

# TABERNACLE TOWNSHIP PUBLIC SCHOOLS

## MATHEMATICS CURRICULUM GRADES K-4

**Revised: July 2017**

**Board Adopted: August, 21st, 2017**

### TABERNACLE TOWNSHIP SCHOOL DISTRICT MISSION STATEMENT

The mission of the Tabernacle School District is to create and maintain a safe and secure learning environment that ensures that all students in grades Pre K-8 attain success in mastering the *New Jersey Student Learning Standards*. The home, the school, and the community working together will provide effective learning experiences that foster the academic, personal, intellectual, physical, social, and emotional growth necessary for students to become responsible, productive members of a diverse and global society. We commit to a comprehensive system of support to assure these outcomes.

Glenn Robbins, Superintendent  
Barry Saide, Director of Curriculum & Instruction

Steering Committee:  
Marc Miller, Math Specialist

# **Mathematics**

## **Overview/Philosophy**

The district's vision for Tabernacle Township students is to develop a community of competent and confident learners who value and apply mathematics in their everyday lives. Mathematics educators must carefully construct educational experiences that support this vision. Opportunities for problem-solving and writing about math are embedded into the daily curriculum at each grade level. Students are also afforded opportunities to share and discuss with their peers to further enhance the development of mathematical communication skills.

All students must be challenged to reach higher levels of understanding. Opportunities must be provided that allow students to explore and investigate using varying modalities and learning styles.

The district curriculum is aligned with the NJSL in the area of mathematics and supports the following:

- All students have the need and capability to learn mathematics.
- A pedagogical shift from rote memorization and application of procedures to problem-solving and development of number sense is critical to the success of effective mathematics instruction.
- Integration of appropriate technology into the mathematics curricula and instruction is essential for effective instruction in the twenty-first century.

In the end, our goal is for students to enjoy as well as value mathematics.

## Goals

In order for students to achieve the benefits of mathematical literacy and number sense, the Tabernacle Township School District has identified the following goals:

- Develop mathematical process skills to promote mathematical discourse and enhance understanding and facilitate application of mathematical content in everyday situations
- Develop a strong sense of numbers and its application in real life settings
- Explore, develop, understand, and apply fundamentals of spatial sense and reasoning and related measurements in everyday context
- Read, understand, construct, analyze, and explain representations of data and probability statistics collected from real experiments
- Use concepts of algebraic reasoning to identify patterns, solve problems and equations, and connect algebra to real life experiences

# Curriculum Framework

## **Overview**

Mathematics instruction will formally begin in kindergarten and proceed through grade eight. Students will explore the content areas of number, numerical operations, measurement, geometry, patterns, algebra, data, probability, and discrete mathematics. Integration of content and strategies across the curriculum will be incorporated at all grade levels. Content will be presented within contexts to promote development of the mathematical processes of problem solving, connections, communication, representations, reasoning, and technology.

## **Elementary**

In the K-5 grades, curriculum materials provide opportunities for children to explore content within a spiraling context. Concepts repeat several times throughout the instructional year and are presented in a variety of ways to increase children's exposure and understanding. Focus algorithms present operations in child-friendly ways that elevate conceptual number sense. Materials at each grade level allow for the appropriate use of manipulatives and calculators.

## **Middle**

In the middle school grades (6-8), mathematics materials present challenging content embedded in real-world problem solving contexts. Lessons emphasize multiple strategies and approaches to solving problems. Discovery of patterns are emphasized as students explore problems, develop theories, make connections and construct understanding of presented content. The students continue to use manipulatives and technology and are introduced to graphing calculators to solve problems and represent data.

## **Special Education**

Special education teachers at all grade levels may need to adapt and modify the mathematics curriculum for their students based on individual needs and IEP specifications. By using varied instructional strategies, manipulatives, and effective questioning, special needs teachers help to make challenging curricular materials accessible for all special needs students. In most cases, special education classes use the same program resources as regular education to serve as the core instructional platform on which to base any modifications or adaptations. In cases of significant need, a more individualized curriculum and appropriate curricular materials may be designed in accordance with IEP specifications.

## MATHEMATICS GRADE KINDERGARTEN CURRICULUM MAP

	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	JANUARY
<b>Unit/ Topics</b>	<p>Topic 14 – Identifying and Describing Shapes</p> <p>Topic 1 – One to Five</p>	<p>Topic 2 – Comparing and Ordering 0 to 5</p> <p>Topic 3 – Six to Ten</p>	<p>Topic 4 – Comparing and Ordering 0 to 10</p>	<p>Topic 15 – Position and Location of Shapes</p> <p>Topic 12 - Measurement</p>	<p>Topic 13 – Sorting, Classifying, Counting, and Categorizing Data</p>
<b>Instr uctio nal Mate rials</b>	<p>-enVisionMATH program (teacher resource kits, student pages, online resources at pearsonsuccesnet.com)</p> <p>-Pattern Blocks</p> <p>-Attribute Blocks</p> <p>-Two-Color Counters</p> <p>-Five Frame Mats</p> <p>-Number Cards</p>	<p>-enVisionMATH program (teacher resource kits, student pages, online resources at pearsonsuccesnet.com)</p> <p>-Connecting Cubes</p> <p>-Two-Color Counters</p> <p>-Number Cards</p> <p>-Five Frame Mats</p> <p>-Ten Frame Mats</p>	<p>-enVisionMATH program (teacher resource kits, student pages, online resources at pearsonsuccesnet.com)</p> <p>-Two-Color Counters</p> <p>-Number Cards</p> <p>-Five Frame Mats</p> <p>-Ten Frame Mats</p>	<p>-enVisionMATH program (teacher resource kits, student pages, online resources at pearsonsuccesnet.com)</p> <p>-Classroom Objects</p> <p>-Connecting Cubes</p> <p>-Measuring Cups</p> <p>-Balance Scale</p> <p>-Geometric Solids</p> <p>-Yarn -Attribute Blocks</p>	<p>-enVisionMATH program (teacher resource kits, student pages, online resources at pearsonsuccesnet.com)</p> <p>-Two-Color Counters</p> <p>-Pattern Blocks</p> <p>-Attribute Blocks</p> <p>-Color Tiles</p> <p>-Assorted Buttons</p>
<b>Curr icula r Conn ectio ns (Inte rdisc iplin ary)</b>	<p>-Reading: Follow Directions/ Use Picture Clues/Describe Objects</p> <p>-Science: Collect things from “Nature” to count and sort</p> <p>-Dramatic Play: Students set a table using numbers for plates/forks/cups/etc.</p> <p>-Phys. Ed.: Clap and Jump</p> <p>-Soc. Studies: Street Signs and Shapes</p>	<p>-Reading: Use Objects to Act out Problems and Using Prior Knowledge</p> <p>-Science: Grow Beans</p> <p>-Phys. Ed.: Giant Steps or Not? and Button, Button!</p> <p>-Social Studies: Numbers All Over!</p>	<p>-Reading: Visual Images/Text Descriptions and Count ‘Em Up!</p> <p>-Art: Show More, Show Fewer</p>	<p>-Reading: Use Prior Knowledge, Sequencing, Sense or Nonsense? and Guess What’s Inside!</p> <p>-Drama: Taller than Teddy?</p> <p>-Social Studies: Line Up the Family</p> <p>-Phys. Ed.: Simon Says!</p>	<p>-Reading: Use Reasoning</p> <p>-Social Studies: Talk It Over</p> <p>-Phys. Ed.: Match Them Up</p>
<b>Integ ratio n of 21<sup>st</sup> Cent ury The mes &amp; Skills</b>	<p>-Make Sense of Problems and Persevere in Solving Them</p> <p>-Reason Abstractly and Quantitatively</p>	<p>-Construct Viable Arguments and Critique the Reasoning of Others</p>	<p>-Model with Mathematics</p> <p>-Use Appropriate Tools Strategically</p>	<p>-Attend to Precision</p> <p>-Look for and Make Use of Structure</p>	<p>-Look for and Express Regularity in Repeated Reasoning</p>

<b>Assessments (Formative, Summative, Benchmark)</b>	-Daily Quick Checks -Placement Test -Topic Tests	-Daily Quick Checks -Topic Tests -MAP Assessment - Fall	-Daily Quick Checks -Topic Tests -Topics 1-4 Benchmark Test	-Daily Quick Checks -Topic Tests	-Daily Quick Checks -Topic Tests -MAP Assessment - Winter
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## MATHEMATICS GRADE KINDERGARTEN CURRICULUM MAP

	FEBRUARY	MARCH	APRIL	MAY	JUNE
<b>Unit/Topics</b>	<p>Topic 7 – Understanding Addition</p> <p>Topic 8 – Understanding Subtraction</p>	<p>Topic 9 – Composing and Decomposing Numbers to 10</p> <p>Topic 5 - Numbers to 20</p> <p>Topic 10 – Composing Numbers 11-19</p>	<p>Topic 11 – Decomposing Numbers 11-19</p> <p>Topic 6 – Numbers to 100</p>	<p>Topic 16 – Analyzing, Comparing, and Composing Shapes</p>	<p>Step Up to Grade 1</p>
<b>Instructional Materials</b>	<p>-enVisionMATH program (teacher resource kits, student pages, online resources at pearsonsuccesnet.com)</p> <p>-Two-Color Counters</p> <p>-Connecting Cubes</p>	<p>-enVisionMATH program (teacher resource kits, student pages, online resources at pearsonsuccesnet.com)</p> <p>-Two-Color Counters</p> <p>-Connecting Cubes</p> <p>-Ten Frame Mats</p> <p>-Number Cards</p> <p>-Double Ten Frame Mats</p>	<p>-enVisionMATH program (teacher resource kits, student pages, online resources at pearsonsuccesnet.com)</p> <p>-Two-Color Counters</p> <p>-Connecting Cubes</p> <p>-Hundred Chart</p> <p>-Number Cards</p>	<p>-enVisionMATH program (teacher resource kits, student pages, online resources at pearsonsuccesnet.com)</p> <p>-Pattern Blocks</p> <p>-Geometric Solids</p>	<p>-enVisionMATH program (teacher resource kits, student pages, online resources at pearsonsuccesnet.com)</p> <p>-Connecting Cubes</p> <p>-Two-Color Counters</p> <p>-Part/Part/Whole Mats</p> <p>-Pattern Blocks</p> <p>-Geometric Solids</p>
<b>Curricular Connections (Interdisciplinary)</b>	<p>-Reading: Retell the Order of Events, Use Prior Knowledge and Room For One More</p> <p>-Music: Take a Seat!</p> <p>-Drama: What’s Going On?</p>	<p>-Reading: Make Predictions, Following Directions and Five Little Squirrels</p> <p>-Phys. Ed.: More or Fewer, Go Fish, and Find Your Partner</p> <p>-Art: Popcorn fun</p> <p>-Science: 20 Questions</p> <p>-Writing: We’ve Been Framed</p>	<p>-Reading: Use Prior Knowledge</p> <p>-Drama: Muffins for Sale! and How Many Beans?</p> <p>-Technology: Input, Output</p>	<p>-Reading: Retelling</p> <p>-Drama: I Spy</p> <p>-Science: Guess It!</p>	
<b>Integration of 21<sup>st</sup> Century Themes &amp; Skills</b>	<p>-Make Sense of Problems and Persevere in Solving Them</p> <p>-Reason Abstractly and Quantitatively</p>	<p>-Construct Viable Arguments and Critique the Reasoning of Others</p>	<p>-Model with Mathematics</p> <p>-Use Appropriate Tools Strategically</p>	<p>-Attend to Precision</p> <p>-Look for and Make Use of Structure</p>	<p>-Look for and Express Regularity in Repeated Reasoning</p>



<b>Assessments (Formative, Summative, Benchmark)</b>	-Daily Quick Checks -Topic Tests -Topics 5-8 Benchmark Test	-Daily Quick Checks -Topic Tests	-Daily Quick Checks -Topic Tests -Topics 9-12 Benchmark Test	-Daily Quick Checks -Topic Tests -Topics 13-16 Benchmark Test	-MAP Assessment – Spring -Topics 1-16 End-of-Year Test
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**TABERNACLE TOWNSHIP PUBLIC SCHOOLS  
MATHEMATICS CURRICULUM  
GRADE KINDERGARTEN**

<b>NJSLS</b>	<b>STANDARDS/INDICATORS</b>	<b>BENCHMARKS/CPI</b>	<b>ASSESSMENT</b>	<b>RESOURCES</b>
<b>K.CC Counting and Cardinality</b>				
<b>A. Know number names and the count sequence.</b>				
K.CC.A.1	Count to 100 by ones and by tens.	<ul style="list-style-type: none"> <li>Students explore number relationships through counting by tens and ones to 100.</li> <li>Students will demonstrate the ability of counting forward by ones given a random number other than one.</li> <li>Students count, write, recognize and compare sets of objects using one to one correspondence for numbers zero to twenty.</li> </ul>	<ul style="list-style-type: none"> <li>Student Practice Pages</li> <li>Oral Responses</li> <li>Teacher Checklist</li> <li>Topic Assessments</li> <li>Topic Centers</li> <li>Topics Addressing Standards: 1, 2, 3, 4, 5, 6</li> </ul>	<ul style="list-style-type: none"> <li>Manipulatives</li> <li>Counters               <ul style="list-style-type: none"> <li>EnVisionMATH Program</li> <li>Teacher Resource Masters</li> <li>Center Materials</li> </ul> </li> <li>Pearson website</li> <li>Mathematics Literature in Media Center</li> <li>Topics Addressing Standards: 1, 2, 3, 4, 5, 6</li> </ul>
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).			
<b>B. Count to tell the number of objects.</b>				
K.CC.B.4	Understand the relationship between numbers and quantities; connect counting to cardinality.	<ul style="list-style-type: none"> <li>When given items in a group students will assign a number to each item and provide the total amount of items in that group.</li> <li>Count a variety of objects up to twenty items using a variety of configurations.</li> <li>While counting items students will demonstrate the understanding that the next sequential number is one larger than the previous one.</li> </ul>	<ul style="list-style-type: none"> <li>Student Practice Pages</li> <li>Oral Responses</li> <li>Teacher Checklist</li> <li>Topic Assessments</li> <li>Topic Centers</li> <li>Topics Addressing Standards: 1, 2, 3, 4, 6</li> </ul>	<ul style="list-style-type: none"> <li>Manipulatives</li> <li>Counters               <ul style="list-style-type: none"> <li>EnVisionMATH Program</li> <li>Teacher Resource Masters</li> <li>Center Materials</li> </ul> </li> <li>Pearson website</li> <li>Mathematics Literature in Media Center</li> </ul>
K.CC.B.4.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.			
K.CC.B.4.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.			<ul style="list-style-type: none"> <li>• Topics Addressing Standards: 1, 2, 3, 4, 6</li> </ul>
K.CC.B.4.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			

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K.CC.B.5 (cont.)	things in a scattered configuration; given a number from 1-20, count out that many objects.			
<b>C. Compare numbers.</b>				
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 (groups of ten).	<ul style="list-style-type: none"> <li>• Students will use the language of less than, more than, or equal to in order to compare items in a group.</li> <li>• When given two written numbers, one through ten, students will be able to distinguish the quantity of a written numeral compared to another written numeral.</li> </ul>	<ul style="list-style-type: none"> <li>• Student Practice Pages</li> <li>• Oral Responses</li> <li>• Teacher Checklist</li> <li>• Topic Assessments</li> <li>• Topic Centers</li> <li>• Topics Addressing Standards: 2, 4, 5</li> </ul>	<ul style="list-style-type: none"> <li>• Manipulatives</li> <li>• EnVisionMATH Program</li> <li>• Teacher Resource Masters</li> <li>• Center Materials</li> <li>• Pearson website</li> <li>• Mathematics Literature in Media Center</li> <li>• Topics Addressing Standards: 2, 4, 5</li> </ul>
K.CC.C.7	Compare two numbers between 1 and 10 presented as written numerals.			
<b>K.OA Operations and Algebraic Thinking</b>				
<b>A. Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.</b>				
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.	<ul style="list-style-type: none"> <li>• Add and subtract items in their environment up to ten and use language to explain how they added or subtracted to get the total</li> <li>• Know basic addition and subtraction facts 0 through five</li> </ul>	<ul style="list-style-type: none"> <li>• Student Practice Pages</li> <li>• Oral Responses</li> <li>• Teacher Checklist</li> <li>• Topic Assessments</li> <li>• Topic Centers</li> <li>• Topics Addressing Standards: 4, 7, 8, 9</li> </ul>	<ul style="list-style-type: none"> <li>• Manipulatives</li> <li>• Counters</li> <li>• EnVisionMATH Program</li> <li>• Teacher Resource Masters</li> <li>• Center Materials</li> <li>• Pearson website</li> </ul>
K.OA.A.2	Solve addition and subtraction with 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 $5=4+1$ ).			<ul style="list-style-type: none"><li>● Mathematics Literature in Media Center</li><li>● Topics Addressing Standards: 4, 7, 8, 9</li></ul>
K.OA.A.4	For any number from 1 to 9, find the number that makes 10 when added to the given			

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NJSLS	CONTENT	BENCHMARKS/CPI	ASSESSMENT	RESOURCES
K.OA.A.4 (cont.)  K.OA.A.5	number, e.g., by using objects or drawings, and record the answer with a drawing or equation.  Demonstrate fluency for addition and subtraction within 5.			
<b>K. NBT      Number and Operations in Base Ten</b>				
<b>A. Work with numbers 11-19 to gain foundations for place value.</b>				
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.	<ul style="list-style-type: none"> <li>● Using numbers 11 through 19 students will represent the meaning of a composition or a decomposition problem by using pictures, equations, manipulatives and or objects.</li> </ul>	<ul style="list-style-type: none"> <li>● Student Practice Pages</li> <li>● Oral Responses</li> <li>● Teacher Checklist</li> <li>● Topic Assessments</li> <li>● Topic Centers</li> <li>● Topics Addressing Standards: 10, 11</li> </ul>	<ul style="list-style-type: none"> <li>● Manipulatives               <ul style="list-style-type: none"> <li>● EnVisionMATH Program</li> <li>● Teacher Resource Masters</li> <li>● Center Materials</li> </ul> </li> <li>● Pearson website</li> <li>● Mathematics Literature in Media Center</li> <li>● Topics Addressing Standards: 10, 11</li> </ul>
<b>K.MD      Measurement and Data</b>				
<b>A. Describe and compare measurable attributes.</b>				
K.MD.A.1  K.MD.A.2	Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.  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.	<ul style="list-style-type: none"> <li>● Students will identify several ways to measure a single object .</li> <li>● Students will measure objects using a variety of measurements.</li> <li>● Students will use language that shows understanding of an object’s different attributes .</li> </ul>	<ul style="list-style-type: none"> <li>● Student Practice Pages</li> <li>● Oral Responses</li> <li>● Teacher Checklist</li> <li>● Topic Assessments</li> <li>● Topic Centers</li> <li>● Topic Addressing Standards: 12</li> </ul>	<ul style="list-style-type: none"> <li>● Manipulatives               <ul style="list-style-type: none"> <li>● EnVisionMATH Program</li> <li>● Teacher Resource Masters</li> <li>● Center Materials</li> </ul> </li> <li>● Pearson website</li> <li>● Mathematics Literature</li> <li>● Topic Addressing Standards: 12</li> </ul>
<b>B. Classify objects and count the number of objects in each category.</b>				
K.MD.B.3	Classify objects into given categories; count the number of objects in each category and sort the categories by count. (Limit category	<ul style="list-style-type: none"> <li>● Given a set of objects students will classify them into categories, count</li> </ul>	<ul style="list-style-type: none"> <li>● Student Practice Pages</li> <li>● Oral Responses</li> </ul>	<ul style="list-style-type: none"> <li>● Manipulatives               <ul style="list-style-type: none"> <li>● EnVisionMATH</li> </ul> </li> </ul>



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<b>NJSLS</b>	<b>CONTENT</b>	<b>BENCHMARKS/CPI</b>	<b>ASSESSMENT</b>	<b>RESOURCES</b>
K.G.B.5	Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes.			<ul style="list-style-type: none"> <li>● Mathematics Literature in Media Center</li> </ul>
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?”			<ul style="list-style-type: none"> <li>● 3-D Shapes</li> <li>● Topic Addressing Standards: 16</li> </ul>

## MATHEMATICS GRADE 1 CURRICULUM MAP

	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	JANUARY
<b>Unit/Topics</b>	<p>Topic 1- Understanding Addition</p> <p>Topic 2- Understanding Subtraction</p>	Topic 3- Five and Ten Relationships	Topic 4- Addition and Subtraction Facts to 12	Topic 5- Addition Facts to 20	<p>Topic 6- Subtraction Facts to 20</p> <p>Topic 7- Counting and Number Patterns to 120</p>
<b>Instructional Materials</b>	<p>-enVisionMATH program (teacher resource kits, student pages, online resources at pearsonsuccesstnet.com)</p> <p>-Part/Part/Whole Mats</p> <p>-Two-Color Counters</p> <p>-Paper Plates</p> <p>-Color Tiles</p> <p>-Connecting Cubes</p> <p>-Number Cards</p>	<p>-enVisionMATH program (teacher resource kits, student pages, online resources at pearsonsuccesstnet.com)</p> <p>-Number Cards</p> <p>-Two-Color Counters</p> <p>-Ten Frame Mats</p>	<p>-enVisionMATH program (teacher resource kits, student pages, online resources at pearsonsuccesstnet.com)</p> <p>-Number Cards</p> <p>-Two-Color Counters</p> <p>-Connecting Cubes</p> <p>-Number Cube</p> <p>-Double Ten Frame Mats</p>	<p>-enVisionMATH program (teacher resource kits, student pages, online resources at pearsonsuccesstnet.com)</p> <p>-Connecting Cubes</p> <p>-Double Ten Frame Mats</p> <p>-Number Cards</p>	<p>-enVisionMATH program (teacher resource kits, student pages, online resources at pearsonsuccesstnet.com)</p> <p>-Two-Color Counters</p> <p>-Number Cards</p> <p>-Hundred Chart</p> <p>-Connecting Cubes</p>
<b>Curricular Connections (Interdisciplinary)</b>	<p>Reading: Retell and Act Out and draw visual images based on text description</p> <p>Writing: Write a story about an amusement park</p> <p>Music: Sing a backward song</p> <p>Literature: <i>The Action of Subtraction</i></p>	<p>Reading: Draw visual images based on text description</p> <p>Art: Make Number Collages</p> <p>Literature: <i>Math for All Seasons</i></p>	<p>Reading: Retelling and Sequencing</p> <p>Soc. Stud.: Research state wildlife (plant, birds, etc.)</p> <p>Literature: <i>Animals on Board</i></p>	<p>Reading – Retelling and Sequencing</p> <p>STEM: Research animals raised on Farms and Ranches</p> <p>Literature: <i>Two of Everything: A Chinese Folktale</i></p>	<p>Reading: Retelling and Sequencing</p> <p>Soc. Stud.: Write facts about state capitol and illustrate a counting pattern of the state mammal</p> <p>Literature: <i>Subtraction Action and Emily's First 100 Days of School</i></p>
<b>Integration of 21<sup>st</sup> Century Themes &amp; Skills</b>	<p>-Make Sense of Problems and Persevere in Solving Them</p> <p>-Reason Abstractly and Quantitatively</p>	-Construct Viable Arguments and Critique the Reasoning of Others	<p>-Model with Mathematics</p> <p>-Use Appropriate Tools Strategically</p>	<p>-Attend to Precision</p> <p>-Look for and Make Use of Structure</p>	-Look for and Express Regularity in Repeated Reasoning

<b>Assessments (Formative, Summative, Benchmark)</b>	-Daily Quick Checks -Placement Test -Topic Tests -MAP Assessment - Fall	-Daily Quick Checks -Topic Tests	-Daily Quick Checks -Topic Tests -Topics 1-4 Benchmark Test	-Daily Quick Checks -Topic Tests	-Daily Quick Checks -Topic Tests -MAP Assessment - Winter
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### MATHEMATICS GRADE 1 CURRICULUM MAP

	<b>FEBRUARY</b>	<b>MARCH</b>	<b>APRIL</b>	<b>MAY</b>	<b>JUNE</b>
<b>Unit/Topics</b>	Topic 8- Tens and Ones  Topic 9- Comparing and Ordering Numbers to 100	Topic 10- Adding with Tens and Ones  Topic 11- Subtracting with Tens and Ones	Topic 12- Length  Topic 13- Time	Topic 14- Using Data to Answer Questions  Topic 15- Geometry	Topic 16- Fractions of Shapes  Step Up to Grade 2
<b>Instructional Materials</b>	-enVisionMATH program (teacher resource kits, student pages, online resources at pearsonsuccessnet.com) -Connecting Cubes -Place Value Mats -Number Cards -Hundred Chart	-enVisionMATH program (teacher resource kits, student pages, online resources at pearsonsuccessnet.com) -Number Cards -Connecting Cubes -Hundred Chart -Place Value Blocks -Place Value Mats -Part/Part/Whole Mats	-enVisionMATH program (teacher resource kits, student pages, online resources at pearsonsuccessnet.com) -Classroom Objects to Measure -Connecting Cubes -Yarn -Straws -Paper Clips - Different Sized Shoes, Pencils, Markers -Demonstration/Student Clocks	-enVisionMATH program (teacher resource kits, student pages, online resources at pearsonsuccessnet.com) -Two-Color Counters -Sticky Notes -Connecting Cubes -Chart Paper -Pattern Blocks -Attribute Blocks -Geometric Solids -Modeling Clay or Pipe Cleaners	-enVisionMATH program (teacher resource kits, student pages, online resources at pearsonsuccessnet.com) -Boxes
<b>Curricular Connections (Interdisciplinary)</b>	Reading: Retell or Act Out to Sequence, Making Inferences, Main Idea, Cause and Effect, Making Prediction, and Drawing Conclusions  STEM: Research state insect to use in groups of 10 pictures Soc. Stud.: Research Native American Jewelry  Literature: <i>A Fair Bear Share</i> and <i>More or Less</i>	Reading: Retell or Act Out to Sequence, Making Inferences, Main Idea, Cause and Effect, Making Prediction, and Drawing Conclusions  Art: Students draw pieces of fruit  STEM: Research New Jersey State Bird  Literature: <i>17 Kings and 42 Elephants</i> and <i>Mike's Mystery</i>	Reading: Draw and discuss visual images based on text and retell or act out to sequence  Soc. Stud.: Create a schedule for a train in a New Jersey City  STEM: Compare measurement of state animals  Literature: <i>Measuring Penny</i> and <i>Bunny Day: Telling Time from Breakfast to Bedtime</i>	Reading: Draw and discuss visual images based on text and Main Idea  STEM: Create a Summer Fun Activity Graph  Art: Find pictures to cut into different shapes  Literature: <i>Graphs</i> and <i>Circus Shapes</i>	Reading: Draw and discuss visual images based on text  Music: Make up a song about fractions of a whole  Literature: <i>Rabbit and Hare Divide and Apple</i>



<b>Integration of 21<sup>st</sup> Century Themes &amp; Skills</b>	-Make Sense of Problems and Persevere in Solving Them  -Reason Abstractly and Quantitatively	-Construct Viable Arguments and Critique the Reasoning of Others	-Model with Mathematics  -Use Appropriate Tools Strategically	-Attend to Precision  -Look for and Make Use of Structure	-Look for and Express Regularity in Repeated Reasoning
<b>Assessments (Formative, Summative, Benchmark)</b>	-Daily Quick Checks -Topic Tests -Topics 5-8 Benchmark Test	-Daily Quick Checks -Topic Tests	-Daily Quick Checks -Topic Tests -Topics 9-12 Benchmark Test	-Daily Quick Checks -Topic Tests -Topics 13-16 Benchmark Test	-MAP Assessment – Spring -Topics 1-16 End-of-Year Test

**TABERNAACLE TOWNSHIP PUBLIC SCHOOLS  
MATHEMATICS CURRICULUM  
GRADE 1**

<b>NJSLS</b>	<b>CONTENT</b>	<b>BENCHMARKS/CPI</b>	<b>ASSESSMENT</b>	<b>RESOURCES</b>
<b>1.OA Operations and Algebraic Thinking</b>				
<b>A. Represent and solve problems involving addition and subtraction.</b>				
1.OA.A.1	Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings and equations with a symbol for the unknown number to represent the problem.	<ul style="list-style-type: none"> <li>Construct, use and explain efficient and accurate procedures for numerical operations and problem solving.</li> <li>Construct and solve open number sentences and recognize and describe changes over time.</li> </ul>	<ul style="list-style-type: none"> <li>Student Practice Pages</li> <li>Teacher Observation</li> <li>Oral Responses</li> <li>Topic Center Activities</li> <li>Topic Assessments</li> <li>Topics Addressing Standards: 1, 2, 4, 5, 6</li> </ul>	<ul style="list-style-type: none"> <li>Manipulatives</li> <li>EnVisionMATH Program</li> <li>Teacher Resource Masters</li> <li>Center Materials</li> <li>Pearson website</li> <li>Mathematics Literature in Media Center</li> <li>Topics Addressing Standards: 1, 2, 4, 5, 6</li> </ul>
1.OA.A.2	Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.			
<b>B. Understand and apply properties of operations and the relationship between addition and subtraction.</b>				
1.OA.B.3	Apply properties of operations as strategies to add and subtract. (Students need not use formal terms for these properties.) Examples: If $8+3+11$ is known, then $3+8=11$ is also known. (Commutative property of addition.) To add	<ul style="list-style-type: none"> <li>Understand and apply the cumulative, associative and zero properties of addition.</li> <li>Construct, use and explain efficient and accurate procedures for</li> </ul>	<ul style="list-style-type: none"> <li>Student Practice Pages</li> <li>Teacher Observation</li> <li>Oral Responses</li> <li>Topic Center Activities</li> <li>Topic Assessments</li> </ul>	<ul style="list-style-type: none"> <li>Manipulatives</li> <li>EnVisionMATH Program</li> <li>Teacher Resource Masters</li> </ul>

1.OA.B.4	<p>2+6+4, the second two numbers can be added to make ten, so <math>2+6+4=2+10=12</math>. (Associative property of addition.) Students need not use the formal terms for these properties.</p> <p>Understand subtraction as an unknown-addend problem. For example, subtract <math>10-8</math> by finding the number that makes 10 when added to 8.</p>	numerical operations and problem solving.	<ul style="list-style-type: none"> <li>● Topics Addressing Standards: 1, 2, 3, 4, 5, 6</li> </ul>	<ul style="list-style-type: none"> <li>● Center Materials</li> <li>● Pearson website</li> <li>● Mathematics Literature in Media Center</li> <li>● Topics Addressing Standards: 1, 2, 3, 4, 5, 6</li> </ul>
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**TABERNACLE TOWNSHIP PUBLIC SCHOOLS  
MATHEMATICS CURRICULUM  
GRADE 1**

NJSLs	CONTENT	BENCHMARKS/CPI	ASSESSMENT	RESOURCES
<b>C. Add and subtract within 20.</b>				
1.OA.C.5  1.OA.C.6	<p>1.OA.C.5 Relate counting to addition and subtraction (e.g., by counting on 2 to add 2).</p> <p>1.OA.C.6 Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten (e.g., <math>8+6=8+2+4=10+4=14</math>; decomposing a number leading to a ten (e.g., <math>13-4=13-3-1=10-1=9</math>); using the relationship between addition and subtraction (e.g., knowing that <math>8+4=12</math>, one knows <math>12-8=4</math>); and creating equivalent but easier or known sums (e.g., adding <math>6+7</math> by creating the known equivalent <math>6+6+1=12+1=13</math>).</p>	<ul style="list-style-type: none"> <li>● Construct, use and explain efficient and accurate procedures for numerical operations and problem solving.</li> </ul>	<ul style="list-style-type: none"> <li>● Student Practice Pages</li> <li>● Teacher Observation</li> <li>● Oral Responses</li> <li>● Topic Center Activities</li> <li>● Topic Assessments</li> <li>● Topics Addressing Standards: 2, 3, 4, 5, 6</li> </ul>	<ul style="list-style-type: none"> <li>● Manipulatives</li> <li>● EnVisionMATH Program</li> <li>● Teacher Resource Masters</li> <li>● Center Materials</li> <li>● Pearson website</li> <li>● Mathematics Literature in Media Center</li> <li>● Topics Addressing Standards: 2, 3, 4, 5, 6</li> </ul>
<b>D. Work with addition and subtraction equations.</b>				
1.OA.D.7  1.OA.D.8	<p>1.OA.D.7 Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. For example, which of the following equations are true and which are false? <math>6=6</math>, <math>7=8-1</math>, <math>5+2=2+5</math>, <math>4+1=5+2</math>.</p> <p>1.OA.D.8 Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations <math>8+?=11</math>, <math>5=?-3</math>, <math>6+6=?</math>.</p>	<ul style="list-style-type: none"> <li>● Construct, use and explain efficient and accurate procedures for numerical operations and problem solving.</li> <li>● Construct, use and explain efficient and accurate procedures for numerical operations and problem solving.</li> </ul>	<ul style="list-style-type: none"> <li>● Student Practice Pages</li> <li>● Teacher Observation</li> <li>● Oral Responses</li> <li>● Topic Center Activities</li> <li>● Topic Assessments</li> <li>● Topics Addressing Standards: 1, 2, 3, 4, 5, 6</li> </ul>	<ul style="list-style-type: none"> <li>● Manipulatives</li> <li>● EnVisionMATH Program</li> <li>● Teacher Resource Masters</li> <li>● Center Materials</li> <li>● Pearson website</li> <li>● Mathematics Literature in Media Center</li> <li>● Topics Addressing Standards: 1, 2, 3, 4, 5, 6</li> </ul>

**TABERNACLE TOWNSHIP PUBLIC SCHOOLS  
MATHEMATICS CURRICULUM  
GRADE 1**

NJSLs	CONTENT	BENCHMARKS/CPI	ASSESSMENT	RESOURCES
<b>1.NBT Number and Operations in Base Ten</b>				
<b>A. Extend the counting sequence.</b>				
1.NBT.A.1	Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral.	<ul style="list-style-type: none"> <li>● Students will read, represent and write numbers up to 120.</li> </ul>	<ul style="list-style-type: none"> <li>● Student Practice Pages</li> <li>● Teacher Observation</li> <li>● Oral Responses</li> <li>● Topic Center Activities</li> <li>● Topic Assessments</li> <li>● Topics Addressing Standards: 7, 9</li> </ul>	<ul style="list-style-type: none"> <li>● Manipulatives</li> <li>● EnVisionMATH Program</li> <li>● Teacher Resource Masters</li> <li>● Center Materials</li> <li>● Pearson website</li> <li>● Mathematics Literature in Media Center</li> <li>● Topics Addressing Standards: 7, 9</li> </ul>
<b>B. Understand place value.</b>				
1.NBT.B.2  1.NBT.B.2.a  1.NBT.B.2.b  1.NBT.B.2.c  1.NBT.B.3	<p>Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases:</p> <p>10 can be thought of as a bundle of ten ones – called a “ten”.</p> <p>The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones.</p> <p>The numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight, or nine tens (and 0 ones).</p> <p>Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols <math>&gt;</math>, <math>=</math>, and <math>&lt;</math>.</p>	<ul style="list-style-type: none"> <li>● Connect symbols to number dot patterns, ten frames and counted sets.</li> <li>● Develop and demonstrate an appropriate understanding of number sense to place value, and comparison and ordering of whole numbers.</li> </ul>	<ul style="list-style-type: none"> <li>● Student Practice Pages</li> <li>● Teacher Observation</li> <li>● Oral Responses</li> <li>● Topic Center Activities</li> <li>● Topic Assessments</li> <li>● Topics Addressing Standards: 7, 8, 9</li> </ul>	<ul style="list-style-type: none"> <li>● Manipulatives</li> <li>● EnVisionMATH Program</li> <li>● Teacher Resource Masters</li> <li>● Center Materials</li> <li>● Pearson website</li> <li>● Mathematics Literature in Media Center</li> <li>● Topics Addressing Standards: 7, 8, 9</li> </ul>



**TABERNACLE TOWNSHIP PUBLIC SCHOOLS  
MATHEMATICS CURRICULUM  
GRADE 1**

NJSLS	CONTENT	BENCHMARKS/CPI	ASSESSMENT	RESOURCES
1.MD.A.2	Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object (the length unit) end to end; understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps. Limit to contexts where the object being measured is spanned by a whole number of length units with no gaps or overlaps.			
<b>B. Tell and write time.</b>				
1.MD.B.3	Tell and write time in hours and half-hours using analog and digital clocks.	<ul style="list-style-type: none"> <li>● Students will write and orally state time to the nearest hour and half hour using analog and digital clocks.</li> </ul>	<ul style="list-style-type: none"> <li>● Student Practice Pages</li> <li>● Teacher Observation</li> <li>● Oral Responses</li> <li>● Topic Center Activities</li> <li>● Topic Assessments</li> <li>● Topic Addressing Standards: 13</li> </ul>	<ul style="list-style-type: none"> <li>● Manipulatives</li> <li>● EnVisionMATH Program</li> <li>● Teacher Resource Masters</li> <li>● Center Materials</li> <li>● Pearson website</li> <li>● Mathematics Literature in Media Center</li> <li>● Topic Addressing Standards: 13</li> </ul>
<b>C. Represent and interpret data.</b>				
1.MD.C.4	Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another.	<ul style="list-style-type: none"> <li>● Use graphs and charts to collect and organize information in a systematic way to discover patterns, and make comparisons between groups on graph.</li> </ul>	<ul style="list-style-type: none"> <li>● Student Practice Pages</li> <li>● Teacher Observation</li> <li>● Oral Responses</li> <li>● Topic Center Activities</li> <li>● Topic Assessments</li> <li>● Topic Addressing Standards: 14</li> </ul>	<ul style="list-style-type: none"> <li>● Manipulatives</li> <li>● EnVisionMATH Program</li> <li>● Teacher Resource Masters</li> <li>● Center Materials</li> <li>● Pearson website</li> <li>● Mathematics Literature in Media Center</li> <li>● Topic Addressing Standards: 14</li> </ul>



## MATHEMATICS GRADE 2 CURRICULUM MAP

	<b>SEPTEMBER</b>	<b>OCTOBER</b>	<b>NOVEMBER</b>	<b>DECEMBER</b>	<b>JANUARY</b>
<b>Unit /Topics</b>	<p>Topic 1- Understanding Addition and Subtraction</p> <p>Topic 2- Addition Strategies</p>	<p>Topic 2 – (Continued)</p> <p>Topic 3- Subtraction Strategies</p>	<p>Topic 4- Working with Equal Groups</p>	<p>Topic 5- Place Value to 100</p>	<p>Topic 6- Mental Addition</p> <p>Topic 7- Mental Subtraction</p>
<b>Instructional Materials</b>	<p>-enVisionMATH program (teacher resource kits, student pages, online resources at pearsonsuccesnet.com)</p> <p>-Connecting Cubes</p> <p>-Part-Part-Whole Mats</p> <p>-Number Cards</p> <p>-Two-Color Counters</p> <p>-Double Ten Frame Mats</p> <p>-Number Cubes</p>	<p>-enVisionMATH program (teacher resource kits, student pages, online resources at pearsonsuccesnet.com)</p> <p>-Connecting Cubes</p> <p>-Part-Part-Whole Mats</p> <p>-Number Cards</p> <p>-Two-Color Counters</p> <p>-Double Ten Frame Mats</p> <p>-Number Cubes</p>	<p>-enVisionMATH program (teacher resource kits, student pages, online resources at pearsonsuccesnet.com)</p> <p>-Two Sided Counters</p>	<p>-enVisionMATH program (teacher resource kits, student pages, online resources at pearsonsuccesnet.com)</p> <p>-Connecting Cubes</p> <p>-Number Cards</p> <p>-Place Value Mats</p> <p>-Hundred Chart</p>	<p>-enVisionMATH program (teacher resource kits, student pages, online resources at pearsonsuccesnet.com)</p> <p>-Place Value Blocks</p> <p>-Single Ten Frame Mats</p> <p>-Double Ten Frame Mats</p> <p>-Number Cards</p> <p>-Two-Color Counters</p> <p>-Hundred Chart</p> <p>-Connecting Cubes</p>
<b>Curricular Connections (Interdisciplinary)</b>	<p>-Reading: Use Structure and Act Out or Retell Important Events in a Story</p> <p>-Soc. Stud.: Where to Go on Vacation?</p> <p>-STEM: What you Might See at a Space Center</p>	<p>-Reading: Act Out or Retell Important Events in a Story</p> <p>-Science/Literature: Look up and make a list of animals</p>	<p>-Reading: Draw and Discuss Visual Images Based on Text Descriptions</p> <p>-STEM: Students research animals, plants, and products from their state</p>	<p>-Reading: Use Prior Knowledge</p> <p>-Art: Students Draw Stars in the Night Sky</p>	<p>-Reading: Represent Text in Different Ways, Including Charts</p> <p>-Literature: Students write a story about things they can count “10 more of”</p>
<b>Integration of 21<sup>st</sup> Century Themes &amp; Skills)</b>	<p>-Make Sense of Problems and Persevere in Solving Them</p> <p>-Reason Abstractly and Quantitatively</p>	<p>-Construct Viable Arguments and Critique the Reasoning of Others</p>	<p>-Model with Mathematics</p> <p>-Use Appropriate Tools Strategically</p>	<p>-Attend to Precision</p> <p>-Look for and Make Use of Structure</p>	<p>-Look for and Express Regularity in Repeated Reasoning</p>



<b>Assessments (Formative, Summative, Benchmark)</b>	-Daily Quick Checks -Placement Test -Topic Tests -MAP Assessment - Fall	-Daily Quick Checks -Topic Tests	-Daily Quick Checks -Topic Tests -Topics 1-4 Benchmark Test	-Daily Quick Checks -Topic Tests	-Daily Quick Checks -Topic Tests -MAP Assessment - Winter
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### MATHEMATICS GRADE 2 CURRICULUM MAP

	<b>FEBRUARY</b>	<b>MARCH</b>	<b>APRIL</b>	<b>MAY</b>	<b>JUNE</b>
<b>Unit/T opics</b>	Topic 8- Adding Two-Digit Numbers  Topic 9- Subtracting Two-Digit Numbers	Topic 10- Place Value to 1,000  Topic 11- Three-Digit Addition and Subtraction	Topic 12- Geometry  Topic 13- Counting Money	Topic 14- Money  Topic 15- Measuring Length	Topic 16- Time, Graphs, and Data  Step Up to Grade 3
<b>Instru ctional Materi als</b>	-enVisionMATH program (teacher resource kits, student pages, online resources at pearsonsuccessnet.com) -Place Value Mats -Number Cards -Connecting Cubes -Number Lines -Number Cubes	-enVisionMATH program (teacher resource kits, student pages, online resources at pearsonsuccessnet.com) -Hundred Chart -Place Value Blocks -Number Cube -Place Value Mats -Number Cards	-enVisionMATH program (teacher resource kits, student pages, online resources at pearsonsuccessnet.com) -Geometric Solids -Straws -Pipe Cleaners -Pattern Blocks -Plastic Coins -Number Cube -Bills	-enVisionMATH program (teacher resource kits, student pages, online resources at pearsonsuccessnet.com) -Plastic Coins -Number Cube -Classroom Objects to Measure -Connecting Cubes -Small Paper Clips -Inch/Centimeter Ruler -Yardstick/Meterstick	-enVisionMATH program (teacher resource kits, student pages, online resources at pearsonsuccessnet.com) -Demonstration Clock -Student Clocks -Inch Ruler -Classroom Objects -Connecting Cubes -Unit Cubes -Two-Color Counters
<b>Curric ular Conne ctions (Interd isciplin ary)</b>	-Reading: Draw and discuss visual images based on text  -Art: Draw fields of wildflowers native to their region  -Soc. Stud.: Compare information about cities in New Jersey	-Reading: Draw and discuss visual images based on text and relate facts and details in text to clarify and organize data  -STEM: Research animals found at the shore  -Art: Students research and draw a large marine animal	-Reading: Use text to find clues and to represent text information in different ways  -Art: Use magazines and newspapers to find examples of geometric solids  -Soc. Stud.: Create a seasonal dish menu	-Reading: Represent text information in different ways and draw and discuss visual images based on text descriptions  -Soc. Stud.: Draw a Fairground scene map  -STEM: Research length of animals	-Reading: Draw images based on text descriptions  -STEM: Research favorite dinosaur

<b>Integration of 21<sup>st</sup> Century Themes &amp; Skills)</b>	-Make Sense of Problems and Persevere in Solving Them  -Reason Abstractly and Quantitatively	-Construct Viable Arguments and Critique the Reasoning of Others	-Model with Mathematics  -Use Appropriate Tools Strategically  -Financial Responsibility	-Attend to Precision  -Look for and Make Use of Structure  -Financial Responsibility	-Look for and Express Regularity in Repeated Reasoning
<b>Assessments (Formative, Summative, Benchmark)</b>	-Daily Quick Checks -Topic Tests -Topics 5-8 Benchmark Test	-Daily Quick Checks -Topic Tests	-Daily Quick Checks -Topic Tests -Topics 9-12 Benchmark Test	-Daily Quick Checks -Topic Tests -Topics 13-16 Benchmark Test	-MAP Assessment – Spring -Topics 1-16 End-of-Year Test

**TABERNAACLE TOWNSHIP PUBLIC SCHOOLS  
MATHEMATICS CURRICULUM  
GRADE 2**

<b>NJSLS</b>	<b>CONTENT</b>	<b>BENCHMARKS/CPI</b>	<b>ASSESSMENT</b>	<b>RESOURCES</b>
<b>2.OA</b>	<b>Operations and Algebraic Thinking</b>			
	<b>A. Represent and solve problems involving addition and subtraction.</b>			
2.OA.A.1	Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.	<ul style="list-style-type: none"> <li>Use tile designs to develop number sentences for addition.</li> <li>Use manipulatives to show joining, separating and comparing.</li> </ul>	<ul style="list-style-type: none"> <li>Student Guide Pages</li> <li>Teacher Observation</li> <li>Oral Responses</li> <li>Topic Assessments</li> <li>Topic Center Activities</li> <li>Topics Addressing Standards: 1, 2, 3, 4, 5, 6, 7, 8, 9</li> </ul>	<ul style="list-style-type: none"> <li>Manipulatives</li> <li>EnVisionMATH Program</li> <li>Teacher Resource Masters</li> <li>Center Materials</li> <li>Pearson website</li> <li>Mathematics Literature in Media Center</li> <li>Tiles</li> <li>Topics Addressing Standards: 1, 2, 3, 4, 5, 6, 7, 8, 9</li> </ul>
	<b>B. Add and subtract within 20.</b>			
2.OA.B.2	Fluently add and subtract within 20 using mental strategies. By end of Grade 2, know from memory all sums of two one-digit numbers.	<ul style="list-style-type: none"> <li>Fluently add and subtract within 20</li> </ul>	<ul style="list-style-type: none"> <li>Student Guide Pages</li> <li>Teacher Observation</li> <li>Oral Responses</li> <li>Topic Assessments</li> </ul>	<ul style="list-style-type: none"> <li>Manipulatives</li> <li>EnVisionMATH Program</li> </ul>

			<ul style="list-style-type: none"> <li>● Topic Center Activities</li> <li>● Topics Addressing Standards: 2, 3</li> </ul>	<ul style="list-style-type: none"> <li>● Teacher Resource Masters</li> <li>● Center Materials</li> <li>● Pearson website</li> <li>● Mathematics Literature in Media Center</li> <li>● Topics Addressing Standards: 2, 3</li> </ul>
<b>C. Work with equal groups of objects to gain foundations for multiplication.</b>				
2.OA.C.3	Determine whether a group of objects (up to 20) has an odd or even number of members, e.g., by pairing objects or counting them by 2s; write an equation to express an even number as a sum of two equal addends.	<ul style="list-style-type: none"> <li>● Use manipulatives to pair objects, determine if a number is odd or even</li> <li>● Students will write an equation using the same digits that equals</li> </ul>	<ul style="list-style-type: none"> <li>● Student Guide Pages</li> <li>● Teacher Observation</li> <li>● Oral Responses</li> <li>● Topic Assessments</li> <li>● Topic Center Activities</li> </ul>	<ul style="list-style-type: none"> <li>● Manipulatives</li> <li>● EnVisionMATH Program</li> <li>● Teacher Resource Masters</li> </ul>

**TABERNACLE TOWNSHIP PUBLIC SCHOOLS  
MATHEMATICS CURRICULUM  
GRADE 2**

NJSLS	CONTENT	BENCHMARKS/CPI	ASSESSMENT	RESOURCES
2.OA.C.4	Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends.	<ul style="list-style-type: none"> <li>● an even number</li> <li>● Use tile designs to develop number sentences for addition</li> </ul>	<ul style="list-style-type: none"> <li>● Topics Addressing Standards: 4, 5</li> </ul>	<ul style="list-style-type: none"> <li>● Center Materials</li> <li>● Pearson website</li> <li>● Mathematics Literature in Media Center</li> <li>● Topics Addressing Standards: 4, 5</li> </ul>
<b>2.NBT Number and Operations in Base Ten</b>				
<b>A. Understand place value.</b>				
2.NBT.A.1	Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g., 706 equals 7 hundreds, 0 tens, and 6 ones. Understand the following as special cases:	<ul style="list-style-type: none"> <li>● Identify the ones, tens and hundreds in a number.</li> <li>● Demonstrate an understanding of whole number place value concepts.</li> <li>● Students will show understanding by grouping place value blocks in bundles of ten tens to make one hundred and identify the value of the ones, tens, and hundreds.</li> <li>● Students will Count within 1000; skip-count by 5s, 10s, and 100s.</li> <li>● Students will write numbers to 1000 using standard form, word form, and expanded form.</li> <li>● Compare and order whole numbers using <math>&gt;</math>, <math>&lt;</math> and <math>=</math>.</li> </ul>	<ul style="list-style-type: none"> <li>● Student Guide Pages</li> <li>● Teacher Observation</li> <li>● Oral Responses</li> <li>● Topic Assessments</li> <li>● Topic Center Activities</li> <li>● Topics Addressing Standards: 5, 6, 10</li> </ul>	<ul style="list-style-type: none"> <li>● Manipulatives</li> <li>● EnVisionMATH Program</li> <li>● Teacher Resource Masters</li> <li>● Center Materials</li> <li>● Pearson website</li> <li>● Mathematics Literature in Media Center</li> <li>● Place Value Blocks</li> <li>● Topics Addressing Standards: 5, 6, 10</li> </ul>
2.NBT.A.1.a	100 can be thought of as a bundle of ten tens – called a “hundred.”			
2.NBT.A.1.b	The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones).			
2.NBT.A.2	Count within 1000; skip-count by 5s, 10s, and 100s.			
2.NBT.A.3	Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.			
2.NBT.A.4	Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using $>$ , $=$ , and $<$ symbols to record the results of comparisons.			
<b>B. Use place value understanding and properties of operations to add and subtract.</b>				
2.NBT.B.5	Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between	<ul style="list-style-type: none"> <li>● Use count on to add.</li> <li>● Use double and double plus one.</li> <li>● Use ten frame to add or subtract</li> </ul>	<ul style="list-style-type: none"> <li>● Student Guide Pages</li> <li>● Teacher Observation</li> <li>● Oral Responses</li> </ul>	<ul style="list-style-type: none"> <li>● Manipulatives</li> <li>● Envision Math Program</li> </ul>

**TABERNACLE TOWNSHIP PUBLIC SCHOOLS  
MATHEMATICS CURRICULUM  
GRADE 2**

NJSLS	CONTENT	BENCHMARKS/CPI	ASSESSMENT	RESOURCES
2.NBT.B.5 (cont.)  2.NBT.B.6  2.NBT.B.7  2.NBT.B.8  2.NBT.B.9	addition and subtraction.  Add up to four two-digit numbers using strategies based on place value and properties of operations.  Add and subtract within 1000, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds.  Mentally add 10 or 100 to a given number 100-900, and mentally subtract 10 or 100 from a given number 100-900.  Explain why addition and subtraction strategies work, using place value and the properties of operations.	<ul style="list-style-type: none"> <li>● numbers.</li> <li>● Learn how to add and subtract on a 200 chart.</li> <li>● Use paper and pencil to solve addition and subtraction problems.</li> <li>● Use mental math to solve problems.</li> <li>● Use a calculator to solve problems.</li> <li>● Choose best strategy to solve specific problems.</li> <li>● Determine if answer is reasonable or crazy.</li> <li>● Use number families to connect the operations of addition and subtraction.</li> <li>● Use paper pencil, mental math or calculator to construct, use and explain addition and subtraction strategies.</li> </ul>	<ul style="list-style-type: none"> <li>● Topic Assessments</li> <li>● Topic Center Activities</li> <li>● Topics Addressing Standards: 1, 2, 3, 5, 6, 7, 8, 9, 10, 11, 14</li> </ul>	<ul style="list-style-type: none"> <li>● Teacher Resource Masters</li> <li>● Center Materials</li> <li>● Pearson website</li> <li>● Mathematics Literature in Media Center</li> <li>● Topics Addressing Standards: 1, 2, 3, 5, 6, 7, 8, 9, 10, 11, 14</li> <li>● Ten Frames</li> <li>● 200 Chart</li> <li>● Calculator</li> </ul>
<b>2.MD Measurement and Data</b>				
<b>A. Measure and estimate lengths in standard units.</b>				
2.MD.A.1  2.MD.A.2	Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.  Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two	<ul style="list-style-type: none"> <li>● Use standard and nonstandard units of measure for length.</li> <li>● Students will measure and compare the length of an object by using two different units of measurement.</li> <li>● Estimate measurements using</li> </ul>	<ul style="list-style-type: none"> <li>● Student Guide Pages</li> <li>● Teacher Observation</li> <li>● Oral Responses</li> <li>● Topic Assessments</li> <li>● Topic Center Activities</li> <li>● Topic Addressing</li> </ul>	<ul style="list-style-type: none"> <li>● Manipulatives</li> <li>● enVisionMATH Program</li> <li>● Teacher Resource Masters</li> <li>● Center Materials</li> <li>● Pearson website</li> </ul>

**TABERNACLE TOWNSHIP PUBLIC SCHOOLS  
MATHEMATICS CURRICULUM  
GRADE 2**

NJSLS	CONTENT	BENCHMARKS/CPI	ASSESSMENT	RESOURCES
2.MD.A.2 (cont.)  2.MD.A.3  2.MD.A.4	measurements relate to the size of the unit chosen.  Estimate lengths using units of inches, feet, centimeters, and meters.  Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit.	<ul style="list-style-type: none"> <li>● standard units of measurement.</li> <li>● Compare and contrast objects according to length.</li> </ul>	Standards: 15	<ul style="list-style-type: none"> <li>● Mathematics Literature in Media Center</li> <li>● Topic Addressing Standards: 15</li> </ul>
<b>B. Relate addition and subtraction to length.</b>				
2.MD.B.5  2.MD.B.6	Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units, e.g., by using drawings (such as drawings of rulers) and equations with a symbol for the unknown number to represent the problem.  Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2, ..., and represent whole-number sums and differences within 100 on a number line diagram.	<ul style="list-style-type: none"> <li>● Students will solve addition and subtraction word problems using the same unit of measurement for length.</li> <li>● Students will use the number line to place whole number lengths and to find the sum and differences within 100.</li> </ul>	<ul style="list-style-type: none"> <li>● Student Guide Pages</li> <li>● Teacher Observation</li> <li>● Oral Responses</li> <li>● Topic Assessments</li> <li>● Topic Center Activities</li> <li>● Topics Addressing Standards: 8, 9, 15</li> </ul>	<ul style="list-style-type: none"> <li>● Manipulatives</li> <li>● enVisionMATH Program</li> <li>● Teacher Resource Masters</li> <li>● Center Materials</li> <li>● Pearson website</li> <li>● Mathematics Literature in Media Center</li> <li>● Topics Addressing Standards: 8, 9, 15</li> </ul>
<b>C. Work with time and money.</b>				
2.MD.C.7  2.MD.C.8	Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.  Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using \$ and ¢ symbols appropriately. Example: If you have 2 dimes and 3 pennies, how many cents do you have?	<ul style="list-style-type: none"> <li>● Use digital and analog clocks to the nearest five minutes, using a.m. and p.m.</li> <li>● Count coins using pennies, nickels, dimes and quarters up to \$1.00.</li> <li>● Add or subtract money amounts to solve problems.</li> </ul>	<ul style="list-style-type: none"> <li>● Student Guide Pages</li> <li>● Teacher Observation</li> <li>● Oral Responses</li> <li>● Topic Assessments</li> <li>● Topic Center Activities</li> <li>● Topics Addressing Standards: 13, 14, 16</li> </ul>	<ul style="list-style-type: none"> <li>● Manipulatives</li> <li>● enVisionMATH Program</li> <li>● Teacher Resource Masters</li> <li>● Center Materials</li> <li>● Pearson website</li> <li>● Mathematics Literature in Media Center</li> <li>● Topics Addressing Standards: 13, 14, 16</li> </ul>



	<b>SEPTEMBER</b>	<b>OCTOBER</b>	<b>NOVEMBER</b>	<b>DECEMBER</b>	<b>JANUARY</b>
<b>Unit/Topic s</b>	Topic 1 – Numeration	Topic 2 – Number Sense: Addition and Subtraction Topic 3 – Using Place Value to Add and Subtract	Topic 4 – Meanings of Multiplication Topic 5 – Multiplication Facts: Use Patterns	Topic 6 – Multiplication Facts: Use Known Facts	Topic 7 – Meanings of Division
<b>Instructional Materials</b>	-enVisionMATH program (teacher resource kits, student pages, online resources at pearsonsuccesstnet.com) -Place-Value Blocks -Number Lines	-enVisionMATH program (teacher resource kits, student pages, online resources at pearsonsuccesstnet.com) -Two-Color Counters -Place-Value Blocks	-enVisionMATH program (teacher resource kits, student pages, online resources at pearsonsuccesstnet.com) -Two-Color Counters -Hundred Chart	-enVisionMATH program (teacher resource kits, student pages, online resources at pearsonsuccesstnet.com) -Two-Color Counters	-enVisionMATH program (teacher resource kits, student pages, online resources at pearsonsuccesstnet.com) -Two-Color Counters -Multiplication Table -Two-Color Tiles
<b>Curricular Connections (Interdisciplinary)</b>	Reading: Compare and Contrast elements, settings, characters and problems in two texts Soc. Stud.: Students research the height of famous structures Literature: <i>Fiji Facts and Figures</i>	Reading: Order Details Literature: <i>Magic Squares and More</i> Soc. Stud.: Students research the heights of three amusement park rides and students research how many days students in other countries go to school	Reading: Draw visual images based on text descriptions and record information Literature: <i>Below Zero</i> and <i>Keeping Count</i> STEM: Students use facts about an armadillo to solve problems and use the mockingbird to create arrays	Reading: Record information Literature: <i>Below Zero</i> Social Studies: Steam Locomotive and the Railroad System Multiplication	Reading: Finding Important Information in a Word Problem Literature: <i>Surviving the Odds</i> STEM: Division with Apollo Missions
<b>Integration of 21<sup>st</sup> Century Themes &amp; Skills</b>	-Make Sense of Problems and Persevere in Solving Them -Reason Abstractly and Quantitatively	-Construct Viable Arguments and Critique the Reasoning of Others	-Model with Mathematics -Use Appropriate Tools Strategically	-Attend to Precision -Look for and Make Use of Structure	-Look for and Express Regularity in Repeated Reasoning
<b>Assessments (Formative, Summative, Benchmark)</b>	-Daily Quick Checks -Placement Test -Topic Tests -MAP Assessment - Fall	-Daily Quick Checks -Topic Tests	-Daily Quick Checks -Topic Tests -Topics 1-4 Benchmark Test	-Daily Quick Checks -Topic Tests	-Daily Quick Checks -Topic Tests -MAP Assessment - Winter



## MATHEMATICS GRADE 3 CURRICULUM MAP

	FEBRUARY	MARCH	APRIL	MAY	JUNE
<b>Unit /Topics</b>	Topic 8 – Division Facts Topic 9 – Understanding Fractions	Topic 10 – Fraction Comparison and Equivalence Topic 11 – Two-Dimensional Shapes and Their Attributes	Topic 12 – Time Topic 13 – Perimeter	Topic 14 – Area Topic 15 – Liquid Volume and Mass	Topic 16 – Data Step Up to Grade 4
<b>Instructional Materials</b>	-enVisionMATH program (teacher resource kits, student pages, online resources at pearsonsuccesstnet.com) -Two-Color Counters -Centimeter Grid Paper -Number Lines -Fraction Strips	-enVisionMATH program (teacher resource kits, student pages, online resources at pearsonsuccesstnet.com) -Fraction Models -Fraction Strips -Number Lines -Ruler -Piper Cleaners -Two-Color Tiles	-enVisionMATH program (teacher resource kits, student pages, online resources at pearsonsuccesstnet.com) -Demonstration Clocks -Student Clocks -Calendar -ruler, yardstick -Straws, Craft Sticks, Tooth Picks	-enVisionMATH program (teacher resource kits, student pages, online resources at pearsonsuccesstnet.com) -Pattern Blocks -Capacity Containers -Liter Containers -Water, Sand, Rice -Pan Balance	-enVisionMATH program (teacher resource kits, student pages, online resources at pearsonsuccesstnet.com) -Line Plots -Paper Bags -Rulers
<b>Curricular Connections (Interdisciplinary)</b>	Reading: Organizing Ideas and Visual Images  Literature: <i>Rainforest Math</i> and <i>Keeping Count</i>  Art: Mosaic Pattern Designs  Social Studies: Flags with Equal Parts	Reading: Visual Images and Organizing Information  Literature: <i>Surviving the Odds</i> and <i>Perfect Patterns</i>  STEM: Fractions with Insects  Art: Shapes with John Gillin	Reading: Main Idea, Drawing Conclusions, and Organizing Information  Literature: <i>Below Zero</i> and <i>Fiji Facts and Figures</i>  Social Studies: Charter Fishing Boats  Art: Perimeters of Famous Buildings	Reading: Organizing Information  Literature: <i>Rainforest Math</i> and <i>Keeping Count</i>  Social Studies: State Symbols  STEM: Make up a New Metric System to Measure Mass	Reading: Draw Visual Images Based on Text Descriptions  Literature: <i>Fiji Facts and Figures</i>  Social Studies: Olympic Team Medal Tallies
<b>Integration of 21<sup>st</sup> Century Themes &amp; Skills</b>	-Make Sense of Problems and Persevere in Solving Them  -Reason Abstractly and Quantitatively	-Construct Viable Arguments and Critique the Reasoning of Others	-Model with Mathematics  -Use Appropriate Tools Strategically	-Attend to Precision  -Look for and Make Use of Structure	-Look for and Express Regularity in Repeated Reasoning
<b>Assessments (Formative, Summative, Ben</b>	-Daily Quick Checks -Topic Tests -Topics 5-8 Benchmark Test	-Daily Quick Checks -Topic Tests	-Daily Quick Checks -Topic Tests -Topics 9-12 Benchmark Test	-Daily Quick Checks -Topic Tests -Topics 13-16 Benchmark Test	-MAP Assessment – Spring -Topics 1-16 End-of-Year Test

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**TABERNACLE TOWNSHIP PUBLIC SCHOOLS  
MATHEMATICS CURRICULUM  
GRADE 3**

NJSLS	CONTENT	BENCHMARKS/CPI	ASSESSMENT	RESOURCES
<b>3.OA</b>	<b>Operations and Algebraic Thinking</b>			
	<b>A. Represent and solve problems involving multiplication and division.</b>			
3.OA.A.1	Interpret products of whole numbers, e.g., interpret $5 \times 7$ as the total number of objects in 5 groups of 7 objects each. For example, describe and/or represent a context in which a total number of objects can be expressed as $5 \times 7$ .	<ul style="list-style-type: none"> <li>Students will use arrays, repeated addition and objects to show the number of groups and how many in each group to represent a multiplication number sentence.</li> <li>Students will use pictures, repeated subtraction and objects to show the total amount divided into groups for a division number sentence.</li> <li>Construct and solve word problems and equations using multiplication and division (e.g., <math>3 \times 6 = \_</math>, <math>15 \div 3 = n</math>, <math>3 \times n = 15</math>, <math>16 \div c = 4</math>).</li> </ul>	<ul style="list-style-type: none"> <li>Teacher Observation</li> <li>Student Guide Pages</li> <li>Oral Responses</li> <li>Topic Assessments</li> <li>Topic Center Activities</li> <li>Topics Addressing Standards: 4, 5, 6, 7, 8</li> </ul>	<ul style="list-style-type: none"> <li>Manipulatives</li> <li>enVisionMATH Program</li> <li>Teacher Resource Masters</li> <li>Center Materials</li> <li>Pearson website</li> <li>Mathematics Literature in Media Center</li> <li>Topics Addressing Standards: 4, 5, 6, 7, 8</li> </ul>
3.OA.A.2	Interpret whole-number quotients of whole numbers, e.g., interpret $56 \div 8$ as the number of objects in each share when 56 objects are partitioned equally into 8 shares, or as a number of shares when 56 objects are partitioned in to equal shares of 8 objects each. For example, describe and/or represent a context in which a number of shares or a number of groups can be expressed as $56 \div 8$ .			
3.OA.A.3	Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.			
3.OA.A.4	Determine the unknown whole number in a multiplication or division equation relating three whole numbers. For example, determine the			

	unknown number that makes the equation true in each of the equations $8 \times ? = 48$ , $5 = \bullet \div 3$ , $6 \times 6 = ?$ .			
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**TABERNACLE TOWNSHIP PUBLIC SCHOOLS  
MATHEMATICS CURRICULUM  
GRADE 3**

NJSLs	CONTENT	BENCHMARKS/CPI	ASSESSMENT	RESOURCES
3.NBT.A.3	Multiply one-digit whole numbers by multiples of 10 in the range 10-90 (e.g., 9 x 80, 5, x 60) using strategies based on place value and properties of operations.	<ul style="list-style-type: none"> <li>● Students will multiply two digit numbers that are multiples of ten by one digit numbers.</li> </ul>	<ul style="list-style-type: none"> <li>● Topics Addressing Standards: 1-8</li> </ul>	<ul style="list-style-type: none"> <li>● Pearson website</li> <li>● Mathematics Literature in Media Center</li> <li>● Topics Addressing Standards: 1-8</li> </ul>
<b>3.NF                    Number and Operations - Fractions</b>				
<b>A. Develop understanding of fractions as numbers.</b>				
3.NF.A.1  3.NF.A.2	Understand a fraction $1/b$ as the quantity formed by 1 part when a whole is partitioned into $b$ equal parts; understand a fraction $a/b$ as the quantity formed by $a$ parts of size $1/b$ .  Understand a fraction as a number on the number line; represent fractions on a number line diagram.	<ul style="list-style-type: none"> <li>● Students will demonstrate an understanding of fractions using fraction strips.</li> <li>● Students will construct a number line and correctly place the fraction on the number line.</li> <li>● Student will compare and order fractions using fraction strips.</li> <li>● Students will compare and order fractions using symbols.</li> </ul>	<ul style="list-style-type: none"> <li>● Teacher Observation</li> <li>● Student Guide Pages</li> <li>● Oral Responses</li> <li>● Topic Assessments</li> <li>● Topic Center Activities</li> <li>● Topics Addressing Standards: 9, 10</li> </ul>	<ul style="list-style-type: none"> <li>● Manipulatives</li> <li>● enVisionMATH Program</li> <li>● Teacher Resource Masters</li> <li>● Center Materials</li> <li>● Pearson website</li> <li>● Mathematics Literature in Media Center</li> <li>● Topics Addressing Standards: 9, 10</li> </ul>

**MATHEMATICS CURRICULUM  
GRADE 3**

NJLS	CONTENT	BENCHMARKS/CPI	ASSESSMENT	RESOURCES
3.NF.A.2.a	Represent a fraction $1/b$ on a number line diagram by defining the interval from 0 to 1 as the whole and partitioning it into $b$ equal parts. Recognize that each part has size $1/b$ and that the endpoint of the part based at 0 located the number $1/b$ on the number line.	<ul style="list-style-type: none"> <li>● Students will demonstrate an understanding of fractions using fraction strips.</li> <li>● Students will construct a number line and correctly place the fraction on the number line.</li> <li>● Student will compare and order fractions using fraction strips.</li> <li>● Students will compare and order fractions using symbols.</li> </ul>	<ul style="list-style-type: none"> <li>● Teacher Observation</li> <li>● Student Guide Pages</li> <li>● Oral Responses</li> <li>● Topic Assessments</li> <li>● Topic Center Activities</li> <li>● Topics Addressing Standards: 9, 10</li> </ul>	<ul style="list-style-type: none"> <li>● Manipulatives</li> <li>● enVisionMATH Program</li> <li>● Teacher Resource Masters</li> <li>● Center Materials</li> <li>● Pearson website</li> <li>● Mathematics Literature in Media Center</li> <li>● Topics Addressing Standards: 9, 10</li> </ul>
3.NF.A.2.b	Represent a fraction $a/b$ on a number line diagram by marking off a lengths $1/b$ from 0. Recognize that the resulting interval has size $a/b$ and that its endpoint locates the number $a/b$ on the number line.			
3.NF.A.3	Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size.			
3.NF.A.3.a	Understand two fractions as equivalent (equal) if they are the same size, or the same point on a number line.			
3.NF.A.3.b	Recognize and generate simple equivalent fractions, e.g., $1/2 = 2/4$ , $4/6 = 2/3$ ). Explain why the fractions are equivalent, e.g., by using a visual fraction model.			
3.NF.A.3.c	Express whole numbers as fractions, and recognize fractions that are equivalent to whole numbers. Examples: Express 3 in the form $3 = 3/1$ ; recognize that $6/1 = 6$ ; locate $4/4$ and 1 at the same point of a number line diagram.			

**TABERNACLE TOWNSHIP PUBLIC SCHOOLS  
MATHEMATICS CURRICULUM  
GRADE 3**

NJSLS	CONTENT	BENCHMARKS/CPI	ASSESSMENT	RESOURCES
3.NF.A.3.d	Compare two fractions with the same numerator or the same denominator by reasoning about their size. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with the symbols $>$ , $=$ , or $<$ , and justify the conclusions, e.g., by using a visual fraction model.			
<b>3.MD Measurement and Data</b>				
<b>A. Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.</b>				
3.MD.A.1	Tell and write time to the nearest minute and measure time intervals in minutes. Solve word problems involving addition and subtraction of time intervals in minutes, e.g., by representing the problem on a number line diagram.	<ul style="list-style-type: none"> <li>● Using digital and analog clocks students will tell time to the nearest minute.</li> <li>● Students will solve word problems involving the addition and subtraction of time.</li> </ul>	<ul style="list-style-type: none"> <li>● Teacher Observation</li> <li>● Student Guide Pages</li> <li>● Oral Responses</li> <li>● Topic Assessments</li> <li>● Topic Center Activities</li> <li>● Topics Addressing Standards: 12, 15</li> </ul>	<ul style="list-style-type: none"> <li>● Manipulatives</li> <li>● enVisionMATH Program</li> <li>● Teacher Resource Masters</li> <li>● Center Materials</li> <li>● Pearson website</li> <li>● Mathematics Literature in Media Center</li> <li>● Topics Addressing Standards: 12, 15</li> </ul>
3.MD.A.2	Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l). Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units, e.g., by using drawings (such as a beaker with a measurement scale) to represent the problem.	<ul style="list-style-type: none"> <li>● Select and use appropriate standard units of measure and measurement tools to solve word problems.</li> <li>● Incorporate estimation in measurement activities (e.g. estimate before measuring).</li> </ul>		
<b>B. Represent and interpret data.</b>				
3.MD.B.3	Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two-step “how many more” and “how many less” problems using information presented in scaled bar graphs. For example, draw a bar graph in which each square in the bar graph might represent 5 pets.	<ul style="list-style-type: none"> <li>● Read, interpret, construct, analyze, generate questions about, and draw inferences from displays of data.</li> <li>● Use rulers to measure objects to the nearest halves and fourths of an inch and display data on a line plot.</li> </ul>	<ul style="list-style-type: none"> <li>● Teacher Observation</li> <li>● Student Guide Pages</li> <li>● Oral Responses</li> <li>● Topic Assessments</li> <li>● Topic Center Activities</li> <li>● Topic Addressing Standards: 16</li> </ul>	<ul style="list-style-type: none"> <li>● Manipulatives</li> <li>● enVisionMATH Program</li> <li>● Teacher Resource Masters</li> <li>● Center Materials</li> <li>● Pearson website</li> <li>● Mathematics Lit. in Media Center</li> </ul>



**MATHEMATICS CURRICULUM  
GRADE 3**

NJSLS	CONTENT	BENCHMARKS/CPI	ASSESSMENT	RESOURCES
3.MD.B.4	Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch. Show the data by making a line plot, where the horizontal scale is marked off in appropriate units – whole numbers, halves, or quarters.			
<b>C. Geometric measurement: understand concepts of area and relate area to multiplication and to addition.</b>				
3.MD.C.5  3.MD.C.5.a  3.MD.C.5.b  3.MD.C.6  3.MD.C.7  3.MD.C.7.a  3.MD.C.7.b	Recognize area as an attribute of plane figures and understand concepts of area measurement.  A square with side length 1 unit, called “a unit square,” is said to have “one square unit” of area, and can be used to measure area.  A plane figure which can be covered without gaps or overlaps by n unit squares is said to have an area of n square units.  Measure areas by counting unit squares (square cm, square m, square in, square ft, and non-standard units).  Relate area to the operations of multiplication and addition.  Find the area of a rectangle with whole- number side lengths by tiling it, and show that the area is the same as would be found by multiplying the side lengths.  Multiply side lengths to find areas of rectangles with whole-number side lengths in the context of solving real world and mathematical problems, and represent whole-number products as rectangular areas in mathematical reasoning.	<ul style="list-style-type: none"> <li>● Select and use appropriate standard units of measure and standard measurement tools to solve real-life problems.</li> </ul>	<ul style="list-style-type: none"> <li>● Teacher Observation</li> <li>● Student Guide Pages</li> <li>● Oral Responses</li> <li>● Topic Assessments</li> <li>● Topic Center Activities</li> <li>● Topic Addressing Standards: 14</li> </ul>	<ul style="list-style-type: none"> <li>● Manipulatives</li> <li>● enVisionMATH Program</li> <li>● Teacher Resource Masters</li> <li>● Center Materials</li> <li>● Pearson website</li> <li>● Mathematics Literature in Media Center</li> <li>● Topic Addressing Standards: 14</li> </ul>



**TABERNACLE TOWNSHIP PUBLIC SCHOOLS  
MATHEMATICS CURRICULUM  
GRADE 3**

<b>NJSLS</b>	<b>CONTENT</b>	<b>BENCHMARKS/CPI</b>	<b>ASSESSMENT</b>	<b>RESOURCES</b>
3.G.A.2	Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole. For example, partition a shape into 4 parts with equal area, and describe the area of each part as $\frac{1}{4}$ of the area of the shape.			<ul style="list-style-type: none"><li>• Topic Addressing Standards: 9, 11</li></ul>

## MATHEMATICS GRADE 4 CURRICULUM MAP

	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	JANUARY
<b>Unit /Topics</b>	<p>Topic 1 – Multiplication and Division: Meanings and Facts</p> <p>Topic 2 – Generate and Analyze Patterns</p>	<p>Topic 3 – Place Value</p> <p>Topic 4 – Addition and Subtraction of Whole Numbers</p>	<p>Topic 5 – Number Sense: Multiplying by 1-Digit Numbers</p> <p>Topic 6 – Developing Fluency: Multiplying by 1-Digit Numbers</p>	<p>Topic 7 – Number Sense: Multiplying by 2-Digit Numbers</p>	<p>Topic 8 – Developing Fluency: Multiplying by 2-Digit Numbers</p> <p>Topic 9 – Number Sense: Dividing by 1-Digit Divisors</p> <p>Topic 10 – Developing Fluency: Dividing by 1-Digit Divisors</p>
<b>Instructional Materials</b>	<p>-enVisionMATH program (teacher resource kits, student pages, online resources at pearsonsuccesnet.com)</p> <p>-Grid Paper</p> <p>-Place Value Blocks</p> <p>-Hundred Chart</p> <p>-Two-Color Counters</p> <p>-Pattern Blocks -Cubes</p>	<p>-enVisionMATH program (teacher resource kits, student pages, online resources at pearsonsuccesnet.com)</p> <p>-Place Value Blocks</p> <p>-Number Lines</p> <p>-Place Value Chart</p>	<p>-enVisionMATH program (teacher resource kits, student pages, online resources at pearsonsuccesnet.com)</p> <p>-Place Value Blocks</p>	<p>-enVisionMATH program (teacher resource kits, student pages, online resources at pearsonsuccesnet.com)</p> <p>-Grid Paper</p> <p>-Calculators</p>	<p>-enVisionMATH program (teacher resource kits, student pages, online resources at pearsonsuccesnet.com)</p> <p>-Grid Paper</p> <p>-Two-Color Counters</p> <p>-Place Value Blocks</p>
<b>Curricular Connections (Interdisciplinary)</b>	<p>Reading: Reading for Different Purposes and Drawing Visual Images Based on Text Descriptions</p> <p>Literature: <i>All Roads Lead to Rome</i> and <i>It's a Big Country</i></p> <p>Social Studies: Multiplication at the Indianapolis Speedway</p> <p>STEM: Rate of Growth</p>	<p>Reading: Main Idea and Using Images to Comprehend</p> <p>Literature: <i>All Tied Up</i> and <i>First In Space</i></p> <p>Social Studies: Freshwater Lakes in Florida and Maps of USA and Mexico</p>	<p>Reading: Summarizing and Use Text Information to Answer Questions</p> <p>Literature: <i>All Roads Lead to Rome</i></p> <p>Social Studies: National Park Research and Create a City Skyline</p>	<p>Reading: Identify Purpose</p> <p>Literature: <i>Wild, Wet, and Windy</i></p> <p>STEM: Reasearch how much water is used by the average household</p>	<p>Reading: Use Context Clues, Representing Text in Different Ways, and Note Important Information in Text</p> <p>Literature: <i>First in Space, All Roads Lead to Rome, and All Tied Up</i></p> <p>Social Studies: US Railroads and Surveys of Local Animals</p> <p>Art: Seminole Designs</p>
<b>Integration of 21<sup>st</sup> Century Themes &amp; Skills</b>	<p>-Make Sense of Problems and Persevere in Solving Them</p> <p>-Reason Abstractly and Quantitatively</p>	<p>-Construct Viable Arguments and Critique the Reasoning of Others</p>	<p>-Model with Mathematics</p> <p>-Use Appropriate Tools Strategically</p>	<p>-Attend to Precision</p> <p>-Look for and Make Use of Structure</p>	<p>-Look for and Express Regularity in Repeated Reasoning</p>

<b>Assessments (For formatives, Summative, Benchmark)</b>	-Daily Quick Checks -Placement Test -Topic Tests -MAP Assessment - Fall	-Daily Quick Checks -Topic Tests -Topics 1-4 Benchmark Test	-Daily Quick Checks -Topic Tests	-Daily Quick Checks -Topic Tests	-Daily Quick Checks -Topic Tests -MAP Assessment – Winter -Topics 5-8 Benchmark Test
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### MATHEMATICS GRADE 4 CURRICULUM MAP

	<b>FEBRUARY</b>	<b>MARCH</b>	<b>APRIL</b>	<b>MAY</b>	<b>JUNE</b>
<b>Unit /Topics</b>	Topic 11 – Fraction Equivalence and Ordering  Topic 12 – Adding and Subtracting Fractions and Mixed Numbers with Like Denominators	Topic 13 – Extending Fraction Concepts	Topic 14 – Measurement Units and Conversions	Topic 15 – Solving Measurement Problems	Topic 16 – Lines, Angles, and Shapes  Step Up to Grade 5
<b>Instructional Materials</b>	-enVisionMATH program (teacher resource kits, student pages, online resources at pearsonsuccessnet.com) -Grid Paper -Color Tiles -Fraction Models: Strips -Fraction Models: Circles -Number Lines	-enVisionMATH program (teacher resource kits, student pages, online resources at pearsonsuccessnet.com) -Grid Paper -Fraction Models: Strips -Fraction Models: Circles -Number Lines -Bills and Coins	-enVisionMATH program (teacher resource kits, student pages, online resources at pearsonsuccessnet.com) -Rulers (Inch, Yardstick) -Capacity Containers -Place Value Blocks -Pan Balance -Demonstration/Student Clocks	-enVisionMATH program (teacher resource kits, student pages, online resources at pearsonsuccessnet.com) -Bills and Coins	-enVisionMATH program (teacher resource kits, student pages, online resources at pearsonsuccessnet.com) -Grid Paper -Dot Paper -Demonstration Clock -Pattern Blocks -Protractors
<b>Curricular Connections (Interdisciplinary)</b>	Reading: Organizing Information  Literature: <i>All Roads Lead to Rome</i> and <i>All Tied Up</i>  Social Studies: US Flags  STEM: Animals in Shell Island	Reading: Visualize Important Information  Literature: <i>It's a Big Country</i>  Social Studies: US Racetracks	Reading: Record Important Information in a Graphic Organizer  Literature: <i>It's a Big Country</i>  Social Studies: Movie Theater Design	Reading: Locate Key Ideas  Literature: <i>Building Blocks</i>  Social Studies: Maps of States	Reading: Organize Information in Different Forms  Literature: <i>Dazzling Designs</i>  Social Studies: Map of 48 Contiguous States

<b>Integration of 21st Century Themes &amp; Skills)</b>	-Make Sense of Problems and Persevere in Solving Them  -Reason Abstractly and Quantitatively	-Construct Viable Arguments and Critique the Reasoning of Others	-Model with Mathematics  -Use Appropriate Tools Strategically	-Attend to Precision  -Look for and Make Use of Structure	-Look for and Express Regularity in Repeated Reasoning
<b>Assessments (Formative, Summative, Benchmark)</b>	-Daily Quick Checks -Topic Tests -Topics 9-12 Benchmark Test	-Daily Quick Checks -Topic Tests	-Daily Quick Checks -Topic Tests	-Daily Quick Checks -Topic Tests	-MAP Assessment – Spring  -Topics 13-16 Benchmark Test  -Topics 1-16 End-of-Year Test

**TABERNAACLE TOWNSHIP PUBLIC SCHOOLS  
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GRADE 4**

<b>NJSLS</b>	<b>CONTENT</b>	<b>BENCHMARKS/CPI</b>	<b>ASSESSMENT</b>	<b>RESOURCES</b>
<b>4.OA</b>	<b>Operations and Algebraic Thinking</b>			
	<b>A. Use the four operations with whole numbers to solve problems.</b>			
4.OA.A.1	Interpret a multiplication equation as a comparison, e.g., interpret $35 = 5 \times 7$ as a statement that 35 is 5 times as many as 7 and 7 times as many as 5. Represent verbal statements of multiplicative comparisons as multiplication equations.	<ul style="list-style-type: none"> <li>Students will use multiplication equations to represent verbal statements of multiplicative comparison.</li> <li>Given a multiplication equation students will give a multiplicative comparison statement.</li> </ul>	<ul style="list-style-type: none"> <li>Teacher Observation</li> <li>Student Guide Pages</li> <li>Oral Responses</li> <li>Topic Assessments</li> <li>Topic Center Activities</li> <li>Problem solving lessons in units 1-20</li> </ul>	<ul style="list-style-type: none"> <li>Manipulatives</li> <li>enVisionMATH Program</li> <li>Teacher Resource Masters</li> <li>Center Materials</li> <li>Pearson website</li> </ul>
4.OA.A.2	Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing the multiplicative comparison from additive comparison.	<ul style="list-style-type: none"> <li>Use appropriate operations to solve multiplicative comparison word problems. Students will solve problems using manipulatives and drawings.</li> </ul>	<ul style="list-style-type: none"> <li>Topic Addressing Standards: All lessons have a problem solving section which involve using the four operations to solve problems</li> </ul>	<ul style="list-style-type: none"> <li>Mathematics Literature in Media Center</li> <li>Units 1-20</li> </ul>
4.OA.A.3	Solve multistep word problems posed with whole numbers and having whole-number	<ul style="list-style-type: none"> <li>Use four basic operations to solve multi step word problems.</li> </ul>		<ul style="list-style-type: none"> <li>Topic Addressing Standards: All lessons have a problem solving</li> </ul>

	answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.	<ul style="list-style-type: none"> <li>● Use estimation strategies to determine whether the result of the computation is reasonable.</li> <li>● Construct and solve simple open sentences involving any one operation.</li> </ul>		section which involve using the four operations to solve problems
<b>B. Gain familiarity with factors and multiples.</b>				
4.OA.B.4	Find all factor pairs for a whole number in the range 1-100. Recognize that a whole number is a multiple of each of its factors. Determine whether a given whole number in the range 1-100 is a multiple of a given one-digit number. Determine whether a given whole number in the range 1-100 is prime or composite.	<ul style="list-style-type: none"> <li>● Students will factor whole numbers.</li> <li>● Students will identify prime and composite numbers.</li> </ul>	<ul style="list-style-type: none"> <li>● Teacher Observation</li> <li>● Student Guide Pages</li> <li>● Oral Responses</li> <li>● Topic Assessments</li> <li>● Topic Center Activities</li> <li>● Topic Addressing Standards: 11</li> </ul>	<ul style="list-style-type: none"> <li>● Manipulatives</li> <li>● enVisionMATH Program</li> <li>● Teacher Resource Masters</li> <li>● Center Materials</li> <li>● Pearson website</li> <li>● Mathematics Literature in Media Center</li> </ul>

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GRADE 4**

NJSLS	CONTENT	BENCHMARKS/CPI	ASSESSMENT	RESOURCES
<b>C. Generate and analyze patterns.</b>				
4.OA.C.5	Generate a number or shape pattern that follows a given rule. Identify apparent features of the pattern that were not explicit in the rule itself. For example, given the rule “Add 3” and the starting number 1, generate terms in the resulting sequence and observe that the terms appear to alternate between odd and even numbers. Explain informally why the numbers will continue to alternate in this way.	<ul style="list-style-type: none"> <li>● Recognize, describe and extend patterns.</li> </ul>	<ul style="list-style-type: none"> <li>● Teacher Observation</li> <li>● Student Guide Pages</li> <li>● Oral Responses</li> <li>● Topic Assessments</li> <li>● Topic Center Activities</li> <li>● Topic Addressing Standards: 2</li> </ul>	<ul style="list-style-type: none"> <li>● Manipulatives</li> <li>● enVisionMATH Program</li> <li>● Teacher Resource Masters</li> <li>● Center Materials</li> <li>● Pearson website</li> <li>● Mathematics Literature in Media Center</li> <li>● Topic Addressing Standards: 2</li> </ul>
<b>4.NBT Number and Operations in Base Ten</b>				
<b>A. Generalize place value understanding for multi-digit whole numbers.</b>				
4.NBT.A.1	Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right. For example, recognize that $700 \div 70 = 10$ by applying concepts of place value and division.	<ul style="list-style-type: none"> <li>● Demonstrate an understanding of place value concepts.</li> <li>● Compare and order whole numbers using <math>&lt;</math>, <math>&gt;</math>, or <math>=</math>.</li> <li>● Read and write multi digit numbers, using standard, word and expanded form.</li> <li>● Round whole numbers to a given place value.</li> </ul>	<ul style="list-style-type: none"> <li>● Teacher Observation</li> <li>● Student Guide Pages</li> <li>● Oral Responses</li> <li>● Topic Assessments</li> <li>● Topic Center Activities</li> <li>● Topic Addressing Standards: 3</li> </ul>	<ul style="list-style-type: none"> <li>● Manipulatives</li> <li>● enVisionMATH Program</li> <li>● Teacher Resource Masters</li> <li>● Center Materials</li> <li>● Pearson website</li> <li>● Mathematics Literature in Media Center</li> <li>● Topic Addressing Standards: 3</li> </ul>
4.NBT.A.2	Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using $>$ , $=$ , and $<$ symbols to record the results of comparisons.			
4.NBT.A.3	Use place value understanding to round multi-digit whole numbers to any place.			
<b>B. Use place value understanding and properties of operations to perform multi-digit arithmetic.</b>				
4.NBT.B.4	Fluently add and subtract multi-digit whole numbers using the standard algorithm.	<ul style="list-style-type: none"> <li>● Use efficient and accurate pencil and paper procedures to add and subtract multi digit numbers.</li> </ul>	<ul style="list-style-type: none"> <li>● Teacher Observation</li> <li>● Student Guide Pages</li> <li>● Oral Responses</li> <li>● Topic Assessments</li> <li>● Topic Center Activities</li> </ul>	<ul style="list-style-type: none"> <li>● Manipulatives</li> <li>● enVisionMATH Program</li> <li>● Teacher Resource Masters</li> </ul>





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MATHEMATICS CURRICULUM  
GRADE 4**

NJSLs	CONTENT	BENCHMARKS/CPI	ASSESSMENT	RESOURCES
<b>B. Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.</b>				
4.NF.B.3	Understand a fraction $a/b$ with $a > 1$ as a sum of fractions $1/b$ .	<ul style="list-style-type: none"> <li>● Read, write and model fractions.</li> <li>● Add and subtract fractions.</li> <li>● Decompose fractions, write equation for the fraction and use a visual fraction model.</li> <li>● Add and subtract mixed numbers.</li> <li>● Use concrete models to explore addition and subtraction word problems.</li> <li>● Students will use models to understand how to multiply a fraction by a whole number.</li> <li>● Students will use fraction models and equations to solve word problems.</li> </ul>	<ul style="list-style-type: none"> <li>● Teacher Observation</li> <li>● Student Guide Pages</li> <li>● Oral Responses</li> <li>● Topic Assessments</li> <li>● Topic Center Activities</li> <li>● Topic Addressing Standards: 11 - 13</li> </ul>	<ul style="list-style-type: none"> <li>● Manipulatives</li> <li>● enVisionMATH Program</li> <li>● Teacher Resource Masters</li> <li>● Center Materials</li> <li>● Pearson website</li> <li>● Mathematics Literature in Media Center</li> <li>● Topic Addressing Standards: 11 - 13</li> </ul>
4.NF.B.3.a	Understand addition and subtraction of fractions as joining and separating parts referring to the same whole.			
4.NF.B.3.b	Decompose a fraction into a sum of fractions with the same denominator in more than one way, recording each decomposition by an equation. Justify decompositions, e.g., by using a visual fraction model. Examples: $3/8 = 1/8 + 1/8 + 1/8$ ; $3/8 = 1/8 + 2/8$ ; $2\ 1/8 = 1 + 1 + 1/8 = 8/8 + 8/8 + 1/8$ .			
4.NF.B.3.c	Add and subtract mixed numbers with like denominators, e.g., by replacing each mixed number with an equivalent fraction, and/or by using properties of operations and the relationship between addition and subtraction.			
4.NF.B.3.d	Solve word problems involving addition and subtraction of fractions referring to the same whole and having like denominators, e.g., by using visual fraction models and equations to represent the problem.			
4.NF.B.4	Apply and extend previous understandings of multiplication to multiply a fraction by a whole number.			
4.NF.B.4.a	Understand a fraction $a/b$ as a multiple of $1/b$ . For example, use a visual fraction model to represent $5/4$ as the product $5 \times (1/4)$ , recording the conclusion by the equation $5/4 = 5 \times (1/4)$ .			

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NJSLs	CONTENT	BENCHMARKS/CPI	ASSESSMENT	RESOURCES
<p>4.NF.B.4.b</p> <p>4.NF.B.4.c</p>	<p>Understand a multiple of <math>a/b</math> as a multiple of <math>1/b</math>, and use this understanding to multiply a fraction by a whole number. For example, use a visual fraction model to express <math>3 \times (2/5)</math> as <math>6 \times (1/5)</math>, recognizing this product as <math>6/5</math>. (In general, <math>n \times (a/b) = (n \times a)/b</math>.)</p> <p>Solve word problems involving multiplication of a fraction by a whole number, e.g., by using visual fraction models and equations to represent the problem. For example, if each person at a party will eat <math>3/8</math> of a pound of roast beef, and there will be 5 people at the party, how many pounds of roast beef will be needed? Between what two whole numbers does your answer lie?</p>	<ul style="list-style-type: none"> <li>● Read, write and model fractions.</li> <li>● Add and subtract fractions.</li> <li>● Decompose fractions, write equation for the fraction and use a visual fraction model.</li> <li>● Add and subtract mixed numbers.</li> <li>● Use concrete models to explore addition and subtraction word problems.</li> <li>● Students will use models to understand how to multiply a fraction by a whole number.</li> <li>● Students will use fraction models and equations to solve word problems.</li> </ul>	<ul style="list-style-type: none"> <li>● Teacher Observation</li> <li>● Student Guide Pages</li> <li>● Oral Responses</li> <li>● Topic Assessments</li> <li>● Topic Center Activities</li> <li>● Topic Addressing Standards: 11 - 13</li> </ul>	<ul style="list-style-type: none"> <li>● Manipulatives</li> <li>● enVisionMATH Program</li> <li>● Teacher Resource Masters</li> <li>● Center Materials</li> <li>● Pearson website</li> <li>● Mathematics Literature in Media Center</li> <li>● Topic Addressing Standards: 11 - 13</li> </ul>
<b>C. Understand decimal notation for fractions, and compare decimal fractions.</b>				
<p>4.NF.C.5</p> <p>4.NF.C.6</p>	<p>Express a fraction with denominator 10 as an equivalent fraction with denominator 100, and use this technique to add two fractions with respective denominators 10 and 100. For example, express <math>3/10</math> as <math>30/100</math>, and add <math>3/10 + 4/100 = 34/100</math>.</p> <p>Use decimal notation for fractions with denominators 10 or 100. For example, rewrite <math>0.62</math> as <math>62/100</math>; describe a length as <math>0.62</math> meters; locate <math>0.62</math> on a number line diagram.</p>	<ul style="list-style-type: none"> <li>● Students will represent equivalent fractions through addition equations.</li> <li>● Students will translate decimals to fractions.</li> <li>● Students will compare and order decimals using <math>&lt;</math>, <math>&gt;</math>, or <math>=</math>.</li> </ul>	<ul style="list-style-type: none"> <li>● Teacher Observation</li> <li>● Student Guide Pages</li> <li>● Oral Responses</li> <li>● Topic Assessments</li> <li>● Topic Center Activities</li> <li>● Topic Addressing Standards: 13</li> </ul>	<ul style="list-style-type: none"> <li>● Manipulatives</li> <li>● enVisionMATH Program</li> <li>● Teacher Resource Masters</li> <li>● Center Materials</li> <li>● Pearson website</li> <li>● Mathematics Literature in Media Center</li> <li>● Topic Addressing Standards: 13</li> </ul>



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GRADE 4**

NJSLS	CONTENT	BENCHMARKS/CPI	ASSESSMENT	RESOURCES
<b>B. Represent and interpret data.</b>				
4.MD.B.4	Make a line plot to display a data set of measurements in fractions of a unit ( $\frac{1}{2}$ , $\frac{1}{4}$ , $\frac{1}{8}$ ). Solve problems involving addition and subtraction of fractions by using information presented in line plots. For example, from a line plot find and interpret the difference in length between the longest and shortest specimens in an insect collection.	<ul style="list-style-type: none"> <li>● Create a number line, divide and label into fractional units.</li> <li>● Use a number line to solve addition and subtraction word problems.</li> <li>● Read, interpret, construct, analyze, generate questions about, and draw inferences from displays of data.</li> </ul>	<ul style="list-style-type: none"> <li>● Teacher Observation</li> <li>● Student Guide Pages</li> <li>● Oral Responses</li> <li>● Topic Assessments</li> <li>● Topic Center Activities</li> <li>● Topic Addressing Standards: 15</li> </ul>	<ul style="list-style-type: none"> <li>● Manipulatives</li> <li>● enVisionMATH Program</li> <li>● Teacher Resource Masters</li> <li>● Center Materials</li> <li>● Pearson website</li> <li>● Mathematics Literature in Media Center</li> <li>● Topic Addressing Standards: 15</li> </ul>
<b>C. Geometric measurement: understand concepts of angle and measure angles.</b>				
4.MD.C.5  4.MD.C.5.a  4.MD.C.5.b  4.MD.C.6	<p>Recognize angles as geometric shapes that are formed wherever two rays share a common endpoint, and understand concepts of angle measurement:</p> <p>An angle is measured with reference to a circle with its center at the common endpoint of the rays, by considering the fraction of the circular arc between the points where the two rays intersect the circle. An angle that turns through <math>\frac{1}{360}</math> of a circle is called a “one-degree angle,” and can be used to measure angles.</p> <p>An angle that turns through n one-degree angles is said to have an angle measure of n degrees.</p> <p>Measure angles in whole-number degrees using a protractor. Sketch angles of specified measure.</p>	<ul style="list-style-type: none"> <li>● Use a protractor to measure and draw angles</li> </ul>	<ul style="list-style-type: none"> <li>● Teacher Observation</li> <li>● Student Guide Pages</li> <li>● Oral Responses</li> <li>● Topic Assessments</li> <li>● Topic Center Activities</li> <li>● Topic Addressing Standards: 16</li> </ul>	<ul style="list-style-type: none"> <li>● Manipulatives</li> <li>● enVisionMATH Program</li> <li>● Teacher Resource Masters</li> <li>● Center Materials</li> <li>● Pearson website</li> <li>● Mathematics Literature in Media Center</li> <li>● Topic Addressing Standards: 16</li> </ul>

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NJSLs	CONTENT	BENCHMARKS/CPI	ASSESSMENT	RESOURCES
4.MD.C.7	Recognize angle measure as additive. When an angle is decomposed into non-overlapping parts, the angle measure of the whole is the sum of the angle measures of the parts. Solve addition and subtraction problems to find unknown angles on a diagram in real world and mathematical problems, e.g., by using an equation with a symbol for the unknown angle measure.			
<b>4.G Geometry</b>				
<b>A. Draw and identify lines and angles, and classify shapes by properties of their lines and angles.</b>				
4.G.A.1	Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures.	<ul style="list-style-type: none"> <li>● Understand and apply concepts involving lines, and angles of two dimensional figures</li> <li>● Use properties of standard two dimensional shapes to identify, classify and describe them.</li> <li>● Student will use shapes and drawings to find the line symmetry</li> </ul>	<ul style="list-style-type: none"> <li>● Teacher Observation</li> <li>● Student Guide Pages</li> <li>● Oral Responses</li> <li>● Topic Assessments</li> <li>● Topic Center Activities</li> <li>● Topic Addressing Standards: 16</li> </ul>	<ul style="list-style-type: none"> <li>● Manipulatives</li> <li>● EnVisionMATH Program</li> <li>● Teacher Resource Masters</li> <li>● Center Materials</li> <li>● Pearson website</li> <li>● Mathematics Literature in Media Center</li> <li>● Topic Addressing Standards: 16</li> </ul>
4.G.A.2	Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines, or the presence or absence of angles of a specified size. Recognize right triangles as a category, and identify right triangles.			
4.G.A.3	Recognize a line of symmetry for a two-dimensional figure as a line across the figure such that the figure can be folded along the line into matching parts. Identify line-symmetric figures and draw lines of symmetry.			