



# Stafford Township School District

## Mathematics Curriculum Grade K

Adopted: 08/17/2017

Updated: 01/06/2020, 8/2/2021 (enVisions), 09/12/2022 (revised 2020 NJSL Interdisciplinary Standards)

## Statement of Purpose

The New Jersey Student Learning Standards for Mathematics challenges us to ensure focus, coherence, and rigor in our mathematics curriculum across all elementary grade levels. Additionally, through the Standards for Mathematical Practice, students are encouraged to develop the application of math skills while solving real world problems.

To gain a greater focus, the standards place an emphasis on fewer skills, deepening and strengthening the foundations, thus providing students with the knowledge to apply the skills to situations inside and outside of the classroom. Grades 3 – 5 focus on concepts, skills and problem solving related to multiplication and division of whole numbers and fractions. Within our curriculum, focus is maintained by building students' conceptual skills while developing a deeper understanding and real world application.

Coherence is supported by the alignment of the curriculum, instruction, and assessments. The repeated domains, within the standards, progress through the elementary grades to allow for developmentally appropriate attainment of learning outcomes. The curriculum's suggested pacing allows for the important balance of developing conceptual understanding and procedural skills. Instructional decisions are guided by the use of Board approved resources, problem-based learning and real-world applications that incorporate technology and the 21st century skills.

Rigor, as addressed in the standards, has three main components: conceptual understanding, procedural skills and fluency, and application. The curriculum has been designed with this in mind; there is a progression of skills that guide students from the conceptual phase to the application component. Each understanding of the concepts applies to a relevant, real world experience. The Standards for Mathematical Practice guide educators in helping students develop "processes and proficiencies" through problem solving, reasoning and proof, communication, representations, and connections, adaptive reasoning, strategic competence, conceptual understanding (comprehension of mathematical concepts, operations and relations), procedural fluency (skill in carrying out procedures flexibly, accurately, efficiently and appropriately), and productive disposition. From these standards, each instructional cycle focuses on a few to enable students to develop deeper understanding.

The Standards for Mathematical Practice describe ways in which developing student practitioners, of the discipline of mathematics, increasingly promote engagement with the subject matter as they grow in mathematical maturity and expertise. This is supported through the scope and sequence of the curriculum.

**Primary Interdisciplinary Connections:** Science, Social Studies, Language Arts, Technology, and 21st Century Life and Careers. For further clarification see New Jersey Student Learning Standards at <http://www.nj.gov/education/cccs/>

**21st Century Themes:** Through instruction in life and career skills, all students acquire the knowledge and skills needed to prepare for life as citizens and workers in the 21st century. For further clarification see <http://www.nj.gov/education/aps/cccs/career/>

## Grade K Overview

### **Counting and Cardinality**

- Know number names and the count sequence
- Count to tell the number of objects
- Compare numbers

### **Operations and Algebraic Thinking**

- Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.

### **Number and Operations in Base Ten**

- Work with numbers 11-19 to gain foundations for place value.

### **Geometry**

- Identify and describe shapes.
- Analyze, compare, create, and compose shapes.

### **Measurement and Data**

- Describe and compare measurable attributes.
- Classify objects and count the number of objects in categories.

## Mathematical Practices

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

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| <b>Counting and Cardinality</b>  | <b>Topics 1-5 Duration: September to December, 29 Days</b>  |  |
| <b>Standards</b>   |   |  |
| <b>K.CC.A1</b>   | 1. Count to 100 by ones and by tens.  |  |
| <b>K.CC.A2</b>   | 2. Count forward beginning from a given number within the known sequence (instead of having to begin at 1).   |  |
| <b>K.CC.A3</b>   | 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).   |  |
| <b>K.CC.B4</b>   | 4. Understand the relationship between numbers and quantities; connect counting to cardinality. <ul style="list-style-type: none"> <li>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 object.</li> <li>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.</li> <li>c. Understand that each successive number name refers to a quantity that is one larger.</li> </ul> |  |
| <b>K.CC.B5</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.  |  |
| <b>K.CC.B6</b>   | 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.   |  |
| <b>K.CC.C7</b>   | 7. Compare two numbers between 1 and 10 presented as written numerals.  |  |
| <b>Interdisciplinary Connections</b>   |   |  |
| <b>Language Arts Standards</b>   |   |  |
| <b>SL.K.1.A</b>  | Follow agreed-upon norms for discussions (e.g., listening to others with care and taking turns speaking about the topics and texts under discussion).   |  |
| <b>SL.K.1.B</b>  | Continue a conversation through multiple exchanges.   |  |
| <b>Computer Science &amp; Design Thinking Standards</b>  |   |  |
| <b>9.4.2.TL.6:</b>   | Illustrate and communicate ideas and stories using multiple digital tools (e.g., SL.2.5.).  |  |
| <b>Career Readiness, Life Literacies and Key Skills</b>  |   |  |
| <p>This outlines concepts and skills necessary for New Jersey’s students to thrive in an ever-changing world. Intended for integration throughout all K-12 academic and technical content areas, the 2020 New Jersey Student Learning Standards — Career Readiness, Life Literacies, and Key Skills (NJSLs-CLKS) provides the framework for students to learn the concepts, skills, and practices essential to the successful navigation of career exploration and preparation, personal finances and digital literacy.</p> <p><a href="https://www.nj.gov/education/standards/clicks/index.shtml">https://www.nj.gov/education/standards/clicks/index.shtml</a></p> |   |  |

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|  | <p><b>9.1 Personal Financial Literacy</b><br/>This standard outlines the important fiscal knowledge, habits, and skills that must be mastered in order for students to make informed decisions about personal finance. Financial literacy is an integral component of a student's college and career readiness, enabling students to achieve fulfilling, financially-secure, and successful careers.</p> <p><b>9.2 Career Awareness</b><br/>This standard outlines the importance of being knowledgeable about one's interests and talents, and being well informed about postsecondary and career options, career planning, and career requirements.</p> <p><b>9.3 Career and Technical Education</b><br/>This standard outlines what students should know and be able to do upon completion of a CTE Program of Study.</p> <p><b>9.4 Life Literacies and Key Skills</b><br/>This standard outlines key literacies and technical skills such as critical thinking, global and cultural awareness, and technology literacy that are critical for students to develop to live and work in an interconnected global economy.</p> <p style="text-align: center;"><b>Career Readiness, Life Literacies and Key Skills</b></p> <p><b>9.4.2.CT.3:</b> Use a variety of types of thinking to solve problems (e.g., inductive, deductive).</p> |
| <b>Essential Understandings</b>  | <b>Essential Questions</b>   |
| <p><i>Students will understand that...</i></p> <ul style="list-style-type: none"> <li>● Counting tells how many are in a group, regardless of their arrangement or the order in which they were counted.</li> <li>● The last number said when counting a group is the total. Counting is cumulative.</li> <li>● There is a unique symbol that goes with each number word.</li> <li>● Zero is a number that tells how many objects there are when there are none.</li> <li>● Two groups of objects are equal in number if they can be directly matched, one to one with no extras in either group.</li> <li>● Two groups can be directly compared using a matching process.</li> <li>● There is a specific order to the set of whole numbers.</li> <li>● Good math thinkers look for patterns in math to help solve problems. They use what they</li> </ul> | <ul style="list-style-type: none"> <li>● How can numbers from 0 to 5 be counted, read and written?</li> <li>● How can numbers 0 to 5 be compared and ordered?</li> <li>● How can numbers from 6 to 10 be counted, read, and written?</li> <li>● How can numbers from 0 to 10 be compared and ordered?</li> <li>● How can classifying data help answer questions?</li> </ul>  |

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| <p>learn from one problem to help them solve other problems</p> <ul style="list-style-type: none"> <li>● In comparing two groups, the group with more objects is greater than the other. The group with fewer objects is less in number than the other.</li> <li>● In a pair of numbers, the number that tells more is greater. The number that tells fewer is less.</li> <li>● Two groups can be compared by counting the number of objects in each group and finding the position of each within the counting sequence.</li> <li>● Objects can be classified into two categories based on whether they have or do not have a particular attribute. Each group can then be counted. The categories can be compared to count.</li> <li>● Data can be sorted and compared in a variety of ways.</li> <li>● Good math thinkers use math to explain why they are right. They can talk about the math that others do too.</li> </ul> |   |
| <b>Evidence of Student Learning</b>  |   |
| <p><b>Performance Tasks:</b> <i>Activities to provide evidence for student learning of content and cognitive skills.</i></p>   | <b>Other Assessments</b>  |
| <p><b><u>Make a Counting Book</u></b> - Students will sequence and represent numbers 1-10</p> <ul style="list-style-type: none"> <li>● Students will create a book for numbers 1-10, representing each number in multiple ways (sets of objects, number word, digits, etc.)</li> </ul>   | <p><b>Formative Assessments</b></p> <ul style="list-style-type: none"> <li>● Teacher Observation</li> <li>● Performance Assessments</li> <li>● Exit Slips</li> <li>● Games</li> <li>● Anecdotal Records</li> <li>● Oral Assessments/Conferencing</li> </ul> |

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| <ul style="list-style-type: none"> <li>Students can use magazine pictures, colored pencils, stickers, markers, etc.</li> </ul>   | <ul style="list-style-type: none"> <li>Portfolio/Math Journals</li> <li>Daily Classwork</li> <li>Pre-assessments</li> <li>Solve and Share Observational Assessment</li> <li>Convince Me! (K)</li> <li>Guided Practice</li> </ul> <p><b>Summative Assessments</b></p> <ul style="list-style-type: none"> <li>Envision Topic Assessments</li> <li>Topic Performance Tasks</li> <li>Fluency Practice/Assessment masters</li> <li>Assessment book</li> <li>Benchmark</li> </ul> <p><b>Benchmark Assessment</b></p> <ul style="list-style-type: none"> <li>Envision Benchmark Assessment</li> </ul> <p><b>Alternative Assessments</b></p> <ul style="list-style-type: none"> <li>Manipulative Driven Assessment</li> <li>Modified/Teacher Created Topic Tests</li> <li>Visual Representation of Skills Assess</li> <li>Modified Classwork Assignments</li> <li>Modified Benchmarks</li> <li>Envision Topic Performance Tasks</li> <li>Project Based Assessments with Scoring Rubric</li> </ul> |
| <b>Knowledge and Skills</b>  |   |
| <p>Students will know...</p> <p>Clusters: <b>K.CC.A, K.CC.B, K.CC.C, and K.MD.B</b></p> <ul style="list-style-type: none"> <li>Number names and the count sequence</li> <li>Numbers are used to count and order objects</li> <li>Numerals are represented by written symbols</li> <li>Numbers represent a quantity that can be compared</li> </ul> | <p><i>Students will be able to ...</i></p> <ul style="list-style-type: none"> <li>Read and write the numbers 0-10</li> <li>Count up to 10 objects</li> <li>Use math to explain what they know about counting</li> <li>Use objects, drawings, and numbers to compare groups of numbers up to 10 to see whether they are equal or matching.</li> <li>Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group</li> <li>Repeat something from one problem to help solve another problem.</li> </ul>  |
| <b>Instructional Plan</b>  |   |



| Suggested Activities   | Resources   | Suggested Options for Differentiation  |
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| "War" card game - Students will turn over top card and compare numbers for greater/less than.  | Deck of number cards                              | Expand ( <b>Gifted and Talented</b> ) or reduce ( <b>Basic Skills/Economically Disadvantaged</b> ) the numbers on the cards. Use cards with pictures ( <b>ELL</b> )              |
| Chutes and Ladders - One-to-one correspondence, student will be counting and moving toward an end goal   | Chutes and Ladders game                           | Spin twice and find the sum ( <b>Gifted and Talented</b> ) play with two pairs or students ( <b>Basic Skills/ELL/Economically Disadvantaged</b> )                                |
| Marshmallow Counting - Students will drop the correct number of mini marshmallows into each cup that is labeled with a number.   | Cups and mini marshmallows                        | Expand ( <b>Gifted and Talented</b> ) or reduce ( <b>Basic Skills/Economically Disadvantaged</b> ) the numbers on the cups (2-digit numbers); count numbers aloud ( <b>ELL</b> ) |
| Number Match Memory - Students will match number cards with sticker set cards in a memory game.  | Number cards and sticker set cards (teacher made) | Use 1 digit ( <b>Basic Skills/Economically Disadvantaged</b> ) or 2 digit numbers ( <b>Gifted and Talented</b> ); name numbers ( <b>ELL</b> )                                    |
| Number Bingo - Students will use whole numbers or sets.  | blank bingo grids                                 | Use 3x3 ( <b>Basic Skills/Economically Disadvantaged</b> ) or 5x5 ( <b>Gifted and Talented</b> ) bingo cards, vary the number sets   |
| Topic Centers: Numbers 0-5<br>Write it! Guess It!<br>One partner uses a finger to write a number from 0-5 in the sand, the other partner closes their eyes, traces the number and guesses.     | Sand table  | Play in reverse order, counting back from 5 ( <b>Gifted and Talented</b> ), partner help ( <b>Basic Skills/Economically Disadvantaged</b> )                                      |
| Topic Centers: Numbers 0-5<br>Movement center: Clap and Jump<br>Partner A draws a number from 0-5 and whispers the number to Partner B. Partner B then jumps or claps that number of times.    | Number cards 0-5 (Envision teaching tool 3)       | Show the number instead of whispering. ( <b>Basic skills/Economically Disadvantaged</b> ) or add higher number cards ( <b>Gifted and Talented</b> )                              |
| <b>Math Literature</b>   |   |  |
| Textbook: <i>enVision Mathematics Common Core</i> , Savvas Learning Company LLC., 2020<br>Literature <ul style="list-style-type: none"> <li>● <i>Ten Black Dots</i> by Donald Crews</li> </ul> |   |  |

- *Fish Eyes* by Lois Ehlert
- *Anno's Counting Book* by Anno Mitsumasa
- *Chicka, Chicka, 1, 2, 3* by Bill Martin
- *Miss Bindergarten Celebrates the 100th Day of Kindergarten* by Joseph Slate

#### **Websites**

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| <a href="http://www.more.starfall.com">www.more.starfall.com</a>  | Provides opportunities for practice with identifying numbers, counting, addition and subtraction.                                   |
| <a href="http://www.drjean.org/">http://www.drjean.org/</a>   | Songs and fingerplays relating to various math concepts.  |
| <a href="http://www.funbrain.com/">http://www.funbrain.com/</a>   | Games: Bunny Count One False Move   |
| <a href="http://www.primaryonline.co.uk/sitetour/pol/findra.html">http://www.primaryonline.co.uk/sitetour/pol/findra.html</a>         | Order numbers 1 through 10.   |
| <a href="http://www.mathwire.com/">http://www.mathwire.com/</a>   | Provides a plethora of resources for teachers including printable games and online games.   |
| <a href="http://www.jumpstart.com/">http://www.jumpstart.com/</a>   | Students count, add, subtract, make equations, make patterns, sort objects and solve problems.                                      |
| <a href="http://www.abcya.com/kindergarten_computers.htm#numbers-cat">http://www.abcya.com/kindergarten_computers.htm#numbers-cat</a> | Games: Counting Fish, Counting to 100, More or Less, Numerical Order  |
| <a href="http://www.mathseeds.com">www.mathseeds.com</a>  | Provides core math and problem solving skills needed to be successful at school with fun, highly interactive and rewarding lessons. |

#### **Accommodations & Modifications**

##### **Basic Skills**

- Teacher modeling
- Vary activities by choice
- Reminders as needed
- Pre-Teach vocabulary or pre-teach lesson
- Envision Reteach Activities
- Envision Intensive and/or Strategic Intervention activities

##### **Economically Disadvantaged**

- Teacher modeling
- Vary activities by choice
- Reminders as needed

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| <ul style="list-style-type: none"> <li>● Pre-Teach vocabulary or pre-teach lesson</li> <li>● Envision Reteach Activities</li> <li>● Envision Intensive and/or Strategic Intervention activities</li> </ul>   |
| <p><b>Gifted and Talented</b></p> <ul style="list-style-type: none"> <li>● Envision 3-ACT Math</li> <li>● Envision Pick A Project</li> <li>● Envision Stem Activities</li> </ul>   |
| <p><b>English Language Learners</b></p> <ul style="list-style-type: none"> <li>● Teacher modeling</li> <li>● Vary activities by choice</li> <li>● Reminders as needed</li> <li>● Pre-Teach vocabulary or pre-teach lesson</li> <li>● Envision Reteach Activities</li> <li>● Envision Intensive and/or Strategic Intervention activities</li> </ul>   |
| <p><b>Students with IEPs</b></p> <ul style="list-style-type: none"> <li>● Provide differentiated instruction as needed</li> <li>● Follow all IEP modifications</li> <li>● Provide manipulatives or the opportunity to draw solution strategies</li> <li>● Preview lesson and pre-teach vocabulary</li> <li>● Use visual cues</li> <li>● Teacher modeling</li> <li>● Vary activities by choice</li> <li>● Reminders as needed</li> <li>● Pre-Teach vocabulary or pre-teach lesson</li> </ul>      |
| <p><b>Students with 504 plans</b></p> <ul style="list-style-type: none"> <li>● Provide differentiated instruction as needed</li> <li>● Follow all 504 modifications</li> <li>● Provide manipulatives or the opportunity to draw solution strategies</li> <li>● Preview lesson and pre-teach vocabulary</li> <li>● Use visual cues</li> <li>● Teacher modeling</li> <li>● Vary activities by choice</li> <li>● Reminders as needed</li> <li>● Pre-Teach vocabulary or pre-teach lesson</li> </ul> |
| <p><b>Students at Risk for Failure</b></p> <ul style="list-style-type: none"> <li>● Use visuals</li> </ul>   |

- Introduce key vocabulary before lesson
- Teacher reads aloud daily
- Provide peer tutoring
- Use a strong student as a “buddy” (does not necessarily have to speak the primary language)
- chants, songs
- preferential seating

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| <b>Operations and Algebraic Thinking</b>   | <b>Topics 5-8: Duration:</b> January-February, 38 days  |  |
| <b>Standards</b>   |   |  |
| <b>A.</b>  | <b>Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.</b>   |  |
| <b>K.OA.A1</b>   | 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                      |  |
| <b>K.OA.A2</b>   | 2. Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.   |  |
| <b>K.OA.A3</b>   | 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 $5 = 4 + 1$ ). |  |
| <b>K.OA.A4</b>   | 4. For any number from 1 to 9, find the number that makes 10 when added to the given number, e.g., by using objects or drawings, and record the answer with a drawing or equation.                              |  |
| <b>K.OA.A5</b>   | 5. Demonstrate fluency for addition and subtraction within 5.   |  |
| <b>Interdisciplinary Connections</b>   |   |  |
| <b>Language Arts Standards</b>   |   |  |
| <b>SL.K.1.A</b>  | Follow agreed-upon norms for discussions (e.g., listening to others with care and taking turns speaking about the topics and texts under discussion).   |  |
| <b>SL.K.1.B</b>  | Continue a conversation through multiple exchanges.   |  |
| <b>Computer Science &amp; Design Thinking Standards</b>  |   |  |
| <b>9.4.2.TL.6:</b>   | Illustrate and communicate ideas and stories using multiple digital tools (e.g., SL.2.5.).  |  |
| <b>Career Readiness, Life Literacies and Key Skills</b>  |   |  |
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| <a href="https://www.nj.gov/education/standards/clicks/index.shtml">https://www.nj.gov/education/standards/clicks/index.shtml</a>  |   |  |
| <b>9.1 Personal Financial Literacy</b>   |   |  |

This standard outlines the important fiscal knowledge, habits, and skills that must be mastered in order for students to make informed decisions about personal finance. Financial literacy is an integral component of a student's college and career readiness, enabling students to achieve fulfilling, financially-secure, and successful careers.

**9.2 Career Awareness**

This standard outlines the importance of being knowledgeable about one's interests and talents, and being well informed about postsecondary and career options, career planning, and career requirements.

**9.3 Career and Technical Education**

This standard outlines what students should know and be able to do upon completion of a CTE Program of Study.

**9.4 Life Literacies and Key Skills**

This standard outlines key literacies and technical skills such as critical thinking, global and cultural awareness, and technology literacy that are critical for students to develop to live and work in an interconnected global economy.

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

**9.4.2.CT.3:** Use a variety of types of thinking to solve problems (e.g., inductive, deductive).

| <b>Essential Understandings</b>   | <b>Essential Questions</b>   |
|---|--|
| <p><i>Students will understand that...</i></p> <ul style="list-style-type: none"> <li>● Objects can be classified into two categories, based on whether they have or do not have a particular attribute. Each group can then be counted and/or compared.</li> <li>● Data can be sorted and compared in a variety of ways.</li> <li>● Good math thinkers use math to explain why they are right. They can talk about the math that others do.</li> <li>● Addition can be shown in different ways.</li> <li>● Adding one or more objects to an existing group is one interpretation of addition.</li> <li>● Putting together parts to make a whole is one interpretation of addition.</li> <li>● Equations using + and = can be used to show parts of a whole.</li> <li>● Objects, drawings, counting and equations can be used to solve addition problems involving putting together.</li> </ul> | <ul style="list-style-type: none"> <li>● How can classifying data help answer questions?</li> <li>● What types of situations involve addition?</li> <li>● How can representing taking apart and taking from in different ways help you learn about subtraction?</li> <li>● How can solving problems in more than one way help you learn about addition and subtraction?</li> </ul> |

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| <ul style="list-style-type: none"> <li>• Subtraction can be shown in different ways</li> <li>• Separating parts from a whole is one interpretation of subtraction</li> <li>• Taking parts from a whole is one interpretation of subtraction</li> <li>• Subtraction equations using - and = can be used to show subtraction situations</li> <li>• Objects, drawings, counting and equations can be used to solve subtraction problems involving taking from, and unknown addends.</li> <li>• Patterns can be used to solve addition and subtraction problems.</li> <li>• There is more than one way to show a number. An addition equation can show the parts and the whole.</li> <li>• Addition and subtraction facts have an inverse relationship.</li> <li>• For any number 1-9, there is another number to make 10.</li> <li>• Good math thinkers know how to think about words and numbers to solve problems.</li> </ul> |  |
| <b>Evidence of Student Learning</b>  |  |
| <b>Performance Tasks:</b> <i>Activities to provide evidence for student learning of content and cognitive skills.</i>  | <b>Other Assessments</b>   |
| <p><b><u>Let's Plant a Garden</u></b> - Add/Subtract with numbers to 5.</p> <ul style="list-style-type: none"> <li>• Students will be told they are going to plant a pretend garden.</li> <li>• Students will be given a worksheet with 6 different packages of seeds displayed.</li> <li>• Students will then be asked to choose two items they would like to plant in their pretend garden and circle the packets.</li> </ul>  | <p><b>Formative Assessments</b></p> <ul style="list-style-type: none"> <li>• Teacher Observation</li> <li>• Performance Assessments</li> <li>• Exit Slips</li> <li>• Games</li> <li>• Anecdotal Records</li> <li>• Oral Assessments/Conferencing</li> <li>• Portfolio/Math Journals</li> <li>• Daily Classwork</li> <li>• Pre-assessments</li> </ul> |

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| <ul style="list-style-type: none"> <li>● Students will draw the number of seeds (1-5) of each item they are going to plant in their garden.</li> <li>● Students will plot seeds into the “ten frame” garden.</li> <li>● Students will then add the total number of seeds planted.</li> </ul> <p>Modification - increase seeds 6-10 seeds per item.</p> | <ul style="list-style-type: none"> <li>● Solve and Share Observational Assessment</li> <li>● Convince Me! (K)</li> <li>● Guided Practice</li> </ul> <p><b>Summative Assessments</b></p> <ul style="list-style-type: none"> <li>● Envision Topic Assessments</li> <li>● Topic Performance Tasks</li> <li>● Fluency Practice/Assessment masters</li> <li>● Assessment book</li> <li>● Benchmark</li> </ul> <p><b>Benchmark Assessment</b></p> <ul style="list-style-type: none"> <li>● Envision Benchmark Assessment</li> </ul> <p><b>Alternative Assessments</b></p> <ul style="list-style-type: none"> <li>● Manipulative Driven Assessment</li> <li>● Modified/Teacher Created Topic Tests</li> <li>● Visual Representation of Skills Assess</li> <li>● Modified Classwork Assignments</li> <li>● Modified Benchmarks</li> <li>● Envision Topic Performance Tasks</li> <li>● Project Based Assessments with Scoring Rubric</li> </ul> |
| <p><b>Knowledge and Skills</b></p>   |  |
| <p><i>Students will know...</i></p> <p>Clusters: <b>K.MD.B, K.OA.A,</b></p> <ul style="list-style-type: none"> <li>● How to classify objects and count the number of objects in each category.</li> <li>● How to understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.</li> </ul>         | <p><i>Students will be able to ...</i></p> <ul style="list-style-type: none"> <li>● Classify objects into categories and tell why they are in each category</li> <li>● Count how many objects are in different categories.</li> <li>● Use counting to compare how many objects are in categories.</li> <li>● Tell whether the way objects have been sorted, counted and compared makes sense.</li> <li>● Show numbers in many ways</li> <li>● Represent addition as adding to a number</li> <li>● Represent addition as putting two or more numbers together</li> <li>● Write an equation to show addition and subtraction</li> <li>● Solve addition and subtraction problems</li> <li>● Use equation to represent and explain addition and subtraction</li> <li>● Take apart a number and tell the parts</li> <li>● Represent subtraction as taking away from the whole</li> </ul>  |



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|  | <ul style="list-style-type: none"> <li>• Find the difference of two numbers</li> <li>• Find patterns in subtraction equations</li> <li>• Write an addition or subtraction equation to solve a word problem</li> <li>• Solve related addition and subtraction equations</li> <li>• Reason about numbers and operations</li> <li>• Write addition and subtraction equations within 5 and remember them</li> <li>• Show how to make a group of ten</li> <li>• Find number partners for 10</li> <li>• Find a missing part to make 10</li> </ul> |  |
| <b>Instructional Plan</b>  |   |  |
| <b>Suggested Activities</b>  | <b>Resources</b>  | <b>Suggested Options for Differentiation</b>   |
| Addition and Subtraction War - Students will turn over two cards, find the sum, and compare. Or subtract the numbers to find the difference.   | Number cards  | Expand ( <b>Gifted and Talented</b> ) /reduce ( <b>Basic Skills/Economically Disadvantaged</b> ) the numbers on the cards. Provide cards with pictures matching the numbers ( <b>ELL</b> ) |
| Domino Addition and Subtraction - Students will use domino dots to add and subtract numbers.   | dominoes  | Regulate the dominoes used ( <b>high for Gifted and Talented vs low numbers for Basic Skills/Economically Disadvantaged</b> ) Match domino with coordinating number ( <b>ELL</b> )         |
| Make it Right (Topic 5 Center)   | Number Cards 0-10<br>(Envision Teaching Tool 3)   | Find pairs for various numbers higher ( <b>Gifted and Talented</b> ) and lower ( <b>Basic Skills/Economically Disadvantaged</b> )  |
| Ants in the Center (Topic 7 Center)<br>Hide 10 beans, tells students they need to find these “ants” and place in the box<br>Students use math language to predict how many “ants” they have to find. Continue until all ants have been found | 10 Beans. Box   | Use less beans ( <b>Basic Skills/Economically Disadvantaged</b> ); write subtraction sentences after each bean is found( <b>Gifted and Talented</b> )                                      |
| <b>Math Literature</b>   |   |  |
| Textbook: <i>enVision Mathematics Common Core</i> , Savvas Learning Company LLC., 2020   |   |  |

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| Literature   |   |
| <ul style="list-style-type: none"> <li>• <i>This Old Man</i> by Pam Adams</li> <li>• <i>Remainder of One</i> by Elinor J. Pinczes</li> <li>• <i>Domino Addition</i> by Lynette Long</li> </ul>   |   |
| <b>Websites</b>  |   |
| <a href="http://www.bbc.co.uk/schools/laac/numbers/ch1.shtml">http://www.bbc.co.uk/schools/laac/numbers/ch1.shtml</a>  | Provides addition and subtraction practice with open number sentences.  |
| <a href="http://more.starfall.com/">http://more.starfall.com/</a>  | Provides opportunities for practice with identifying numbers, counting, addition and subtraction.                                   |
| <a href="http://www.abcya.com/kindergarten_computers.htm#numbers-cat">http://www.abcya.com/kindergarten_computers.htm#numbers-cat</a>  | Games: Add and Subtract within 10, Add to 10, Addition with Manipulatives, Sum of all Dice  |
| <a href="http://www.mathwire.com/">http://www.mathwire.com/</a>  | Provides a plethora of resources for teachers including printable games and online games.   |
| <a href="http://www.brainpopjr.com/math/">http://www.brainpopjr.com/math/</a>  | Access several movie clips relating to every math standard.   |
| <a href="http://www.jumpstart.com/">http://www.jumpstart.com/</a>  | Students count, add, subtract, make equations, make patterns, sort objects and solve problems.                                      |
| <a href="http://www.mathseeds.com">www.mathseeds.com</a>   | Provides core math and problem solving skills needed to be successful at school with fun, highly interactive and rewarding lessons. |
| <b>Accommodations &amp; Modifications</b>  |   |
| <b>Basic Skills</b>  |   |
| <ul style="list-style-type: none"> <li>• Teacher modeling</li> <li>• Vary activities by choice</li> <li>• Reminders as needed</li> <li>• Pre-Teach vocabulary or pre-teach lesson</li> <li>• Envision Reteach Activities</li> <li>• Envision Intensive and/or Strategic Intervention activities</li> </ul> |   |
| <b>Economically Disadvantaged</b>  |   |
| <ul style="list-style-type: none"> <li>• Teacher modeling</li> <li>• Vary activities by choice</li> <li>• Reminders as needed</li> <li>• Pre-Teach vocabulary or pre-teach lesson</li> </ul>   |   |

- Envision Reteach Activities
- Envision Intensive and/or Strategic Intervention activities

**Gifted and Talented**

- Envision 3-ACT Math
- Envision Pick A Project
- Envision Stem Activities

**English Language Learners**

- Teacher modeling
- Vary activities by choice
- Reminders as needed
- Pre-Teach vocabulary or pre-teach lesson
- Envision Reteach Activities
- Envision Intensive and/or Strategic Intervention activities

**Students with IEPs**

- Provide differentiated instruction as needed
- Follow all IEP modifications
- Provide manipulatives or the opportunity to draw solution strategies
- Preview lesson and pre-teach vocabulary
- Use visual cues
- Teacher modeling
- Vary activities by choice
- Reminders as needed
- Pre-Teach vocabulary or pre-teach lesson

**Students with 504 plans**

- Provide differentiated instruction as needed
- Follow all 504 modifications
- Provide manipulatives or the opportunity to draw solution strategies
- Preview lesson and pre-teach vocabulary
- Use visual cues
- Teacher modeling
- Vary activities by choice
- Reminders as needed
- Pre-Teach vocabulary or pre-teach lesson

**Students at Risk for Failure**

- Use visuals
- Introduce key vocabulary before lesson

- Teacher reads aloud daily
- Provide peer tutoring
- Use a strong student as a “buddy” (does not necessarily have to speak the primary language)
- chants, songs
- preferential seating

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| <b>Number and Operations in Base Ten</b>   | <b>Topics 9-11: Duration:</b> March-April, 31 Days   |  |
| <b>Standards</b>   |  |  |
| <b>A.</b>  | <b>Work with numbers 11–19 to gain foundations for place value.</b>  |  |
| <b>K.NBT.A1</b>  | 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. |  |
| <b>SL.K.1.A</b>  | Follow agreed-upon norms for discussions (e.g., listening to others with care and taking turns speaking about the topics and texts under discussion).  |  |
| <b>SL.K.1.B</b>  | Continue a conversation through multiple exchanges.  |  |
| <b>Interdisciplinary Connections</b>   |  |  |
| <b>Computer Science &amp; Design Thinking Standards</b>  |  |  |
| <b>9.4.2.TL.6:</b>   | Illustrate and communicate ideas and stories using multiple digital tools (e.g., SL.2.5.).   |  |
| <p style="text-align: center;"><b>Career Readiness, Life Literacies and Key Skills</b></p> <p>This outlines concepts and skills necessary for New Jersey’s students to thrive in an ever-changing world. Intended for integration throughout all K-12 academic and technical content areas, the 2020 New Jersey Student Learning Standards — Career Readiness, Life Literacies, and Key Skills (NJSLS-CLKS) provides the framework for students to learn the concepts, skills, and practices essential to the successful navigation of career exploration and preparation, personal finances and digital literacy.</p> <p><a href="https://www.nj.gov/education/standards/clicks/index.shtml">https://www.nj.gov/education/standards/clicks/index.shtml</a></p> <p><b>9.1 Personal Financial Literacy</b><br/>This standard outlines the important fiscal knowledge, habits, and skills that must be mastered in order for students to make informed decisions about personal finance. Financial literacy is an integral component of a student’s college and career readiness, enabling students to achieve fulfilling, financially-secure, and successful careers.</p> <p><b>9.2 Career Awareness</b><br/>This standard outlines the importance of being knowledgeable about one’s interests and talents, and being well informed about postsecondary and career options, career planning, and career requirements.</p> <p><b>9.3 Career and Technical Education</b><br/>This standard outlines what students should know and be able to do upon completion of a CTE Program of Study.</p> <p><b>9.4 Life Literacies and Key Skills</b><br/>This standard outlines key literacies and technical skills such as critical thinking, global and cultural awareness, and technology literacy that are critical for students to develop to live and work in an interconnected global economy.</p> |  |  |

| <b>Career Readiness, Life Literacies and Key Skills</b>  |  |
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| <b>9.4.2.CT.3:</b> Use a variety of types of thinking to solve problems (e.g., inductive, deductive).  |  |
| <b>Essential Understandings</b><br><i>Students will understand that...</i>   | <b>Essential Questions</b>   |
| <ul style="list-style-type: none"> <li>● There is a unique symbol that goes with each number word</li> <li>● You use the count sequence to count from any number within 20.</li> <li>● Numbers become greater when you count on</li> <li>● Counting tells how many are in a set, regardless of their arrangement or the order in which they were counted.</li> <li>● The last number said when counting a set is the total. Counting is cumulative</li> <li>● Good math thinkers know how to think about words and numbers to solve problems.</li> <li>● Numbers from 11-19 can be represented as the sum of 10 and some more</li> <li>● The numbers 11-19 can be decomposed as the sum of ten and some ones.</li> </ul> | <ul style="list-style-type: none"> <li>● How can numbers to 20 be counted, read, written, and pictured to tell how many?</li> <li>● How can composing and decomposing numbers from 11 to 19 into ten ones and some further ones help you understand place value?</li> <li>● How can numbers to 100 be counted using a hundred chart?</li> </ul>  |
| <b>Evidence of Student Learning</b>  |  |
| <b>Performance Tasks:</b> <i>Activities to provide evidence for student learning of content and cognitive skills.</i>  | <b>Other Assessments</b>   |
| <p><b><u>Ten Frame Puzzles</u></b></p> <ul style="list-style-type: none"> <li>● Students will match 3 piece puzzles showing a teen number, the number broken down into tens and ones, and the number shown in base ten frames.</li> </ul> <p>Modification - students can use blank templates to make their own puzzles.</p>  | <p><b>Formative Assessments</b></p> <ul style="list-style-type: none"> <li>● Teacher Observation</li> <li>● Performance Assessments</li> <li>● Exit Slips</li> <li>● Games</li> <li>● Anecdotal Records</li> <li>● Oral Assessments/Conferencing</li> <li>● Portfolio/Math Journals</li> <li>● Daily Classwork</li> <li>● Pre-assessments</li> <li>● Solve and Share Observational Assessment</li> </ul> |

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|   | <ul style="list-style-type: none"> <li>● Convince Me! (K)</li> <li>● Guided Practice</li> </ul> <p><b>Summative Assessments</b></p> <ul style="list-style-type: none"> <li>● Envision Topic Assessments</li> <li>● Topic Performance Tasks</li> <li>● Fluency Practice/Assessment masters</li> <li>● Assessment book</li> <li>● Benchmark</li> </ul> <p><b>Benchmark Assessment</b></p> <ul style="list-style-type: none"> <li>● Envision Benchmark Assessment</li> </ul> <p><b>Alternative Assessments</b></p> <ul style="list-style-type: none"> <li>● Manipulative Driven Assessment</li> <li>● Modified/Teacher Created Topic Tests</li> <li>● Visual Representation of Skills Assess</li> <li>● Modified Classwork Assignments</li> <li>● Modified Benchmarks</li> <li>● Envision Topic Performance Tasks</li> <li>● Project Based Assessments with Scoring Rubric</li> </ul> |  |
| <b>Knowledge and Skills</b>   |  |  |
| <p><i>Students will know...</i></p> <p>Clusters: <b>K.CC.A, K.CC.B, and K.NBT.A</b></p> <ul style="list-style-type: none"> <li>● Number names and the count sequence</li> <li>● How to count to tell the number of objects</li> <li>● How to work with numbers 11-19 to gain foundations for place value</li> </ul> | <p><i>Students will be able to ...</i></p> <ul style="list-style-type: none"> <li>● Count and write the numbers 11-20</li> <li>● Count forward from any number to a number within 20</li> <li>● Count to find how many are in a group of up to 20</li> <li>● Use drawings and equations to make the numbers 11-20</li> <li>● Find the parts of numbers 11-19 when one part is 10</li> <li>● Use patterns to make and find the parts of numbers to 19</li> <li>● Use patterns to count to 30, 50, and 100</li> <li>● Skip count by tens to 100</li> <li>● Count forward from any number to 100 by ones</li> <li>● See patterns when counting</li> </ul>   |  |
| <b>Instructional Plan</b>   |  |  |
| <b>Suggested Activities</b>   | <b>Resources</b>   | <b>Suggested Options for Differentiation</b> |

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| Pom-pom Egg Cartons - Students will represent teen numbers using pom-poms in two 10-section egg cartons as "ten frames"   | Egg cartons with 10 sections, pom-poms, number cards  | Expand ( <b>Gifted and Talented</b> ) /reduce ( <b>Basic Skills/Economically Disadvantaged</b> ) the numbers on the cards   |
| Integrate standards through morning meetings and calendar routines as applicable.   | Number grid   | Count and compare numbers with grid and orally  |
| Students will play, "War" card game with ten frames and dot cards   | Ten frame cards to use for comparing number sets from 11-19                                       | Expand ( <b>Gifted and Talented</b> ) /reduce ( <b>Basic Skills/Economically Disadvantaged</b> ) the numbers; reinforce basic comparing words and numbers ( <b>ELL</b> )                                      |
| More than 10: Envision Topic 9 Center<br>Students start with 10 blocks in a tower. They add two more, 3 more, and so on. Each time, they tell how many blocks they started with, and how many they have now.  | 20 blocks   | Use more blocks ( <b>Gifted and Talented</b> ), Provide prompting ( <b>Basic Skills/Economically Disadvantaged</b> )  |
| Take a Card!: Envision Topic 11 Center<br>Students form patterns based on card selection  | Variety of Number Cards (Envision Teaching Tool 3 and 4)  | Use higher numbers( <b>Gifted and Talented</b> ); reduce the numbers in the deck ( <b>Basic Skills/Economically Disadvantaged</b> ) Pick the picture card with the greater number of pictures. ( <b>ELL</b> ) |
| <b>Math Literature</b>  |   |   |
| Textbook: <i>enVision Mathematics Common Core</i> , Savvas Learning Company LLC., 2020<br>Literature <ul style="list-style-type: none"> <li>● <i>12 Ways to Get to 11</i> by Eve Merriam</li> <li>● <i>10 Friends</i> by Bruce Goldstone</li> <li>● <i>100 Ways to get to 100</i> by Jerry Palotta</li> </ul> |   |   |
| <b>Websites</b>   |   |   |
| <a href="http://more.starfall.com/">http://more.starfall.com/</a>   | Provides opportunities for practice with identifying numbers, counting, addition and subtraction. |   |



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| <a href="http://www.funbrain.com/">http://www.funbrain.com/</a>  | Games: Bunny Count One False Move   |
| <a href="http://www.mathwire.com/">http://www.mathwire.com/</a>  | Provides a plethora of resources for teachers including printable games and online games.   |
| <a href="http://www.abcya.com/kindergarten_computers.htm#numbers-cat">http://www.abcya.com/kindergarten_computers.htm#numbers-cat</a>  | Games: Base 10 Bingo, Base 10 Fun, Base 10 Blocks, Comparing Number Values  |
| <a href="http://www.mathseeds.com">www.mathseeds.com</a>   | Provides core math and problem solving skills needed to be successful at school with fun, highly interactive and rewarding lessons. |
| <b>Accommodations &amp; Modifications</b>  |   |
| <b>Basic Skills</b>  |   |
| <ul style="list-style-type: none"> <li>● Teacher modeling</li> <li>● Vary activities by choice</li> <li>● Reminders as needed</li> <li>● Pre-Teach vocabulary or pre-teach lesson</li> <li>● Envision Reteach Activities</li> <li>● Envision Intensive and/or Strategic Intervention activities</li> </ul> |   |
| <b>Economically Disadvantaged</b>  |   |
| <ul style="list-style-type: none"> <li>● Teacher modeling</li> <li>● Vary activities by choice</li> <li>● Reminders as needed</li> <li>● Pre-Teach vocabulary or pre-teach lesson</li> <li>● Envision Reteach Activities</li> <li>● Envision Intensive and/or Strategic Intervention activities</li> </ul> |   |
| <b>Gifted and Talented</b>   |   |
| <ul style="list-style-type: none"> <li>● Envision 3-ACT Math</li> <li>● Envision Pick A Project</li> <li>● Envision Stem Activities</li> </ul>   |   |
| <b>English Language Learners</b>   |   |
| <ul style="list-style-type: none"> <li>● Teacher modeling</li> <li>● Vary activities by choice</li> <li>● Reminders as needed</li> </ul>   |   |

- Pre-Teach vocabulary or pre-teach lesson
- Envision Reteach Activities
- Envision Intensive and/or Strategic Intervention activities

**Students with IEPs**

- Provide differentiated instruction as needed
- Follow all IEP modifications
- Provide manipulatives or the opportunity to draw solution strategies
- Preview lesson and pre-teach vocabulary
- Use visual cues
- Teacher modeling
- Vary activities by choice
- Reminders as needed
- Pre-Teach vocabulary or pre-teach lesson

**Students with 504 plans**

- Provide differentiated instruction as needed
- Follow all 504 modifications
- Provide manipulatives or the opportunity to draw solution strategies
- Preview lesson and pre-teach vocabulary
- Use visual cues
- Teacher modeling
- Vary activities by choice
- Reminders as needed
- Pre-Teach vocabulary or pre-teach lesson

**Students at Risk for Failure**

- Use visuals
- Introduce key vocabulary before lesson
- Teacher reads aloud daily
- Provide peer tutoring
- Use a strong student as a “buddy” (does not necessarily have to speak the primary language)
- chants, songs
- preferential seating

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| <b>Geometry</b>  |   | <b>Topics 12-13 Duration:</b> May 22 days |
| <b>Standards</b>   |   |   |
| <b>K.G.A1</b>  | 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   |   |
| <b>K.G.A2</b>  | 2. Correctly name shapes regardless of their orientations or overall size.  |   |
| <b>K.G.A3</b>  | 3. Identify shapes as two-dimensional (lying in a plane, “flat”) or three-dimensional (“solid”).  |   |
| <b>K.G.B4</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). |   |
| <b>K.G.B5</b>  | 5. Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes.   |   |
| <b>K.G.B6</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?”   |   |
| <b>Interdisciplinary Connections</b>   |   |   |
| <b>Language Arts Standards</b>   |   |   |
| <b>SL.K.1.A</b>  | Follow agreed-upon norms for discussions (e.g., listening to others with care and taking turns speaking about the topics and texts under discussion).   |   |
| <b>SL.K.1.B</b>  | Continue a conversation through multiple exchanges.   |   |
| <b>Computer Science &amp; Design Thinking Standards</b>  |   |   |
| <b>9.4.2.TL.6:</b>   | Illustrate and communicate ideas and stories using multiple digital tools (e.g., SL.2.5).   |   |
| <b>Career Readiness, Life Literacies and Key Skills</b>  |   |   |
| <p>This outlines concepts and skills necessary for New Jersey’s students to thrive in an ever-changing world. Intended for integration throughout all K-12 academic and technical content areas, the 2020 New Jersey Student Learning Standards — Career Readiness, Life Literacies, and Key Skills (NJSLS-CLKS) provides the framework for students to learn the concepts, skills, and practices essential to the successful navigation of career exploration and preparation, personal finances and digital literacy.</p> <p><a href="https://www.nj.gov/education/standards/clicks/index.shtml">https://www.nj.gov/education/standards/clicks/index.shtml</a></p> |   |   |
| <b>9.1 Personal Financial Literacy</b>   |   |   |
| This standard outlines the important fiscal knowledge, habits, and skills that must be mastered in order for students to make informed decisions about personal finance. Financial literacy is an integral component of a student's college and career readiness, enabling students to achieve fulfilling, financially-secure, and successful careers.   |   |   |
| <b>9.2 Career Awareness</b>  |   |   |

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|  | <p>This standard outlines the importance of being knowledgeable about one's interests and talents, and being well informed about postsecondary and career options, career planning, and career requirements.</p> <p><b>9.3 Career and Technical Education</b><br/>This standard outlines what students should know and be able to do upon completion of a CTE Program of Study.</p> <p><b>9.4 Life Literacies and Key Skills</b><br/>This standard outlines key literacies and technical skills such as critical thinking, global and cultural awareness, and technology literacy that are critical for students to develop to live and work in an interconnected global economy.</p> <p style="text-align: center;"><b>Career Readiness, Life Literacies and Key Skills</b></p> <p><b>9.4.2.CT.3:</b> Use a variety of types of thinking to solve problems (e.g., inductive, deductive).</p> |
| <b>Essential Understandings</b>  | <b>Essential Questions</b>  |
| <p><i>Students will understand that...</i></p> <ul style="list-style-type: none"> <li>● Objects have some shape. Some objects, such as a sheet of paper or a photograph, are two dimensional, or flat shapes. Some objects, such as a ball, can, box, or jar, are three dimensional, or solid shapes.</li> <li>● A circle is round and does not have any corners. A triangle has 3 sides and 3 corners.</li> <li>● Flat shapes called rectangles have 4 sides and 4 vertices that look the same.</li> <li>● Squares are special rectangles because their sides are all the same length.</li> <li>● Six sided flat shapes are called hexagons. These shapes can be found in objects made by people and in nature.</li> <li>● Spheres, cylinders, cones, and cubes are solid figures. Many everyday objects closely approximate these figures.</li> <li>● Objects have shape. Some objects look like flat objects or solid shapes. The positions of objects in relation to surrounding objects can be described using words such as above, below, beside, in front of, behind, and next to.</li> </ul> | <ul style="list-style-type: none"> <li>● How can two and three dimensional shapes be identified and described?</li> <li>● How can solid figures be named, described, compared, and composed?</li> <li>● How can objects be described and compared by length, height, capacity, and weight?</li> </ul>   |
| <b>Evidence of Student Learning</b>  |   |
| <b>Performance Tasks:</b> <i>Activities to provide evidence for student learning of content and cognitive skills.</i>  | <b>Other Assessments</b>  |

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| <p><b>Shape Search</b> - identify, name and describe two and three dimensional shapes</p> <ul style="list-style-type: none"> <li>• Students will find examples of two dimensional shapes in the classroom.</li> <li>• Teacher will review numbers of sides and vertices of various shapes with the class.</li> <li>• Students will then be given a picture of a scene and identify the shapes by color coding them.</li> <li>• Students will then search for real world three dimensional shapes and will draw an example of each.</li> </ul> <p>Modification - Draw three dimensional shapes in relation to each other using positional words.</p> | <p><b>Formative Assessments</b></p> <ul style="list-style-type: none"> <li>• Teacher Observation</li> <li>• Performance Assessments</li> <li>• Exit Slips</li> <li>• Games</li> <li>• Anecdotal Records</li> <li>• Oral Assessments/Conferencing</li> <li>• Portfolio/Math Journals</li> <li>• Daily Classwork</li> <li>• Pre-assessments</li> <li>• Solve and Share Observational Assessment</li> <li>• Convince Me! (K)</li> <li>• Guided Practice</li> </ul> <p><b>Summative Assessments</b></p> <ul style="list-style-type: none"> <li>• Envision Topic Assessments</li> <li>• Topic Performance Tasks</li> <li>• Fluency Practice/Assessment masters</li> <li>• Assessment book</li> <li>• Benchmark</li> </ul> <p><b>Benchmark Assessment</b></p> <ul style="list-style-type: none"> <li>• Envision Benchmark Assessment</li> </ul> <p><b>Alternative Assessments</b></p> <ul style="list-style-type: none"> <li>• Manipulative Driven Assessment</li> <li>• Modified/Teacher Created Topic Tests</li> <li>• Visual Representation of Skills Assess</li> <li>• Modified Classwork Assignments</li> <li>• Modified Benchmarks</li> <li>• Envision Topic Performance Tasks</li> <li>• Project Based Assessments with Scoring Rubric</li> </ul> |
| <b>Knowledge and Skills</b>   |  |
| <b>Content:</b>   | <b>Skills:</b>   |
| Students will know...   | <i>Students will be able to ...</i> <ul style="list-style-type: none"> <li>• Name shapes as flat or solid</li> </ul>   |

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| <p>Cluster: <b>K.G.A, K.G.B</b></p> <p>How to identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres)</p> <p>How to analyze, compare, create, and compose shapes</p> | <ul style="list-style-type: none"> <li>● Identify and describe circles, triangles, squares, rectangles, hexagons</li> <li>● Describe and identify solid shapes</li> <li>● Describe shapes and their position in the environment</li> <li>● Analyze and compare 2-D, and 3-D shapes</li> <li>● Make sense of problems about shapes</li> </ul> |  |
| <b>Instructional Plan</b>   |  |  |
| <b>Suggested Activities</b>   | <b>Resources</b>   | <b>Suggested Options for Differentiation</b>   |
| <p>Body Shapes - Students will make shapes on the rug using their bodies as the sides of the shapes - work together to decide how to make each shape</p>  | <p>none</p>  | <p>Draw and label shapes made (<b>Gifted and Talented</b>); assist groups as needed (<b>Basic Skills/Economically Disadvantaged</b>); reinforce shape names and numbers of sides (<b>ELL</b>)</p>                        |
| <p>Pattern Blocks - Students will use pattern blocks to model and create pictures.</p>  | <p>Pattern blocks, picture cards (optional)</p>  | <p>Create own pictures (<b>Gifted and Talented</b>) shape patterns from cards (<b>Basic Skills/Economically Disadvantaged</b>) Use colored pattern shape cards (<b>ELL</b>)</p>  |
| <p>Pattern Blocks - Students will use pattern blocks to practice joining shapes to make other shapes.</p>   | <p>Pattern blocks, paper</p>   | <p>Draw designs of shapes created; take apart shapes (<b>Gifted and Talented</b>); Trace dotted joined shapes (<b>Basic Skills/Economically Disadvantaged</b>); Name each shape as it is traced (<b>ELL</b>)</p>         |
| <p>Geoboards - Students will create shapes by stretching rubber bands across geoboards.</p>   | <p>Geoboards and rubber bands</p>  | <p>Create a given list of shapes - count sides and vertices (<b>Gifted and Talented</b>); free choice shapes (<b>Basic Skills/Economically Disadvantaged</b>) Use pictures to show shapes ; name shapes (<b>ELL</b>)</p> |
| <b>Math Literature</b>  |  |  |
| <p>Textbook: <i>enVision Mathematics Common Core</i>, Savvas Learning Company LLC., 2020</p> <p>Literature</p> <ul style="list-style-type: none"> <li>● <i>The Greedy Triangle</i> by Marilyn Burns</li> </ul>                      |  |  |

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| <ul style="list-style-type: none"> <li>● <i>Cubes, Cones, Cylinders and Spheres</i> by Tana Hoban</li> <li>● <i>The Shape of Things</i> by Dayle Ann Dodds</li> <li>● <i>Go Away Big Green Monster</i> by Ed Emberley</li> <li>● <i>The M &amp; M's Color Pattern Book</i> by Barbara Barbieri McGrath</li> </ul> |   |
| <b>Websites</b>   |   |
| <a href="http://www.pbs.org/parents/education/math/games/preschool-kindergarten/">http://www.pbs.org/parents/education/math/games/preschool-kindergarten/</a>   | Game: Building Sandcastles  |
| <a href="http://www.abcya.com/kindergarten_computers.htm#numbers-cat">http://www.abcya.com/kindergarten_computers.htm#numbers-cat</a>   | Various games   |
| <a href="https://www.education.com/game/2d-3d-shapes/">https://www.education.com/game/2d-3d-shapes/</a>   | Sort 2d and 3d shapes   |
| <a href="https://www.education.com/game/2d-3d-shape-match/">https://www.education.com/game/2d-3d-shape-match/</a>   | 2d and 3d shape match   |
| <a href="https://www.education.com/game/shapes-ski-race/">https://www.education.com/game/shapes-ski-race/</a>   | Ski Race shapes   |
| <a href="http://www.mathseeds.com">www.mathseeds.com</a>  | Provides core math and problem solving skills needed to be successful at school with fun, highly interactive and rewarding lessons. |
| <b>Accommodations &amp; Modifications</b>   |   |
| <b>Basic Skills</b>   |   |
| <ul style="list-style-type: none"> <li>● Teacher modeling</li> <li>● Vary activities by choice</li> <li>● Reminders as needed</li> <li>● Pre-Teach vocabulary or pre-teach lesson</li> <li>● Envision Reteach Activities</li> <li>● Envision Intensive and/or Strategic Intervention activities</li> </ul>        |   |
| <b>Economically Disadvantaged</b>   |   |
| <ul style="list-style-type: none"> <li>● Teacher modeling</li> <li>● Vary activities by choice</li> <li>● Reminders as needed</li> <li>● Pre-Teach vocabulary or pre-teach lesson</li> <li>● Envision Reteach Activities</li> <li>● Envision Intensive and/or Strategic Intervention activities</li> </ul>        |   |
| <b>Gifted and Talented</b>  |   |
| <ul style="list-style-type: none"> <li>● Envision 3-ACT Math</li> </ul>   |   |

- Envision Pick A Project
- Envision Stem Activities

**English Language Learners**

- Teacher modeling
- Vary activities by choice
- Reminders as needed
- Pre-Teach vocabulary or pre-teach lesson
- Envision Reteach Activities
- Envision Intensive and/or Strategic Intervention activities

**Students with IEPs**

- Provide differentiated instruction as needed
- Follow all IEP modifications
- Provide manipulatives or the opportunity to draw solution strategies
- Preview lesson and pre-teach vocabulary
- Use visual cues
- Teacher modeling
- Vary activities by choice
- Reminders as needed
- Pre-Teach vocabulary or pre-teach lesson

**Students with 504 plans**

- Provide differentiated instruction as needed
- Follow all 504 modifications
- Provide manipulatives or the opportunity to draw solution strategies
- Preview lesson and pre-teach vocabulary
- Use visual cues
- Teacher modeling
- Vary activities by choice
- Reminders as needed
- Pre-Teach vocabulary or pre-teach lesson

**Students at Risk for Failure**

- Use visuals
- Introduce key vocabulary before lesson
- Teacher reads aloud daily
- Provide peer tutoring
- Use a strong student as a “buddy” (does not necessarily have to speak the primary language)
- preferential seating



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| <b>Measurement and Data</b>  |  | <b>Topic 14 Duration:</b> June 10 days |
| <b>Standards</b>   |  |  |
| <b>K.MD.A1</b>   | 1. Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.   |  |
| <b>K.MD.A2</b>   | 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. |  |
| <b>K.MD.B3</b>   | 3. Classify objects into given categories; count the numbers of objects in each category and sort the categories by count. <sup>3</sup>  |  |
| <b>Interdisciplinary Connections</b>   |  |  |
| <b>Language Arts Standards</b>   |  |  |
| <b>SL.K.1.A</b>  | Follow agreed-upon norms for discussions (e.g., listening to others with care and taking turns speaking about the topics and texts under discussion).  |  |
| <b>SL.K.1.B</b>  | Continue a conversation through multiple exchanges.  |  |
| <b>Computer Science &amp; Design Thinking Standards</b>  |  |  |
| <b>9.4.2.TL.6:</b>   | Illustrate and communicate ideas and stories using multiple digital tools (e.g., SL.2.5.).   |  |
| <b>Career Readiness, Life Literacies and Key Skills</b>  |  |  |
| <p>This outlines concepts and skills necessary for New Jersey’s students to thrive in an ever-changing world. Intended for integration throughout all K-12 academic and technical content areas, the 2020 New Jersey Student Learning Standards — Career Readiness, Life Literacies, and Key Skills (NJSL-CLKS) provides the framework for students to learn the concepts, skills, and practices essential to the successful navigation of career exploration and preparation, personal finances and digital literacy.</p> <p><a href="https://www.nj.gov/education/standards/clicks/index.shtml">https://www.nj.gov/education/standards/clicks/index.shtml</a></p> <p><b>9.1 Personal Financial Literacy</b><br/>This standard outlines the important fiscal knowledge, habits, and skills that must be mastered in order for students to make informed decisions about personal finance. Financial literacy is an integral component of a student's college and career readiness, enabling students to achieve fulfilling, financially-secure, and successful careers.</p> <p><b>9.2 Career Awareness</b><br/>This standard outlines the importance of being knowledgeable about one's interests and talents, and being well informed about postsecondary and career options, career planning, and career requirements.</p> <p><b>9.3 Career and Technical Education</b></p> |  |  |

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| <p>This standard outlines what students should know and be able to do upon completion of a CTE Program of Study.</p> <p><b>9.4 Life Literacies and Key Skills</b><br/> This standard outlines key literacies and technical skills such as critical thinking, global and cultural awareness, and technology literacy that are critical for students to develop to live and work in an interconnected global economy.</p> <p style="text-align: center;"><b>Career Readiness, Life Literacies and Key Skills</b></p> <p><b>9.4.2.CT.3:</b> Use a variety of types of thinking to solve problems (e.g., inductive, deductive).</p> |   |
| <b>Essential Understandings</b>   | <b>Essential Questions</b>  |
| <p><i>Students will understand that...</i></p> <p>When you compare by length or height, you are thinking about how long or tall objects are</p> <p>When you compare by capacity, you are thinking about how much objects hold</p> <p>When you compare by weight, you are thinking about how heavy objects are</p> <p>Objects have measurable attributes that can be recognized and described</p> <p>Measurement is a process of comparing a unit to the object being measured. The length of any object can be used as a measurement unit for length</p>  | <p>How can objects be described and compared by length, height, capacity, and weight?</p>   |
| <b>Evidence of Student Learning</b>   |   |
| <b>Performance Tasks:</b> <i>Activities to provide evidence for student learning of content and cognitive skills.</i>   | <b>Other Assessments</b>  |
| <p><b>Measurement Hunt</b> - compare lengths and weights of various objects</p> <ul style="list-style-type: none"> <li>● Students will trace their shoe on paper.</li> <li>● Students will then make a cube train as long as their shoe.</li> </ul>   | <p><b>Formative Assessments</b></p> <ul style="list-style-type: none"> <li>● Teacher Observation</li> <li>● Performance Assessments</li> <li>● Exit Slips</li> <li>● Games</li> </ul> |

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| <ul style="list-style-type: none"> <li>● Students will then take the cube train around the room and hunt for objects that are shorter and longer than their shoe.</li> <li>● After students find objects, they build a cube train about the same size as each object.</li> <li>● Students will draw the objects and write how many cubes long each object was.</li> </ul> <p>Modification - compare weights of objects to the weight of their shoe.</p> | <ul style="list-style-type: none"> <li>● Anecdotal Records</li> <li>● Oral Assessments/Conferencing</li> <li>● Portfolio/Math Journals</li> <li>● Daily Classwork</li> <li>● Pre-assessments</li> <li>● Solve and Share Observational Assessment</li> <li>● Convince Me! (K)</li> <li>● Guided Practice</li> </ul> <p><b>Summative Assessments</b></p> <ul style="list-style-type: none"> <li>● Envision Topic Assessments</li> <li>● Topic Performance Tasks</li> <li>● Fluency Practice/Assessment masters</li> <li>● Assessment book</li> <li>● Benchmark</li> </ul> <p><b>Benchmark Assessment</b></p> <ul style="list-style-type: none"> <li>● Envision Benchmark Assessment</li> </ul> <p><b>Alternative Assessments</b></p> <ul style="list-style-type: none"> <li>● Manipulative Driven Assessment</li> <li>● Modified/Teacher Created Topic Tests</li> <li>● Visual Representation of Skills Assess</li> <li>● Modified Classwork Assignments</li> <li>● Modified Benchmarks</li> <li>● Envision Topic Performance Tasks</li> <li>● Project Based Assessments with Scoring Rubric</li> </ul> |
| <b>Knowledge and Skills</b>   |   |
| <p>Students will know...</p> <p>Cluster: <b>K.MD.A</b></p> <ul style="list-style-type: none"> <li>● Objects have measurable attributes that can be compared</li> <li>● Objects can be classified and counted based on common attributes</li> </ul>  | <p><i>Students will be able to ...</i></p> <ul style="list-style-type: none"> <li>● Describe and compare objects by length,height, capacity, and weight.</li> <li>● Use measurable attributes to describe different objects</li> <li>● Use small objects to measure length</li> <li>● Solve math problems about objects with measurable attributes by using precision.</li> </ul>   |
| <b>Instructional Plan</b>   |   |

| Suggested Activities   | Resources  | Suggested Options for Differentiation  |
|--|--|--|
| Marshmallow Measuring - Students will use mini marshmallows to see how many it takes to “measure” everyday classroom items.  | Mini marshmallows, classroom items, paper to draw and label items measured | Use regular size marshmallows or various other units of measurement ( <b>Gifted and Talented</b> ); work with a partner ( <b>Basic Skills/ELL/Economically Disadvantaged</b> )                                     |
| Pan Balance Weights - Students will use a pan balance to compare weights of various classroom items (erasers, beans, counters, etc.).  | Pan balance and items to weigh   | Make a sheet of items to compare and document ( <b>Gifted and Talented</b> ); work with a partner ( <b>Basic Skills/Economically Disadvantaged</b> )   |
| Sorting Shapes - Students will sort by color, shape, or size.  | Shape manipulatives  | Sort by various attributes; “guess my attribute” (one sorts, one guesses) ( <b>Gifted and Talented</b> )<br>Sort by color using color poster as a guide ( <b>ELL and Basic Skills/Economically Disadvantaged</b> ) |
| Students will create class tally charts and graphs about various topics, such as favorite animal, number of siblings, etc. Discuss data.   | Chart paper or class white board   | Teacher administered ( <b>Basic Skills/Economically Disadvantaged</b> ) vs student- administered ( <b>Gifted and Talented</b> ) surveys; work with a partner ( <b>ELL</b> )  |
| <b>Math Literature</b>   |  |  |
| <p>Textbook: <i>enVision Mathematics Common Core</i>, Savvas Learning Company LLC., 2020</p> <p>Literature</p> <ul style="list-style-type: none"> <li>● <i>Ten Beads Tall</i> by Pam Adams</li> <li>● <i>How Big Is a Foot?</i> by Myller Rolf</li> <li>● <i>Is it larger? Is it Smaller?</i> by Tana Hoban</li> <li>● <i>Inch by Inch</i> by Leo Lionni</li> <li>● <i>The Grouchy Ladybug</i> by Eric Carle</li> <li>● <i>Measuring Penny</i> by Loreen Leedy</li> <li>● <i>The Button Box</i> by Margarete Reid</li> </ul> |  |  |

| <b>Websites</b>  |   |
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| <a href="http://www.abcya.com/kindergarten_computers.htm#numbers-cat">http://www.abcya.com/kindergarten_computers.htm#numbers-cat</a>  | Various games   |
| <a href="https://www.education.com/game/circus-measurement/">https://www.education.com/game/circus-measurement/</a>  | Circus measuring game   |
| <a href="https://www.education.com/resources/game+skill-builder/kindergarten/data/">https://www.education.com/resources/game+skill-builder/kindergarten/data/</a>  | Various Sorting games   |
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| <b>Basic Skills</b>  |   |
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| <b>Gifted and Talented</b>   |   |
| <ul style="list-style-type: none"> <li>● Envision 3-ACT Math</li> <li>● Envision Pick A Project</li> <li>● Envision Stem Activities</li> </ul>   |   |
| <b>English Language Learners</b>   |   |
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