.1 Identify problems and develop possible solutions.

Computer Science & Design Thinking (*CS & DT***):**

- 8.1.2.DA.1 Collect and organize data to answer questions.
- 8.2.2.ED.1 Communicate design ideas through sketches, models, or other representations.

Interdisciplinary Connections:

English Language Arts (2023 NJSLS-ELA)

- L.KL.K.1 Develop knowledge of language and its conventions when speaking and listening.
- L.VL.K.2 Ask and answer questions to determine or clarify the meaning of unknown words and phrases.
- L.VI.K.3 Explore word relationships and nuances in word meanings.

Science (2026 NJSLS-Science)

- K-ETS1-1 Ask questions, make observations, and gather information about a situation people want to change to define a simple problem.
- K-ETS1-2 Develop a simple sketch, drawing, or physical model to illustrate how an object's shape helps it function.

Visual and Performing Arts (2020 NJSLS-VPA)

- 1.5.2.Cr1a Engage in individual and collaborative art-making experiences using geometric shapes and spatial design.

Learning Targets

Unit Essential Questions:

- How can we count, represent, and compare numbers to 10?
- How can numbers be broken apart and put back together to make 10?
- How can smaller shapes be combined to create larger shapes?
- How do models and equations help us represent mathematical thinking?

Unit Enduring Understandings:

- Numbers can be counted, written, compared, and represented in multiple ways.
- Numbers can be composed and decomposed into smaller parts while maintaining the same value.
- Shapes can be combined to create larger shapes and new designs.
- Mathematical models, equations, and vocabulary help explain mathematical thinking.

Mathematical Vocabulary

- Equal to
- Equation
- Greater
- Ten

Academic Vocabulary

- After
- Part

Additional Vocabulary

- Six
- Seven
- Eight
- Nine
- Compose
- Decompose

Students will be able to:

- Count, read, write, and represent numbers 6–10.
- Compare numbers using the terms greater than, less than, and equal to.
- Compose larger two-dimensional shapes from smaller shapes.
- Compose larger three-dimensional shapes from smaller shapes.
- Compose and decompose the number 10 in multiple ways.
- Find the missing number partner for 10.
- Write equations to represent number partners for 10.
- Use mathematical vocabulary to describe numbers, equations, and shapes.
- Explain mathematical thinking using words, pictures, objects, models, and equations.

Assessment Evidence

Formative Assessments:

- Show What You Know (Pre-Assessment)
- Teacher observations
- Classroom discussions and questioning
- Number identification and comparison activities
- Shape composition investigations
- Number partner activities
- Equation-writing practice
- Vocabulary checks
- Math in Action: Plan a Playground
- Student self-reflection

Summative Assessments:

- Unit 4 Assessment or Digital Comprehension Check
- Show What You Learned (Post-Assessment)

Core Instructional & Supplemental Materials

- i-Ready Classroom Mathematics Student Worktext
- Teacher's Guide
- Teacher Toolbox digital resources
- Interactive whiteboard or document camera
- Vocabulary cards and visual word wall
- Number cards (6–10)
- Counters and connecting cubes
- Ten frames
- Two-color counters
- Pattern blocks
- Two- and three-dimensional shape manipulatives
- Geoboards (optional)
- Recording sheets or math journals
- Chart paper and anchor charts
- Crayons, pencils, scissors, and glue
- Manipulatives for composing/decomposing numbers and shapes
- Digital interactive resources

Accommodations and Modifications:
Students with Disabilities, English Language Learners,
Students at Risk of Failure, Students with 504s, Gifted & Talented Students

Specific Strategies and Practices that Support Students with Disabilities:

Students receiving Special Education programming have specific goals and objectives, as well as accommodations and modifications outlined within their Individualized Education Plans (IEP) due to an identified disability and/or diagnosis. In addition to exposure to the general education curriculum, the instruction is differentiated based upon the student's needs. The IEP acts as a supplemental curriculum guide inclusive of instructional strategies that support each learner.

- Provide additional manipulatives to support instruction
- Allow for alternative strategies to solve algorithms or tasks
- Provide the steps needed to complete the task
- Model frequently
- Use visuals to demonstrate/model the processes
- Visual Animation Plus
- Reteaching opportunities if applicable through differentiated centers
- Checklists - Immediate feedback

Specific Strategies and Practices that Support Gifted & Talented Students:

- Problem based learning
- Pre-Assess to condense curriculum in order to do more authentic problem solving/projects
- Differentiated centers with extension activities

Specific Strategies and Practices that Support English Language Learners:

- Develop basic vocabulary
- Demonstrate listening comprehension by retelling
- Use prior experience to understand meanings
- Visual learning bridge
- Visual learning Animation Plus
- Personal glossary
- Text-to-speech
- Extended time
- Simplified / verbal instructions

Specific Strategies and Practices that Support English Language Learners

English language learner (ELL) is a national-origin-minority student who is limited-English-proficient. This term is often preferred over limited-English-proficient (LEP) as it highlights accomplishments rather than deficits.

- Pre-teaching of vocabulary and concepts
- Personal Glossary
- Extended Time

- Simplified/Verbal Instructions
- Visual learning, including graphic organizers
- Use of cognates to increase comprehension
- Pairing students with beginning English language skills with students who have more advanced English language skills
- Scaffolding - Word walls - Think-pair-share - Cooperative learning groups

Students at Risk of Failure

- Home/School Connection
- Alternative Assessments
- Learning Contracts
- Homogeneous Grouping
- Supplemental Instruction
- Tiered Activities - Small Group Instruction
- Work Alone Choice - Group Work Choice

Students with 504 Plans

- Teachers are responsible for implementing designated services and strategies identified on a student's 504 Plan.
- 504 plans are formal plans that schools develop to give kids the support they need and covers any condition that limits daily activities in a major way.
- Students' accommodations are outlined in their individual 504 plan.

Specific Strategies and Practices that Support Gifted & Talented Students

It is critical that all teachers are able to recognize a high-ability student who may need more depth and complexity in instruction.

- Homogeneous Grouping - Small Group In-Depth Instruction
- Differentiated Online Practice - Alternative Assessments
- Pre-Assess to provide Differentiated Instruction to Accelerate Learning

Unit 5

Desired Results

Unit 5 Title: **Numbers to 100**

Unit Summary: This unit expands students' understanding of numbers by developing skills in counting, reading, and writing numbers through 20, counting within 100, and composing and decomposing numbers. Through hands-on activities and real-world applications, students build number sense, recognize number relationships, and strengthen place value foundations.

Learning Standards

NJSLS:

- K.CC.A.1 Count to 100 by ones and by tens.
- K.CC.A.2 Count forward beginning from a given number within the known sequence (instead of having to begin
- at 1).
- K.CC.A.3 Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects).
- K.CC.B.4 Understand the relationship between numbers and quantities; connect counting to cardinality.
    - a. When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one
    - b. Understand that the last number name said, tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted.
    - c. Understand that each successive number name refers to a quantity that is one larger. ● K.CC.B.5 Count to answer “how many?” questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1–20, count out that many objects.
- K.CC.B.5 Count to answer “how many?” questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1–20, count out that many objects.
- K.OA.A.3 Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a drawing or equation (e.g., 5 =2 + 3 and 5 = 4 + 1).
- K.OA.A.5 Demonstrate fluency for addition and subtraction within 5.

Interdisciplinary Connections

Career Readiness, Life Literacies, & Key Skills *(CLKS)*:

- 9.4.2.CI.1 Demonstrate creativity and imagination in solving problems.
- 9.4.2.CT.1 Identify problems and develop possible solutions.

Computer Science & Design Thinking (*CS & DT***):**

- 8.1.2.DA.1 Collect and organize data to answer questions.
- 8.2.2.ED.1 Communicate ideas through sketches, models, or other representations.

Interdisciplinary Connections:

English Language Arts (2023 NJSLS-ELA)

- L.KL.K.1 Develop knowledge of language and its conventions when speaking and listening.
- L.VL.K.2 Ask and answer questions to determine or clarify the meaning of unknown words and phrases.
- L.VI.K.3 Explore word relationships and nuances in word meanings.

Science (2026 NJSLS-Science)

- K-LS1-1 Use observations to describe patterns of what plants and animals need to survive, supporting the Grow a Garden performance task.

Visual and Performing Arts (2020 NJSLS-VPA)

- 1.5.2.Cr1a Engage in individual and collaborative creative experiences to represent mathematical ideas through drawings and models.

Learning Targets

Unit Essential Questions:

- How can counting patterns help us count to 100?
- What do teen numbers represent?
- How can numbers be broken apart into smaller parts?
- How can equations help us represent number relationships?

Unit Enduring Understandings:

- Counting by ones and tens helps us understand larger numbers and recognize patterns.
- Teen numbers represent quantities from 11 to 19 and can be read, written, and counted.
- Numbers can be composed and decomposed into smaller parts while maintaining the same value.
- Equations and mathematical models help represent and explain number relationships.

Mathematical Vocabulary

- Count on
- Eleven
- Twelve
- Teen numbers

Academic Vocabulary

- Place
- Organize

Additional Vocabulary

- Thirteen
- Fourteen
- Fifteen
- Sixteen
- Seventeen
- Eighteen
- Nineteen
- Twenty

Students will be able to:

- Count, read, write, and represent numbers 11–20.
- Count to 100 by ones and by tens.
- Count on from any number less than 100.
- Decompose the numbers 6 and 7 into number partners.
- Write equations to represent number partners for 6 and 7.
- Decompose the numbers 8 and 9 into number partners.
- Write equations to represent number partners for 8 and 9.
- Use mathematical vocabulary to describe counting, composing, and decomposing numbers.
- Explain mathematical thinking using words, pictures, objects, models, and equations.

Assessment Evidence

Formative Assessments

- Show What You Know (Pre-Assessment)
- Teacher observations
- Classroom discussions and questioning
- Counting and number sequencing activities
- Count-on investigations
- Number partner activities
- Equation-writing practice
- Vocabulary checks
- Math in Action: Grow a Garden
- Student self-reflection

Summative Assessments:

- Unit 5 Assessment or Digital Comprehension Check
- Show What You Learned (Post-Assessment)

Common Benchmark Assessments:

- iReady EOY

Core Instructional & Supplemental Materials

- i-Ready Classroom Mathematics Student Worktext
- Teacher's Guide
- Teacher Toolbox digital resources
- Interactive whiteboard or document camera
- Vocabulary cards and visual word wall
- Number cards (11–20)
- Counters and connecting cubes
- Ten frames
- Hundreds chart
- Linking cubes
- Number path or number line
- Two-color counters
- Recording sheets or math journals
- Chart paper and anchor charts
- Crayons, pencils, scissors, and glue
- Manipulatives for composing and decomposing numbers
- Digital interactive resources

Accommodations and Modifications:
Students with Disabilities, English Language Learners,
Students at Risk of Failure, Students with 504s, Gifted & Talented Students

Specific Strategies and Practices that Support Students with Disabilities:

Students receiving Special Education programming have specific goals and objectives, as well as accommodations and modifications outlined within their Individualized Education Plans (IEP) due to an identified disability and/or diagnosis. In addition to exposure to the general education curriculum, the instruction is differentiated based upon the student's needs. The IEP acts as a supplemental curriculum guide inclusive of instructional strategies that support each learner.

- Provide additional manipulatives to support instruction
- Allow for alternative strategies to solve algorithms or tasks
- Provide the steps needed to complete the task
- Model frequently
- Use visuals to demonstrate/model the processes
- Visual Animation Plus
- Reteaching opportunities if applicable through differentiated centers
- Checklists - Immediate feedback

Specific Strategies and Practices that Support Gifted & Talented Students:

- Problem based learning
- Pre-Assess to condense curriculum in order to do more authentic problem solving/projects
- Differentiated centers with extension activities

Specific Strategies and Practices that Support English Language Learners:

- Develop basic vocabulary
- Demonstrate listening comprehension by retelling
- Use prior experience to understand meanings
- Visual learning bridge
- Visual learning Animation Plus
- Personal glossary
- Text-to-speech
- Extended time
- Simplified / verbal instructions

Specific Strategies and Practices that Support English Language Learners

English language learner (ELL) is a national-origin-minority student who is limited-English-proficient. This term is often preferred over limited-English-proficient (LEP) as it highlights accomplishments rather than deficits.

- Pre-teaching of vocabulary and concepts
- Personal Glossary
- Extended Time

- Simplified/Verbal Instructions
- Visual learning, including graphic organizers
- Use of cognates to increase comprehension
- Pairing students with beginning English language skills with students who have more advanced English language skills
- Scaffolding - Word walls - Think-pair-share - Cooperative learning groups

Students at Risk of Failure

- Home/School Connection
- Alternative Assessments
- Learning Contracts
- Homogeneous Grouping
- Supplemental Instruction
- Tiered Activities - Small Group Instruction
- Work Alone Choice - Group Work Choice

Students with 504 Plans

- Teachers are responsible for implementing designated services and strategies identified on a student's 504 Plan.
- 504 plans are formal plans that schools develop to give kids the support they need and covers any condition that limits daily activities in a major way.
- Students' accommodations are outlined in their individual 504 plan.

Specific Strategies and Practices that Support Gifted & Talented Students

It is critical that all teachers are able to recognize a high-ability student who may need more depth and complexity in instruction.

- Homogeneous Grouping - Small Group In-Depth Instruction
- Differentiated Online Practice - Alternative Assessments
- Pre-Assess to provide Differentiated Instruction to Accelerate Learning

Unit 6

Desired Results

Unit 6 Title: Addition and Subtraction Within 10

Unit Summary: This unit develops students' fluency with addition and subtraction within 10 while applying these skills to solve real-world word problems. Through hands-on learning and mathematical reasoning, students strengthen computational fluency, problem-solving strategies, and confidence with early operations.

Learning Standards

NJSLS:

- K.OA.A.1 Represent addition and subtraction up to 10 with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.
- K.OA.A.2 Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.
- K.OA.A.5 Demonstrate fluency for addition and subtraction within 5.
- K.CC.B.4 Understand the relationship between numbers and quantities; connect counting to cardinality.
    - a. When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one
- K.CC.B.5 Count to answer "how many?" questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1–20, count out that many objects.

Interdisciplinary Connections

Career Readiness, Life Literacies, & Key Skills *(CLKS)*:

- 9.4.2.CI.1 Demonstrate creativity and imagination in solving problems.
- 9.4.2.CT.1 Identify problems and develop possible solutions.

Computer Science & Design Thinking (*CS & DT***):**

- 8.1.2.DA.1 Collect and organize data to answer questions.
- 8.2.2.ED.1 Communicate ideas through sketches, models, or other representations.

Interdisciplinary Connections:

English Language Arts (2023 NJSLS-ELA)

- L.KL.K.1 Develop knowledge of language and its conventions when speaking and listening.
- L.VL.K.2 Ask and answer questions to determine or clarify the meaning of unknown words and phrases.
- L.VI.K.3 Explore word relationships and nuances in word meanings.

Visual and Performing Arts (2020 NJSLS-VPA)

- 1.3.2.Cr1a Generate and conceptualize artistic ideas through movement and creative expression, supporting the Design a Dance performance task.

Health and Physical Education (2020 NJSLS-HPE)

- 2.2.2.MSC.1 Perform and combine movement skills in a variety of physical activities.

Learning Targets

Unit Essential Questions:

- How can we use addition and subtraction to solve everyday problems?
- How do we decide whether to add or subtract?
- How can pictures, manipulatives, and equations help us solve story problems?
- How can mathematical models help explain our thinking?

Unit Enduring Understandings:

- Addition joins groups together, while subtraction separates or takes away from a group.
- Story problems can be solved by determining whether addition or subtraction is needed.
- Mathematical models, equations, and drawings represent addition and subtraction situations.
- Mathematical vocabulary helps communicate mathematical reasoning clearly.

Mathematical Vocabulary

- Addition
- Equal sign (=)
- Equation
- Subtraction

Academic Vocabulary

- Represent
- Start

Additional Vocabulary

- Minus sign (-)
- Plus sign (+)

Students will be able to:

- Use manipulatives to add two numbers within 10.
- Write equations to represent addition situations.
- Use manipulatives to subtract two numbers within 10.
- Write equations to represent subtraction situations.
- Determine whether to add or subtract to solve a story problem.
- Solve addition and subtraction story problems within 10.
- Draw pictures or write equations to represent story problems.
- Use mathematical vocabulary to describe addition and subtraction.
- Explain mathematical thinking using words, pictures, manipulatives, and equations.

Assessment Evidence

Formative Assessments:

- Show What You Know (Pre-Assessment)
- Teacher observations
- Classroom discussions and questioning
- Hands-on addition and subtraction activities
- Story problem investigations
- Manipulative and drawing-based modeling
- Equation-writing practice

- Vocabulary checks
- Math in Action: Design a Dance
- Student self-reflection

Summative Assessments:

- Unit 6 Assessment or Digital Comprehension Check
- Show What You Learned (Post-Assessment)

Common Benchmark Assessments:

- iReady EOY
- USNS Spring Assessment

Core Instructional & Supplemental Materials

- i-Ready Classroom Mathematics Student Worktext
- Teacher's Guide
- Teacher Toolbox digital resources
- Interactive whiteboard or document camera
- Vocabulary cards and visual word wall
- Counters and connecting cubes
- Two-color counters
- Ten frames
- Number path or number line
- Story problem picture cards
- Equation cards
- Recording sheets or math journals
- Chart paper and anchor charts
- Crayons, pencils, scissors, and glue
- Manipulatives for modeling addition and subtraction
- Digital interactive resources

Accommodations and Modifications:
Students with Disabilities, English Language Learners,
Students at Risk of Failure, Students with 504s, Gifted & Talented Students

Specific Strategies and Practices that Support Students with Disabilities:

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- Provide additional manipulatives to support instruction
- Allow for alternative strategies to solve algorithms or tasks
- Provide the steps needed to complete the task
- Model frequently
- Use visuals to demonstrate/model the processes
- Visual Animation Plus
- Reteaching opportunities if applicable through differentiated centers
- Checklists - Immediate feedback

Specific Strategies and Practices that Support Gifted & Talented Students:

- Problem based learning
- Pre-Assess to condense curriculum in order to do more authentic problem solving/projects
- Differentiated centers with extension activities

Specific Strategies and Practices that Support English Language Learners:

- Develop basic vocabulary
- Demonstrate listening comprehension by retelling
- Use prior experience to understand meanings
- Visual learning bridge
- Visual learning Animation Plus
- Personal glossary
- Text-to-speech
- Extended time
- Simplified / verbal instructions

Specific Strategies and Practices that Support English Language Learners

English language learner (ELL) is a national-origin-minority student who is limited-English-proficient. This term is often preferred over limited-English-proficient (LEP) as it highlights accomplishments rather than deficits.

- Pre-teaching of vocabulary and concepts
- Personal Glossary
- Extended Time

- Simplified/Verbal Instructions
- Visual learning, including graphic organizers
- Use of cognates to increase comprehension
- Pairing students with beginning English language skills with students who have more advanced English language skills
- Scaffolding - Word walls - Think-pair-share - Cooperative learning groups

Students at Risk of Failure

- Home/School Connection
- Alternative Assessments
- Learning Contracts
- Homogeneous Grouping
- Supplemental Instruction
- Tiered Activities - Small Group Instruction
- Work Alone Choice - Group Work Choice

Students with 504 Plans

- Teachers are responsible for implementing designated services and strategies identified on a student's 504 Plan.
- 504 plans are formal plans that schools develop to give kids the support they need and covers any condition that limits daily activities in a major way.
- Students' accommodations are outlined in their individual 504 plan.

Specific Strategies and Practices that Support Gifted & Talented Students

It is critical that all teachers are able to recognize a high-ability student who may need more depth and complexity in instruction.

- Homogeneous Grouping - Small Group In-Depth Instruction
- Differentiated Online Practice - Alternative Assessments
- Pre-Assess to provide Differentiated Instruction to Accelerate Learning

Unit 7

Desired Results

Unit 7 Title: Teen numbers and Shapes

Unit Summary: This unit deepens students' understanding of teen numbers by composing and decomposing numbers using models, drawings, and symbols while strengthening spatial reasoning through building with shapes. Through hands-on exploration, students develop place value concepts, mathematical reasoning, and problem-solving skills.

Learning Standards

NJSLS:

- K.NBT.A.1 Compose and decompose numbers from 11 to 19 into ten ones and some further ones, e.g., by using objects or drawings, and record each composition or decomposition by a drawing or equation (e.g., 18 = 10 +8); understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.
- K.G.A.1 Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as above, below, beside, in front of, behind, and next to.
- K.G.A.2 Correctly name shapes regardless of their orientations or overall size.
- K.G.B.5 Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes.
- K.G.B.6 Compose simple shapes to form larger shapes. For example, “Can you join these two triangles with full sides touching to make a rectangle?”

Interdisciplinary Connections

Career Readiness, Life Literacies, & Key Skills *(CLKS)*:

- 9.4.2.CI.1 Demonstrate creativity and imagination in solving problems.
- 9.4.2.CT.1 Identify problems and develop possible solutions.

Computer Science & Design Thinking (*CS & DT***):**

- 8.1.2.DA.1 Collect and organize data to answer questions.
- 8.2.2.ED.1 Communicate design ideas through sketches, models, or other representations.

Interdisciplinary Connections:

English Language Arts (2023 NJSLS-ELA)

- L.KL.K.1 Develop knowledge of language and its conventions when speaking and listening.
- L.VL.K.2 Ask and answer questions to determine or clarify the meaning of unknown words and phrases.
- L.VI.K.3 Explore word relationships and nuances in word meanings.

Science (2026 NJSLS-Science)

- K-ETS1-1 Ask questions, make observations, and gather information to define a simple design problem.
- K-ETS1-2 Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function, supporting the Build for Birds performance task.

Visual and Performing Arts (2020 NJSLS-VPA)

- 1.5.2.Cr1a Engage in individual and collaborative creative experiences using two- and three-dimensional shapes to create works of art.

Learning Targets

Unit Essential Questions:

- What makes a number a teen number?
- How can teen numbers be composed and decomposed?
- How can shapes be combined to build larger objects?
- How can mathematical models and equations help us explain our thinking?

Unit Enduring Understandings:

- Teen numbers are composed of one group of ten and some additional ones.
- Numbers can be composed and decomposed in multiple ways while maintaining the same value.
- Two-dimensional and three-dimensional shapes can be identified, described, and combined to create larger objects.
- Mathematical models, equations, and vocabulary help communicate mathematical thinking.

Mathematical Vocabulary

- Compose
- Flat
- Solid
- Teen numbers
- Ten

Academic Vocabulary

- Build
- Describe

Additional Vocabulary

- Count on
- Cube
- Equation
- Rectangle
- Sort
- Square

Students will be able to:

- Compose teen numbers using one group of ten and additional ones.
- Decompose teen numbers into ten ones and some more ones.
- Identify and describe shapes as flat (two-dimensional) or solid (three-dimensional).
- Create pictures using two-dimensional shapes.
- Build objects using three-dimensional shapes.
- Write equations to represent composing teen numbers.
- Write equations to represent decomposing teen numbers.
- Use mathematical vocabulary to describe teen numbers and two- and three-dimensional shapes.
- Explain mathematical thinking using words, pictures, manipulatives, models, and equations.

Assessment Evidence

Formative Assessments:

- Show What You Know (Pre-Assessment)
- Teacher observations
- Classroom discussions and questioning
- Teen number composition and decomposition activities
- Shape identification and building tasks
- Manipulative investigations

- Equation-writing practice
- Vocabulary checks
- Math in Action: Build for Birds
- Student self-reflection

Summative Assessments:

- Unit 7 Assessment or Digital Comprehension Check
- Show What You Learned (Post-Assessment)

Core Instructional & Supplemental Materials

- i-Ready Classroom Mathematics Student Worktext
- Teacher's Guide
- Teacher Toolbox digital resources
- Interactive whiteboard or document camera
- Vocabulary cards and visual word wall
- Counters and connecting cubes
- Ten frames
- Base-ten blocks or linking cubes
- Number cards (11–19)
- Two-dimensional shape manipulatives
- Three-dimensional shape models
- Pattern blocks
- Building materials (cubes, blocks)
- Recording sheets or math journals
- Chart paper and anchor charts
- Crayons, pencils, scissors, and glue
- Digital interactive resources

Accommodations and Modifications: Students with Disabilities, English Language Learners, Students at Risk of Failure, Students with 504s, Gifted & Talented Students

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- Allow for alternative strategies to solve algorithms or tasks

- Provide the steps needed to complete the task
- Model frequently
- Use visuals to demonstrate/model the processes
- Visual Animation Plus
- Reteaching opportunities if applicable through differentiated centers
- Checklists - Immediate feedback

Specific Strategies and Practices that Support Gifted & Talented Students:

- Problem based learning
- Pre-Assess to condense curriculum in order to do more authentic problem solving/projects
- Differentiated centers with extension activities

Specific Strategies and Practices that Support English Language Learners:

- Develop basic vocabulary
- Demonstrate listening comprehension by retelling
- Use prior experience to understand meanings
- Visual learning bridge
- Visual learning Animation Plus
- Personal glossary
- Text-to-speech
- Extended time
- Simplified / verbal instructions

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- Pre-teaching of vocabulary and concepts
- Personal Glossary
- Extended Time
- Simplified/Verbal Instructions
- Visual learning, including graphic organizers
- Use of cognates to increase comprehension
- Pairing students with beginning English language skills with students who have more advanced English language skills
- Scaffolding - Word walls - Think-pair-share - Cooperative learning groups

Students at Risk of Failure

- Home/School Connection
- Alternative Assessments
- Learning Contracts
- Homogeneous Grouping
- Supplemental Instruction
- Tiered Activities - Small Group Instruction

- Work Alone Choice - Group Work Choice

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Specific Strategies and Practices that Support Gifted & Talented Students

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- Homogeneous Grouping - Small Group In-Depth Instruction
- Differentiated Online Practice - Alternative Assessments
- Pre-Assess to provide Differentiated Instruction to Accelerate Learning