

# North East School District PA Core Curriculum Map

## Mathematics

### Third Grade



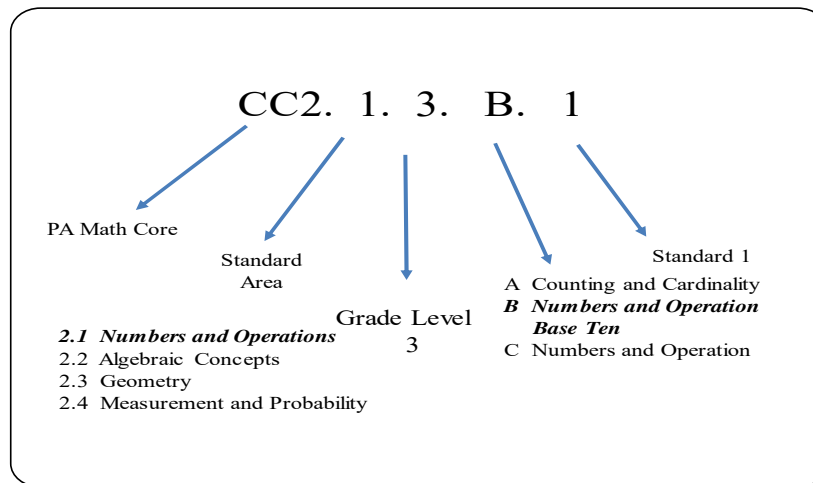
## INTRODUCTION

North East School District has adopted Pennsylvania Department of Education's Standards for Mathematical Practice that highlight the effective use of understanding, knowledge, and skills in order to prepare students to be college and/or career ready.

In Grade 3, instructional time should focus on four critical areas: (1) developing understanding of multiplication and division and strategies for multiplication and division within 100; (2) developing understanding of fractions, especially unit fractions (fractions with numerator 1); (3) developing understanding of the structure of rectangular arrays and of area; and (4) describing and analyzing two-dimensional shapes.

1. Students develop an understanding of the meanings of multiplication and division of whole numbers through activities and problems involving equal-sized groups, arrays, and area models; multiplication is finding an unknown product, and division is finding an unknown factor in these situations. For equal-sized group situations, division can require finding the unknown number of groups or the unknown group size. Students use properties of operations to calculate products of whole numbers, using increasingly sophisticated strategies based on these properties to solve multiplication and division problems involving single-digit factors. By comparing a variety of solution strategies, students learn the relationship between multiplication and division.
2. Students develop an understanding of fractions, beginning with unit fractions. Students view fractions in general as being built out of unit fractions, and they use fractions along with visual fraction models to represent parts of a whole. Students understand that the size of a fractional part is relative to the size of the whole. For example,  $\frac{1}{2}$  of the paint in a small bucket could be less paint than  $\frac{1}{3}$  of the paint in a larger bucket, but  $\frac{1}{3}$  of a ribbon is longer than  $\frac{1}{5}$  of the same ribbon because when the ribbon is divided into 3 equal parts, the parts are longer than when the ribbon is divided into 5 equal parts. Students are able to use fractions to represent numbers equal to, less than, and greater than one. They solve problems that involve comparing fractions by using visual fraction models and strategies based on noticing equal numerators or denominators.
3. Students recognize area as an attribute of two-dimensional regions. They measure the area of a shape by finding the total number of same-size units of area required to cover the shape without gaps or overlaps, a square with sides of unit length being the standard unit for measuring area. Students understand that rectangular arrays can be decomposed into identical rows or into identical columns. By decomposing rectangles into rectangular arrays of squares, students connect area to multiplication, and justify using multiplication to determine the area of a rectangle.
4. Students describe, analyze, and compare properties of two-dimensional shapes. They compare and classify shapes by their sides and angles, and connect these with definitions of shapes. Students also relate their fraction work to geometry by expressing the area of part of a shape as a unit fraction of the whole.

Mathematical Standards: Development and Progression											
	Pre K	K	1	2	3	4	5	6	7	8	HS
2.1 Numbers and Operations	(A) Counting & Cardinality										
		(B) Number and Operations in Base Ten					(D) Ratios and Proportional Relationships			(F) Number and Quantity	
				(C) Number and Operations - Fractions			(E) The Number System				
2.2 Algebraic Concepts	(A) Operations and Algebraic Thinking						(B) Expressions and Equations			(D) Algebra	
										(C) Functions	
2.3 Geometry	(A) Geometry										
2.4 Measurement, Data and Probability	(A) Measurement and Data						(B) Statistics and Probability				



Adapted from: PDE SAS

## Standards for Mathematical Practices for Third Grade

Below are a few examples of how the Standards for Mathematical Practices may be integrated into tasks that students complete:

<b>Mathematic Practices</b>	<b>Explanations and Examples</b>
<b>1. Make sense of problems and persevere in solving them.</b>	In third grade, mathematically proficient students know that doing mathematics involves solving problems and discussing how they solved them. Students explain to themselves the meaning of a problem and look for ways to solve it. Third graders may use concrete objects or pictures to help them conceptualize and solve problems. They may check their thinking by asking themselves, “Does this make sense?” They listen to the strategies of others and will try different approaches. They often will use another method to check their answers.
<b>2. Reason abstractly and quantitatively.</b>	Mathematically proficient third graders should recognize that a number represents a specific quantity. They connect the quantity to written symbols and create a logical representation of the problem at hand, considering both the appropriate units involved and the meaning of quantities.
<b>3. Construct viable arguments and critique the reasoning of others.</b>	In third grade, mathematically proficient students may construct arguments using concrete referents, such as objects, pictures, and drawings. They refine their mathematical communication skills as they participate in mathematical discussions involving questions like “How did you get that?” and “Why is that true?” They explain their thinking to others and respond to others’ thinking.
<b>4. Model with mathematics.</b>	Mathematically proficient students experiment with representing problem situations in multiple ways including numbers, words (mathematical language), drawing pictures, using objects, acting out, making a chart, list, or graph, creating equations, etc. Students need opportunities to connect the different representations and explain the connections. They should be able to use all of these representations as needed. Third graders should evaluate their results in the context of the situation and reflect on whether the results make sense.

<p><b>5. Use appropriate tools strategically.</b></p>	<p>Mathematically proficient third graders consider the available tools (including estimation) when solving a mathematical problem and decide when certain tools might be helpful. For instance, they may use graph paper to find all the possible rectangles that have a given perimeter. They compile the possibilities into an organized list or a table, and determine whether they have all the possible rectangles.</p>
<p><b>6. Attend to precision.</b></p>	<p>Mathematically proficient third graders develop their mathematical communication skills, they try to use clear and precise language in their discussions with others and in their own reasoning. They are careful about specifying units of measure and state the meaning of the symbols they choose. For instance, when figuring out the area of a rectangle they record their answers in square units.</p>
<p><b>7. Look for and make use of structure.</b></p>	<p>In third grade, mathematically proficient students look closely to discover a pattern or structure. For instance, students use properties of operations as strategies to multiply and divide (commutative and distributive properties).</p>
<p><b>8. Look for and express regularity in repeated reasoning.</b></p>	<p>Mathematically proficient students in third grade should notice repetitive actions in computation and look for more shortcut methods. For example, students may use the distributive property as a strategy for using products they know to solve products that they don't know. For example, if students are asked to find the product of <math>7 \times 8</math>, they might decompose 7 into 5 and 2 and then multiply <math>5 \times 8</math> and <math>2 \times 8</math> to arrive at <math>40 + 16</math> or 56. In addition, third graders continually evaluate their work by asking themselves, "Does this make sense?"</p>

**MATH**



**Mathematics 3**

**GRADE 3**

Instructional time should focus on five critical areas: [1] developing an understanding of multiplication and division and strategies for multiplication and division within 100; [2] developing understanding of fractions, especially unit fractions (fractions with a numerator of 1); [3] developing understanding of the structure of rectangular arrays and of area; [4] describing and analyzing two-dimensional shapes; and [5] solving problems involving measurement and estimation of intervals of time, money, liquid volumes, masses, and lengths of objects.

**PA CORE Reporting Categories & Assessment Anchors**

**Numbers & Operations in Base Ten**

M03.A-T.1 → Use Place-Value Understanding & Properties of Operations to Perform Multi-Digit Arithmetic.

**Numbers & Operations - Fractions**

M03.A-F.1 → Develop an Understanding of Fractions as Numbers.

**Operations & Algebraic Thinking**

M03.B-O.1 → Represent and Solve Problems Involving Multiplication & Division.

M03.B-O.2 → Understand Properties of Multiplication and the Relationship Between Multiplication & Division.

M03.B-O.3 → Solve Problems Involving the Four Operations, and Identify and Explain Patterns in Arithmetic.

**Geometry**

M03.C-G.1 → Reason with Shapes and Their Attributes.

**Measurement and Data**

**M03.D-M.1 → Solve Problems Involving Measurement and Estimation of Intervals of Time, Money, Liquid, Volumes, Masses, and Lengths of Objects.**

**M03.D-M.2 → Represent and Interpret Data.**

**M03.D-M.3 → Geometric Measurement: Understand Concepts of Area and Relate Area to Multiplication and to Addition.**

**M03.D-M.4 → Geometric Measurement: Recognize Perimeter as an Attribute of Plane Figures and Distinguish Between Linear and Area Measures.**

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*All identified strands of PA Core Eligible Content can be found communicated in narrative form through the SAS (Standards Aligned System) Portal. Information related to the Common Core Standards is also readily available via this online resource. The SAS Portal is located at [www.pdesas.org](http://www.pdesas.org).*

**Grade Three PA CORE Anchor Descriptors**

- ★ Apply Place-Value Strategies To Solve Problems.
- ★ Develop And Apply Number Theory Concepts To Compare Quantities And Magnitudes Of Fractions And Whole Numbers.
- ★ Understand Various Meanings Of Multiplication And Division.
- ★ Solve Mathematical And Real-World Problems Using Multiplication And Division, Including Determining The Missing Number In A Multiplication And/Or Division Equation.
- ★ Use Properties To Simplify And Solve Multiplication Problems.
- ★ Relate Division To A Missing-Number Multiplication Equation.
- ★ Use Operations, Patterns, & Estimation Strategies To Solve Problems (May Include Word Problems).
- ★ Analyze Characteristics Of Polygons.
- ★ Determine Or Calculate Time And Elapsed Time.
- ★ Use The Attributes Of Liquid Volume, Mass, And Length Of Objects.
- ★ Count, Compare, And Make Change Using A Collection Of Coins And One-Dollar Bills.
- ★ Organize, Display, And Answer Questions Based On Data.
- ★ Find The Areas Of Plane Figures. Find And Use The Perimeters Of Plane Figures.

MONTH/QUARTER	CONCEPTS	STANDARDS/ ELIGIBLE CONTENT	ASSESSMENTS	RESOURCES
<p><b>SEPTEMBER</b></p> <p><u>Essential Questions</u></p> <p><i>How is mathematics used to quantify, compare, represent, and model numbers?</i></p> <p><i>How can mathematics support effective communication?</i></p> <p><i>How are relationships represented mathematically?</i></p>	<p><u>Place Value</u> Value vs. Place Value</p> <p>Representing Numbers (Standard, Expanded Form, Word Name)</p> <p>Understanding Number Lines</p> <p>Counting on the Number Line</p> <p>Finding the Halfway Number</p> <p>Compare &amp; Order Numbers</p> <p><u>Properties of Operations</u> Addition Meaning &amp; Properties</p> <p>Subtraction Meanings</p> <p>Adding with Exp. Algorithm</p> <p>Models for Adding Three-Digit Numbers</p>	<p>M03.A-T.1.1.1</p> <p>M03.A-T.1.1.2</p> <p>M03.A-T.1.1.4</p>	<p><u>Formative Assessments</u> Topic Tests &amp; Quizzes Classwork Assignments Homework Assignments Skills Sheets Reflex Math Fact Program Ticket Out The Door A/B/C Dry Erase Boards</p> <p><u>Benchmark Assessments</u> Study Island BM #1 STAR Math Assessment #1</p> <p><u>Diagnostic Assessment</u> NWEA MAP [Fall]</p>	<p>enVision Textbook</p> <p>enVision Workbook</p> <p>enVision Supplemental Materials/Resources</p> <p>Common Core Reference Book</p> <p>Manipulatives</p> <p>Reflex Software</p> <p>Hundreds Chart</p> <p>Number Lines</p> <p>Math Vocabulary Cards</p> <p>Tenmarks</p> <p>SmartBoard Activities</p> <p>Study Island Software</p>



	<p>Adding Three-Digit Numbers</p> <p>Adding Three Or More Numbers</p> <p>Models For Subtracting Three-Digit Numbers</p> <p>Subtracting Three-Digit Numbers</p> <p>Subtracting Across Zero(s)</p> <p>Compare &amp; Order Numbers</p> <p><b><u>Patterns</u></b></p> <p>Understanding Number Lines</p> <p>Counting On The Number Line</p> <p>Finding The Halfway Number</p> <p>Problem Solving - Drawing A Picture</p>			
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MONTH/QUARTER	CONCEPTS	STANDARDS/ ELIGIBLE CONTENT	ASSESSMENTS	RESOURCES
<p><b>OCTOBER</b></p> <p><u>Essential Questions</u></p> <p><i>What does it mean to estimate or analyze numerical quantities?</i></p> <p><i>When is it appropriate to estimate versus calculate?</i></p>	<p><u>Place Value</u> Adding &amp; Subtracting (Inverse Operations)</p> <p>Adding Three &amp; Four-Digit Numbers With Trading/Regrouping</p> <p>Rounding To The Nearest 10 And 100</p> <p>Estimating Sums And Differences</p> <p><u>Properties Of Operations</u> Making Sense Of Addition Equations</p> <p>Making Sense Of Subtraction Equations</p> <p>Adding &amp; Subtracting (Inverse Operations)</p> <p>Adding Three &amp; Four-Digit Numbers With Trading/Regrouping</p>	<p>M03.A-T.1.1.1</p> <p>M03.A-T.1.1.2</p>	<p><u>Formative Assessments</u> Topic Tests &amp; Quizzes Classwork Assignments Homework Assignments Skills Sheets Reflex Math Fact Program Ticket Out The Door A/B/C Dry Erase Boards</p> <p><u>Diagnostic Assessment</u> NWEA MAP (continued..)</p>	<p>enVision Textbook</p> <p>enVision Workbook</p> <p>enVision Supplemental Materials/Resources</p> <p>Common Core Reference Book</p> <p>Manipulatives</p> <p>Reflex Software</p> <p>Hundreds Chart</p> <p>Number Lines</p> <p>Math Vocabulary Cards</p> <p>Tenmarks</p> <p>SmartBoard Activities</p> <p>Study Island Software</p>

<p><b>NOVEMBER</b></p> <p><u>Essential Questions</u></p> <p><i>How can patterns be used to describe relationships in mathematical situations?</i></p> <p><i>How can recognizing repetition or regularity assist in solving problems more efficiently?</i></p>	<p><u>Properties Of Operations</u></p> <p>Multiplication As Repeated Addition</p> <p>Commutative Property Of Multiplication</p> <p>Distributive Property Of Multiplication</p> <p>Multiplying By Multiples Of 10</p> <p><u>Multiplication</u></p> <p>Multiplication As Repeated Addition</p> <p>Arrays &amp; Multiplication</p> <p>Commutative Property Of Multiplication</p> <p>Multiplication Facts</p> <p>Distributive Property Of Multiplication</p> <p>Multiplying By Multiples Of 10</p>	<p>M03.A-T.1.1.3</p> <p>M03.B-O.1.1.1</p> <p>M03.B-O.3.1.5</p>	<p><u>Formative Assessments</u></p> <p>Topic Tests &amp; Quizzes</p> <p>Classwork Assignments</p> <p>Homework Assignments</p> <p>Skills Sheets</p> <p>Reflex Math Fact Program</p> <p>Ticket Out The Door</p> <p>A/B/C Dry Erase Boards</p>	<p>enVision Textbook</p> <p>enVision Workbook</p> <p>enVision Supplemental Materials/Resources</p> <p>Common Core Reference Book</p> <p>Manipulatives</p> <p>Reflex Software</p> <p>Hundreds Chart</p> <p>Number Lines</p> <p>Math Vocabulary Cards</p> <p>Tenmarks</p> <p>SmartBoard Activities</p> <p>Study Island Software</p> <p><a href="http://www.multiplication.com">www.multiplication.com</a></p>
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	<p>Patterns For Facts</p> <p><b>Patterns</b></p> <p>Multiplication Facts</p> <p>Multiplying By Multiples Of 10</p> <p>Patterns For Facts</p>			
MONTH/QUARTER	CONCEPTS	STANDARDS/ ELIGIBLE CONTENT	ASSESSMENTS	RESOURCES
<p><b>DECEMBER</b></p> <p><b>Essential Questions</b></p> <p><i>How are relationships represented mathematically?</i></p> <p><i>How can expressions, equations, and inequalities be used to quantify, solve, model, and/or analyze mathematical situations?</i></p>	<p><b>Properties Of Operations</b></p> <p>Multiplying w/ Three Factors (Associative Prop.)</p> <p>Multiplying To Find Combinations</p> <p>Writing Multiplication Stories</p> <p>Number Bonds/Part - Part Whole Diagrams</p> <p>Division As Repeated Subtraction</p> <p>Multiplication</p>	<p>M03.B-0.1.1.1</p> <p>M03.B-0.1.1.2</p> <p>M03.B-0.1.2.2</p> <p>M03.B-0.2.1.2</p> <p>M03.B-0.3.1.3</p> <p>M03.B-0.3.1.6</p> <p><u>Common Core Standard</u> 3.OA.A.2</p>	<p><b>Formative Assessments</b></p> <p>Topic Tests &amp; Quizzes</p> <p>Classwork Assignments</p> <p>Homework Assignments</p> <p>Skills Sheets</p> <p>Reflex Math Fact Program</p> <p>Ticket Out The Door</p> <p>A/B/C Dry Erase Boards</p> <p><b>Benchmark Assessments</b></p> <p>Study Island BM #2</p> <p>STAR Math Assessment #2</p>	<p>enVision Textbook</p> <p>enVision Workbook</p> <p>enVision Supplemental Materials/Resources</p> <p>Common Core Reference Book</p> <p>Manipulatives</p> <p>Reflex Software</p> <p>Hundreds Chart</p>

	<p>Multiplying w/ Three Factors (Associative Prop.)</p> <p>Multiplying To Find Combinations</p> <p>Missing Factors</p> <p>Writing Multiplication Stories</p> <p>Relating Multiplication &amp; Division</p> <p>Fact Families</p> <p>Number Bonds/Part - Part Whole Diagrams</p> <p><b><u>Division</u></b></p> <p>Relating Multiplication &amp; Division</p> <p>Fact Families</p> <p>Number Bonds/Part - Part Whole Diagrams</p> <p>Division Facts</p>			<p>Number Lines</p> <p>Math Vocabulary Cards</p> <p>Tenmarks</p> <p>SmartBoard Activities</p> <p>Study Island Software</p> <p><a href="http://www.multiplication.com">www.multiplication.com</a></p>
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	<p>Division As Repeated Subtraction</p> <p><b>Patterns</b>                  Multiplying To Find Combinations</p> <p>Missing Factors</p> <p>Relating Multiplication &amp; Division</p> <p>Fact Families</p> <p>Number Bonds/Part - Part Whole Diagrams</p> <p>Division Facts</p> <p>Division As Repeated Subtraction</p>			
<p><b>JANUARY</b></p> <p><b>Essential Questions</b>  <i>Why does "WHAT" we measure influence "HOW" we measure?</i></p>	<p><b>Place Value / Patterns / Multiplication / Properties Of Operations</b></p> <p>Missing Numbers In A Multiplication Table</p> <p>Problem Solving - Choose An Appropriate Equation</p>	<p>M03.B-0.1.2.1</p> <p>M03.B-0.1.2.2</p> <p>M03.B-0.3.1.3</p> <p>M03.B-0.3.1.6</p>	<p><b>Formative Assessments</b></p> <p>Topic Tests &amp; Quizzes</p> <p>Classwork Assignments</p> <p>Homework Assignments</p> <p>Skills Sheets</p> <p>Reflex Math Fact Program</p> <p>Ticket Out The Door</p> <p>A/B/C Dry Erase Boards</p>	<p>enVision Textbook</p> <p>enVision Workbook</p> <p>enVision Supplemental Materials/Resources</p>

<p><i>How can mathematics support effective communication?</i></p> <p><i>What makes a tool and/or strategy appropriate for a given task?</i></p>	<p>Problem Solving - Multiple Step Problems</p> <p>Making Sense Of Multiplication &amp; Division Equations</p> <p>Multiplying 2-Digit Numbers By 1-Digit Numbers (2 &amp; 3-Digit Products)</p> <p>Multiplying 3-Digit Numbers By 1-Digit Numbers (3 &amp; 4-Digit Products)</p> <p>Breaking Apart To Multiply</p> <p>Using Mental Math To Multiply</p> <p>Estimating Products</p> <p>Division Problem Solving - Choose An Appropriate Equation</p> <p>Writing Division Stories</p>	<p>M03.D-M.1.3.1</p> <p>M03.D-M.1.3.2</p> <p>M03.D-M.1.3.3</p> <p><u>Common Core Standards</u></p> <p>3.OA.A.4</p> <p>3.OA.B.6</p> <p>3.OA.D.8</p>	<p><b><u>Diagnostic Assessment</u></b> NWEA MAP [Winter]</p>	<p>Common Core Reference Book</p> <p>Manipulatives</p> <p>Reflex Software</p> <p>Hundreds Chart</p> <p>Number Lines</p> <p>Math Vocabulary Cards</p> <p>Tenmarks</p> <p>SmartBoard Activities</p> <p>Study Island Software</p> <p><a href="http://www.multiplication.com">www.multiplication.com</a></p> <p>Coins &amp; Bills</p>
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	<p>Problem Solving - Multiple Step Problems</p> <p>Making Sense Of Multiplication &amp; Division Equations</p> <p><b>Money (Coins &amp; Bills)</b></p> <p>Identify Coins / Bills And Counting Money</p> <p>Adding Money</p> <p>Making Change (Counting Back)</p> <p>Rounding Amounts Of Money To The Nearest Dollar &amp; Ten Dollars</p>			
<b>MONTH/QUARTER</b>	<b>CONCEPTS</b>	<b>STANDARDS/ ELIGIBLE CONTENT</b>	<b>ASSESSMENTS</b>	<b>RESOURCES</b>
<b>FEBRUARY</b>	<p><b>Fractions</b></p> <p>Dividing Fractions Into Equal Parts</p> <p><b>Essential Questions</b></p> <p>Fractions &amp; Regions</p>	<p>M03.A-F.1.1.1</p> <p>M03.A-F.1.1.2</p> <p>M03.A-F.1.1.3</p>	<p><b>Formative Assessments</b></p> <p>Topic Tests &amp; Quizzes</p> <p>Classwork Assignments</p> <p>Homework Assignments</p> <p>Skills Sheets</p>	<p>enVision Textbook</p> <p>enVision Workbook</p> <p>enVision</p>



<p><i>How precise do measurements and calculations need to be?</i></p> <p><i>How are spatial relationships including shape and dimension, used to draw, construct, model, and represent real situations or solve problems?</i></p> <p><i>How can geometric properties and theorems be used to describe, model, and analyze situations?</i></p>	<p>Fractions &amp; Sets</p> <p>Fractional Parts Of A Set</p> <p>Fractions &amp; Length (Unit Fraction)</p> <p>Locating Fractions On A Number Line</p> <p>Naming Fractions On A Number Line / Creating A Fraction Number Line</p> <p>Comparing Fractions On A Number Line</p> <p>Equivalent Fractions And The Number Line</p> <p>Comparing Fractions With Like/Unlike Denominators</p> <p>Using Fractions</p> <p>Finding Equivalent Fractions</p> <p>Whole Numbers And</p>	<p>M03.A-F.1.1.4</p> <p>M03.A-F.1.1.5</p> <p>M03.C-G.1.1.3</p> <p>M03.D-M.1.1.1</p>	<p>Reflex Math Fact Program</p> <p>Ticket Out The Door</p> <p>A/B/C Dry Erase Boards</p> <p>PSSA Practice Prep</p>	<p>Supplemental Materials/Resources</p> <p>Common Core Reference Book</p> <p>Manipulatives</p> <p>Reflex Software</p> <p>Hundreds Chart</p> <p>Number Lines</p> <p>Math Vocabulary Cards</p> <p>Tenmarks</p> <p>SmartBoard Activities</p> <p>Study Island Software</p> <p>Fraction Strips</p>
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	<p>Fractions</p> <p>Adding &amp; Subtracting Fractions</p> <p><b>Time</b> Time To The Hour, ½ Hour, And ¼ Hour</p> <p>Time To The Nearest Minute And Five Minutes</p> <p>Units Of Time (Conversion)</p>			
<p><b>MARCH</b></p> <p><b>Essential Questions</b></p> <p><i>How can the application of the attributes of geometric shapes support mathematical reasoning and problem solving?</i></p> <p><i>How are spatial relationships including shape and dimension, used to draw, construct, model, and represent real situations or solve problems?</i></p>	<p><b>Time</b> Elapsed Time</p> <p>Elapsed Time - Problem Solving (Working Backwards)</p> <p>Time To The Hour, ½ Hour, And ¼ Hour</p> <p>Time To The Nearest Minute And Five Minutes</p> <p>Units Of Time (Conversion)</p>	<p>M03.C-G.1.1.1</p> <p>M03.C-G.1.1.2</p> <p>M03.C-G.1.1.3</p> <p>M03.D-M.1.1.1</p> <p>M03.D-M.1.1.2</p>	<p><b>Formative Assessments</b> Topic Tests &amp; Quizzes Classwork Assignments Homework Assignments Skills Sheets Reflex Math Fact Program Ticket Out The Door A/B/C Dry Erase Boards</p> <p>PSSA Practice Prep</p> <p><b>Benchmark Assessments</b> Study Island BM #3 STAR Math Assessment #3</p>	<p>enVision Textbook</p> <p>enVision Workbook</p> <p>enVision Supplemental Materials/Resources</p> <p>Common Core Reference Book</p> <p>Manipulatives</p> <p>Reflex Software</p> <p>Hundreds Chart</p>

<p><i>How can geometric properties and theorems be used to describe, model, and analyze situations?</i></p>	<p><b><u>Two- And Three-Dimensional Figures</u></b>                  3D Shapes &amp; Attributes</p> <p>Polygons</p> <p>Lines, Line Segments, Rays, Angles, Points</p> <p>Intersecting, Parallel, And Perpendicular Lines</p> <p>Quadrilaterals</p> <p>Triangles</p>			<p>Number Lines</p> <p>Math Vocabulary Cards</p> <p>Tenmarks</p> <p>SmartBoard Activities</p> <p>Study Island Software</p> <p>Fraction Strips</p> <p>Elapsed Time Rulers</p>
MONTH/QUARTER	CONCEPTS	STANDARDS/ ELIGIBLE CONTENT	ASSESSMENTS	RESOURCES
<p><b>APRIL</b></p> <p><b><u>Essential Questions</u></b></p> <p><i>Why does "WHAT" we measure influence "HOW" we measure?</i></p> <p><i>How precise do measurements and calculations need to be?</i></p>	<p><b><u>Multiplication/Division</u></b>                  Capacity Conversions</p> <p>Measurement Conversions</p> <p>Problem Solving</p> <p>Finding Area Of Plane Figures (Multiply Only)</p> <p><b><u>Measurement</u></b></p>	<p>M03.B-0.3.1.1</p> <p>M03.B-0.3.1.2</p> <p>M03.B-0.3.1.3</p> <p>M03.B-0.3.1.4</p> <p>M03.B-0.3.1.5</p> <p>M03.B-0.3.1.6</p>	<p><b><u>Formative Assessments</u></b>                  Topic Tests &amp; Quizzes                  Classwork Assignments                  Homework Assignments                  Skills Sheets                  Reflex Math Fact Program                  Ticket Out The Door                  A/B/C Dry Erase Boards</p> <p>PSSA Practice Prep</p>	<p>enVision Textbook</p> <p>enVision Workbook</p> <p>enVision Supplemental Materials/Resources</p> <p>Common Core Reference Book</p>

<p><i>How does the type of data influence the choice of display?</i></p>	<p>Weight / Mass</p> <p>Customary / Metric Units Of Capacity</p> <p>Capacity Conversions</p> <p>Using Inches, Feet, Yards, And Miles</p> <p>Measure To The Nearest Inch, ½ Inch, And ¼ Inch</p> <p>Measurement Conversions</p> <p><b><u>Two- And Three-Dimensional Figures</u></b></p> <p>Understanding Perimeter - Common Shapes And Unknown Side Lengths</p> <p><b><u>Area</u></b></p> <p>Finding Area Of Plane Figures</p> <p><b><u>Data Displays</u></b></p> <p>Graphs - Tallies, Line Plots, Line Graphs, Bar Graphs, And Pictographs</p>	<p>M03.B-0.3.1.7</p> <p>M03.D-M.1.2.1</p> <p>M03.D-M.1.2.2</p> <p>M03.D-M.1.2.3</p> <p>M03.D-M.2.1.1</p> <p>M03.D-M.2.1.2</p> <p>M03.D-M.2.1.4</p> <p>M03.D-M.3.1.1</p> <p>M03.D-M.3.1.2</p> <p>M03.D-M.4.1.1</p>	<p><b>Summative Assessment</b> Grade 3 Mathematics PSSA</p>	<p>Manipulatives</p> <p>Reflex Software</p> <p>Hundreds Chart</p> <p>Number Lines</p> <p>Math Vocabulary Cards</p> <p>Tenmarks</p> <p>SmartBoard Activities</p> <p>Study Island Software</p> <p>Fraction Strips</p> <p>Rulers</p> <p>Graph Paper</p>
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	Coordinates - Ordered Pairs			
<p><b>MAY</b></p> <p><u>Essential Questions</u></p> <p><i>How does the type of data influence the choice of display?</i></p> <p><i>How can probability and data analysis be used to make predictions?</i></p>	<p><b>Data Displays</b> Graphs - Tallies, Line Plots, Line Graphs, Bar Graphs, And Pictographs</p> <p>Probability</p> <p><b>Place Value / Multiplication / And Division</b> 4-Digit By 1-Digit Multiplication</p> <p>Decimals &lt; One Whole</p> <p>Decimals &gt; One Whole</p> <p>Division With &amp; Without Remainders (1- And 2-Digit Dividends)</p> <p><b>Area</b> Area Review - "Design A Zoo"</p>	<p>M03.D-M.2.1.1</p> <p>M03.D-M.2.1.2</p> <p>M03.D-M.2.1.4</p> <p>M03.D-M.3.1.1</p> <p>M03.D-M.3.1.2</p>	<p><b>Formative Assessments</b> Topic Tests &amp; Quizzes Classwork Assignments Homework Assignments Skills Sheets Reflex Math Fact Program Ticket Out The Door A/B/C Dry Erase Boards</p> <p><b>Benchmark Assessments</b> STAR Math Assessment #4</p> <p><b>Diagnostic Assessment</b> NWEA MAP [Spring]</p>	<p>enVision Textbook</p> <p>enVision Workbook</p> <p>enVision Supplemental Materials/Resources</p> <p>Common Core Reference Book</p> <p>Manipulatives</p> <p>Reflex Software</p> <p>Hundreds Chart</p> <p>Number Lines</p> <p>Math Vocabulary Cards</p> <p>Tenmarks</p> <p>SmartBoard Activities</p> <p>Study Island Software</p>

				Fraction Strips Rulers Graph Paper <i>Design A Zoo Information</i>
MONTH/QUARTER	CONCEPTS	STANDARDS/ ELIGIBLE CONTENT	ASSESSMENTS	RESOURCES
<p><b>JUNE</b></p> <p><u>Essential Questions</u></p> <p><i>How can patterns be used to describe relationships in mathematical situations?</i></p> <p><i>How can the application of the attributes of geometric shapes support mathematical reasoning and problem solving?</i></p> <p><i>Why does "WHAT" we measure influence "HOW" we measure?</i></p>	Connect 4 Tournament Mathematics Scavenger Hunt Mini-Math Olympics	M03.B-O.3.1.5 M03.C-G.1.1.1 M03.C-G.1.1.2	<p><b>Formative Assessments</b></p> Topic Tests & Quizzes Classwork Assignments Homework Assignments Skills Sheets Reflex Math Fact Program Ticket Out The Door A/B/C Dry Erase Boards	Connect 4 Game Boards Rulers Manipulatives Activities

