

**Berlin Brothersvalley School District
 Berlin Brothersvalley Elementary School
 3rd Grade Math Curriculum Framework
 Full Year Course**

Big Idea(s) for 1st nine weeks	Concept(s) of 1st nine weeks	Competencies of 1st nine weeks	Essential Questions for 1st nine weeks
<p>Telling time and identifying the passing of time relates to everyday life.</p> <p>One-step number stories enhance critical thinking skills.</p> <p>Understanding the concept of multiplication is essential for basic multiplication fluency.</p>	<p>Students will know...</p> <ul style="list-style-type: none"> ● finding differences as a subtraction strategy ● telling time and elapsed time ● rounding and estimation of addition ● scaled bar graphs ● foundation of multiplication and division ● mass ● extended addition and subtraction facts ● number stories: addition and subtraction and multi-step ● number stories: multiplication and division 	<p>Students will be able to...</p> <ul style="list-style-type: none"> ● utilize a number grid to find differences between numbers ● identify time to the nearest minute on an analog clock ● calculate the elapsed time or the time that has passed from one time to another ● round 2 and 3 digit numbers to the nearest ten and hundred ● create and interpret a scaled bar graph ● solve 2, 5, and 10s multiplication facts ● demonstrate the use of models or pictures to represent basic multiplication and division facts ● demonstrate and calculate mass using a pan balance and standard masses (grams and kilograms) ● identify and utilize a basic addition of subtraction fact to solve an extended fact ● solve one and two-step addition and subtraction number stories ● solve one-step multiplication 	<p>What time is the analog clock showing? (see picture)</p> <p>How do you round to the nearest ten or hundred?</p> <p>How do you represent multiplication?</p> <p>How do you find the mass of an object?</p> <p>What are the steps to solving a number story?</p>

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		and division number stories	
<u>Unit/Chapter/Selection of Study</u>	<u>Approx # of weeks - % of time</u>	<u>PA Core Standards</u>	<u>Assessment Anchors & Eligible Content</u>
Finding Differences	.5 week	CC.2.1.3.B.1 Apply place-value understanding and properties of operations to perform multi-digit arithmetic.	M03.A-T.1.1.2 Add two- and three-digit whole numbers (limit sums from 100 through 1,000) and/or subtract two- and three-digit numbers from three-digit whole numbers.
Time: Telling Time and Elapsed Time	1.5 weeks	CC.2.4.3.A.2 Tell and write time to the nearest minute and solve problems by calculating time intervals.	M03.D-M.1.1.1 Tell, show, and/or write time (analog) to the nearest minute. M03.D-M.1.1.2 Calculate elapsed time to the minute in a given situation (total elapsed time limited to 60 minutes or less).
Rounding and Estimation of Addition	.5 week	CC.2.1.3.B.1 Apply place-value understanding and properties of operations to perform multi-digit arithmetic.	M03.A-T.1.1.1 Round two- and three-digit whole numbers to the nearest ten or hundred, respectively.

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<u>Unit/Chapter/Selection of Study</u>	<u>Approx # of weeks - % of time</u>	<u>PA Core Standards</u>	<u>Assessment Anchors & Eligible Content</u>
Scaled Bar Graphs	.5 week	CC.2.4.3.A.4 Represent and interpret data using tally charts, tables, pictographs, line plots, and bar graphs.	<p>M03.D-M.2.1.1 Complete a scaled pictograph and a scaled bar graph to represent a data set with several categories (scales limited to 1, 2, 5, and 10).</p> <p>M03.D-M.2.1.2 Solve one- and two-step problems using information to interpret data presented in scaled pictographs and scaled bar graphs (scales limited to 1, 2, 5, and 10). Example 1: (One-step) “Which category is the largest?” Example 2: (Two-step) “How many more are in category A than in category B?”</p>
Foundation of Multiplication and Division	1 week	CC.2.2.3.A.1 Represent and solve problems involving multiplication and division.	M03.B-O.1.1.1 Interpret and/or describe products of whole numbers (up to and including 10×10). Example 1: Interpret 35 as the total number of objects in 5 groups, each containing 7 objects. Example 2: Describe a context in which a total number of objects can be expressed as 5×7 .

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			<p>M03.B-O.1.1.2 Interpret and/or describe whole-number quotients of whole numbers (limit dividends through 50 and limit divisors and quotients through 10). Example 1: Interpret $48 \div 8$ as the number of objects in each share when 48 objects are partitioned equally into 8 shares, or as a number of shares when 48 objects are partitioned into equal shares of 8 objects each. Example 2: Describe a context in which a number of shares or a number of groups can be expressed as $48 \div 8$.</p> <p>M03.B-O.1.2.1 Use multiplication (up to and including 10×10) and/or division (limit dividends through 50 and limit divisors and quotients through 10) to solve word problems in situations involving equal groups, arrays, and/or measurement quantities.</p> <p>M03.B-O.1.2.2 Determine the unknown whole number in a multiplication (up to and including 10×10) or division (limit dividends through 50 and limit divisors and quotients through 10) equation relating three whole numbers. Example: Determine the unknown number that makes an</p>
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			equation true.
<u>Unit/Chapter/Selection of Study</u> Mass	<u>Approx # of weeks - % of time</u> .5 week	<u>PA Core Standards</u> CC.2.4.3.A.1 Solve problems involving measurement and estimation of temperature, liquid volume, mass, and length.	<u>Assessment Anchors & Eligible Content</u> M03.D-M.1.2.1 Measure and estimate liquid volumes and masses of objects using standard units (cups [c], pints [pt], quarts [qt], gallons [gal], ounces [oz.], and pounds [lb]) and metric units (liters [l], grams [g], and kilograms [kg]).
<u>Unit/Chapter/Selection of Study</u> Extended Addition and Subtraction Facts	<u>Approx # of weeks - % of time</u> .5 week	<u>PA Core Standards</u> CC.2.1.3.B.1 Apply place-value understanding and properties of operations to perform multi-digit arithmetic.	<u>Assessment Anchors & Eligible Content</u> M03.A-T.1.1.2 Add two- and three-digit whole numbers (limit sums from 100 through 1,000) and/or subtract two- and three-digit numbers from three-digit whole numbers.

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<u>Unit/Chapter/Selection of Study</u>	<u>Approx # of weeks - % of time</u>	<u>PA Core Standards</u>	<u>Assessment Anchors & Eligible Content</u>
<p>Number Stories: Addition and Subtraction and Multi-Step</p>	<p>1 week</p>	<p>CC.2.2.3.A.4 Solve problems involving the four operations, and identify and explain patterns in arithmetic.</p>	<p>M03.B-O.3.1.2 Represent two-step word problems using equations with a symbol standing for the unknown quantity. Limit to problems with whole numbers and having whole-number answers.</p> <p>M03.B-O.3.1.3 Assess the reasonableness of answers. Limit problems posed with whole numbers and having whole-number answers.</p>
<p>Number Stories: Multiplication and Division</p>	<p>1 week</p>	<p>CC.2.2.3.A.1 Represent and solve problems involving multiplication and division.</p>	<p>M03.B-O.1.1.1 Interpret and/or describe products of whole numbers (up to and including 10×10). Example 1: Interpret 35 as the total number of objects in 5 groups, each containing 7 objects. Example 2: Describe a context in which a total number of objects can be expressed as 5×7.</p> <p>M03.B-O.1.1.2 Interpret and/or describe whole-number quotients of</p>

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			<p>whole numbers (limit dividends through 50 and limit divisors and quotients through 10). Example 1: Interpret $48 \div 8$ as the number of objects in each share when 48 objects are partitioned equally into 8 shares, or as a number of shares when 48 objects are partitioned into equal shares of 8 objects each. Example 2: Describe a context in which a number of shares or a number of groups can be expressed as $48 \div 8$.</p> <p>M03.B-O.1.2.1 Use multiplication (up to and including 10×10) and/or division (limit dividends through 50 and limit divisors and quotients through 10) to solve word problems in situations involving equal groups, arrays, and/or measurement quantities.</p> <p>M03.B-O.1.2.2 Determine the unknown whole number in a multiplication (up to and including 10×10) or division (limit dividends through 50 and limit divisors and quotients through 10) equation relating three whole numbers. Example: Determine the unknown number that makes an equation true.</p>
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<u>Unit/Chapter/Selection of Study</u>	<u>Approx # of weeks - % of time</u>	<u>PA Core Standards</u>	<u>Assessment Anchors & Eligible Content</u>
Order A Set of Whole Numbers	.5 week	CC.2.1.3.B.1 Apply place-value understanding and properties of operations to perform multi-digit arithmetic.	M03.A-T.1.1.4 Order a set of whole numbers from least to greatest or greatest to least (up through 9,999, and limit sets to no more than four numbers).
Application, Assessment, and Remediation of Math Skills	1.5 weeks	Includes all standards listed throughout the framework	Includes all eligible content/assessment anchors listed throughout the framework

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Big Idea(s) for 2nd nine weeks	Concept(s) of 2nd nine weeks	Competencies of 2nd nine weeks	Essential Questions for 2nd nine weeks
<p>Identifying fractions as part of a whole is applicable to everyday examples.</p> <p>Multi-digit addition and subtraction relate to real world, everyday problems.</p> <p>Learning multiplication strategies develop a deeper understanding of the concept of multiplying and dividing.</p>	<p>Students will know...</p> <ul style="list-style-type: none"> ● patterns to include frames and arrows and patterns (In and Out Table) ● an introduction to fractions (Whole vs. Parts) ● comparing Liquid Volume ● estimation ● multi-digit and subtraction strategies ● scaled bar graphs and pictures graphs ● multiplication strategies ● equivalent names for numbers ● measuring with a ruler ($\frac{1}{2}$ inch and centimeter) ● an introduction to line plots 	<p>Students will be able to...</p> <ul style="list-style-type: none"> ● solve and create patterns by identifying the rule ● recognize fractions as part of a whole ● compare liquid volume in liters and milliliters ● estimate addition and subtraction problems with 2 or 3 digits ● add and subtract multi-digit problems ● create and interpret scaled bar graphs and pictures graphs ● utilize multiplication strategies for harder facts ● select and formulate equivalent names ● measure with a ruler ($\frac{1}{2}$ inch and centimeter) ● identify and interpret line plots 	<p>What is the pattern and what number is missing? (see picture)</p> <p>What fraction of the whole is shaded? (see picture)</p> <p>How would you estimate and then solve the addition and subtraction problem?</p> <p>What information can we learn from the graph? (see picture)</p> <p>How do you solve a multiplication fact that is challenging?</p> <p>How do you use a ruler to measure .5 inch and centimeter?</p>

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<u>Unit/Chapter/Selection of Study</u>	<u>Approx # of weeks - % of time</u>	<u>PA Core Standards</u>	<u>Assessment Anchors & Eligible Content</u>
Patterns (Frames and Arrows) and Patterns (In and Out Table)	1 week	CC.2.2.3.A.4 Solve problems involving the four operations, and identify and explain patterns in arithmetic.	M03.B-O.3.1.5 Identify arithmetic patterns (including patterns in the addition table or multiplication table) and/or explain them using properties of operations. Example 1: Observe that 4 times a number is always even. Example 2: Explain why 6 times a number can be decomposed into three equal addends.
Introduction to Fractions (Whole vs. Parts)	.5 week	CC.2.1.3.C.1 Explore and develop an understanding of fractions as numbers.	M03.A-F.1.1.1 Demonstrate that when a whole or set is partitioned into y equal parts, the fraction $1/y$ represents 1 part of the whole and/or the fraction x/y represents x equal parts of the whole (limit denominators to 2, 3, 4, 6, and 8; limit numerators to whole numbers less than the denominator; and no simplification necessary).

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<u>Unit/Chapter/Selection of Study</u>	<u>Approx # of weeks - % of time</u>	<u>PA Core Standards</u>	<u>Assessment Anchors & Eligible Content</u>
Comparing Liquid Volume	.5 week	CC.2.4.3.A.1 Solve problems involving measurement and estimation of temperature, liquid volume, mass, and length.	M03.D-M.1.2.1 Measure and estimate liquid volumes and masses of objects using standard units (cups [c], pints [pt], quarts [qt], gallons [gal], ounces [oz.], and pounds [lb]) and metric units (liters [l], grams [g], and kilograms [kg]).
Estimation	1 week	CC.2.1.3.B.1 Apply place-value understanding and properties of operations to perform multi-digit arithmetic.	M03.A-T.1.1.1 Round two- and three-digit whole numbers to the nearest ten or hundred, respectively.
Multi-digit addition and subtraction strategies	1.5 weeks	CC.2.1.3.B.1 Apply place-value understanding and properties of operations to perform multi-digit arithmetic.	M03.A-T.1.1.2 Add two- and three-digit whole numbers (limit sums from 100 through 1,000) and/or subtract two- and three-digit numbers from three-digit whole numbers

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Scaled Bar Graphs and Picture Graphs	.25 week	CC.2.4.3.A.4 Represent and interpret data using tally charts, tables, pictographs, line plots, and bar graphs.	<p>M03.D-M.2.1.1 Complete a scaled pictograph and a scaled bar graph to represent a data set with several categories (scales limited to 1, 2, 5, and 10).</p> <p>M03.D-M.2.1.2 Solve one- and two-step problems using information to interpret data presented in scaled pictographs and scaled bar graphs (scales limited to 1, 2, 5, and 10). Example 1: (One-step) “Which category is the largest?” Example 2: (Two-step) “How many more are in category A than in category B?”</p>
Multiplication Strategies: Part One	1 week	CC.2.2.3.A.2 Understand properties of multiplication and the relationship between multiplication and division.	M03.B-O.2.1.1 Apply the commutative property of multiplication (not identification or definition of the property).

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<u>Unit/Chapter/Selection of Study</u>	<u>Approx # of weeks - % of time</u>	<u>PA Core Standards</u>	<u>Assessment Anchors & Eligible Content</u>
Equivalent Names	.5 week	CC.2.2.3.A.4 Solve problems involving the four operations, and identify and explain patterns in arithmetic.	M03.B-O.3.1.5 Identify arithmetic patterns (including patterns in the addition table or multiplication table) and/or explain them using properties of operations. Example 1: Observe that 4 times a number is always even. Example 2: Explain why 6 times a number can be decomposed into three equal addends.
Measuring with a Ruler (half inch, centimeter)	.5 week	CC.2.4.3.A.1 Solve problems involving measurement and estimation of temperature, liquid volume, mass, and length.	M03.D-M.1.2.3 Use a ruler to measure lengths to the nearest quarter inch or centimeter.
Introduction to Line Plots	.25 week	CC.2.4.3.A.4 Represent and interpret data using tally charts, tables, pictographs, line plots, and bar graphs.	M03.D-M.2.1.3 Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch. Display the data by making a line plot, where the horizontal scale is marked in appropriate units—whole numbers, halves, or quarters.

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			M03.D-M.2.1.4 Translate information from one type of display to another. Limit to pictographs, tally charts, bar graphs, and tables. Example: Convert a tally chart to a bar graph.
<u>Unit/Chapter/Selection of Study</u> Application, Assessment, and Remediation of Math Skills	<u>Approx # of weeks - % of time</u> 2 weeks	<u>PA Core Standards</u> Includes all standards listed throughout the framework	<u>Assessment Anchors & Eligible Content</u> Includes all eligible content/assessment anchors listed throughout the framework

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Big Idea(s) for 3rd nine weeks	Concept(s) of 3rd nine weeks	Competencies of 3rd nine weeks	Essential Questions for 3rd nine weeks
<p>Quadrilaterals are a four sided polygon with specific attributes.</p> <p>Differentiating between area and perimeter of a rectangle is done in order to compute both.</p> <p>Relating number models to word problems permits learners to solve problems efficiently.</p>	<p>Students will know...</p> <ul style="list-style-type: none"> ● polygons attributes and quadrilateral attributes ● area and perimeter ● methods for representing fractions and equivalent fractions ● multiplication strategies ● the steps for solving and writing 1 step and 2 step multiplication number stories ● multiplying with larger factors ● order of operations for number sentences 	<p>Students will be able to...</p> <ul style="list-style-type: none"> ● identify and describe polygons attributes and quadrilateral attributes ● calculate area and perimeter of rectangles ● represent fractions and equivalent fractions with numerators and denominators ● utilize multiplication strategies for difficult facts ● solve and write 1 step and 2 step multiplication number stories ● multiply with larger factors ● execute order of operations to solve number sentences/equations 	<p>What are the attributes for a certain polygon?</p> <p>How do you find the area and perimeter of a rectangle?</p> <p>Are the given fractions equivalent? (see picture)</p> <p>What number models will solve this number story? (see picture)</p> <p>In what order should you solve this number model?</p>

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<u>Unit/Chapter/Selection of Study</u>	<u>Approx # of weeks - % of time</u>	<u>PA Core Standards</u>	<u>Assessment Anchors & Eligible Content</u>
<p>Polygon Attributes and Quadrilateral Attributes</p>	<p>1.5 weeks</p>	<p>CC.2.3.3.A.1 Identify, compare, and classify shapes and their attributes.</p>	<p>M03.C-G.1.1.1 Explain that shapes in different categories may share attributes and that the shared attributes can define a larger category. Example 1: A rhombus and a rectangle are both quadrilaterals since they both have exactly four sides. Example 2: A triangle and a pentagon are both polygons since they are both multi-sided plane figures.</p> <p>M03.C-G.1.1.2 Recognize rhombi, rectangles, and squares as examples of quadrilaterals and/or draw examples of quadrilaterals</p>
<p>Area and Perimeter</p>	<p>1.5 weeks</p>	<p>CC.2.4.3.A.5 Determine the area of a rectangle and apply the concept to multiplication and to addition.</p> <p>CC.2.4.3.A.6 Solve problems involving perimeters of polygons and distinguish between linear and area measures.</p>	<p>M03.D-M.3.1.1 Measure areas by counting unit squares (square cm, square m, square in., square ft, and non-standard square units).</p> <p>M03.D-M.3.1.2 Multiply side lengths to find areas of rectangles with whole-number side lengths in the context of solving real-world and mathematical problems, and</p>

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			<p>represent whole-number products as rectangular areas in mathematical reasoning.</p> <p>M03.D-M.4.1.1 Solve real-world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths, finding an unknown side length, exhibiting rectangles with the same perimeter and different areas, and exhibiting rectangles with the same area and different perimeters. Use the same units throughout the problem.</p>
<p style="text-align: center;"><u>Unit/Chapter/Selection of Study</u></p> <p>Representing Fractions and Equivalent Fractions</p>	<p style="text-align: center;"><u>Approx # of weeks - % of time</u></p> <p style="text-align: center;">1.5 weeks</p>	<p style="text-align: center;"><u>PA Core Standards</u></p> <p>CC.2.1.3.C.1 Explore and develop an understanding of fractions as numbers.</p> <p>CC.2.3.3.A.2 Use the understanding of fractions to partition shapes into parts with equal areas and express the area of each part as a unit fraction of the whole.</p>	<p style="text-align: center;"><u>Assessment Anchors & Eligible Content</u></p> <p>M03.A-F.1.1.3 Recognize and generate simple equivalent fractions (limit the denominators to 1, 2, 3, 4, 6, and 8 and limit numerators to whole numbers less than the denominator). Example 1: $1/2 = 2/4$ Example 2: $4/6 = 2/3$</p> <p>M03.A-F.1.1.4 Express whole numbers as fractions, and/or generate fractions that are equivalent to whole numbers (limit denominators to 1, 2, 3, 4, 6, and 8). Example 1: Express 3</p>

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			<p>in the form $3 = 3/1$. Example 2: Recognize that $6/1 = 6$.</p> <p>M03.C-G.1.1.3 Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole. Example 1: Partition a shape into 4 parts with equal areas. Example 2: Describe the area of each of 8 equal parts as $1/8$ of the area of the shape.</p>
<p><u>Unit/Chapter/Selection of Study</u></p> <p>Multiplication Strategies:Part 2</p>	<p><u>Approx # of weeks - % of time</u></p> <p>.5 week</p>	<p><u>PA Core Standards</u></p> <p>CC.2.2.3.A.2 Understand properties of multiplication and the relationship between multiplication and division.</p> <p>CC.2.2.3.A.3 Demonstrate multiplication and division fluency.</p>	<p><u>Assessment Anchors & Eligible Content</u></p> <p>M03.B-O.2.2.1 Interpret and/or model division as a multiplication equation with an unknown factor. Example: Find $32 \div 8$ by solving $8 \times ? = 32$.</p>
<p><u>Unit/Chapter/Selection of Study</u></p> <p>Solving Problems Involving Money</p>	<p><u>Approx # of weeks - % of time</u></p> <p>.5 week</p>	<p><u>PA Core Standards</u></p> <p>CC.2.4.3.A.3 Solve problems and make change involving money using a combination of coins and bills.</p>	<p><u>Assessment Anchors & Eligible Content</u></p> <p>M03.D-M.1.3.1 Compare total values of combinations of coins (penny, nickel, dime, and quarter) and/or dollar bills less than \$5.00.</p> <p>M03.D-M.1.3.2 Make change for an amount up to \$5.00 with no more than</p>

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			<p>\$2.00 change given (penny, nickel, dime, quarter, and dollar).</p> <p>M03.D-M.1.3.3 Round amounts of money to the nearest dollar.</p>
<p style="text-align: center;"><u>Unit/Chapter/Selection of Study</u></p> <p>Solving and Writing 1-step and 2-step Multiplication and Division Number Stories</p>	<p style="text-align: center;"><u>Approx # of weeks - % of time</u></p> <p style="text-align: center;">.5 week</p>	<p style="text-align: center;"><u>PA Core Standards</u></p> <p>CC.2.2.3.A.4 Solve problems involving the four operations, and identify and explain patterns in arithmetic.</p>	<p style="text-align: center;"><u>Assessment Anchors & Eligible Content</u></p> <p>M03.B-O.3.1.1 Solve two-step word problems using the four operations (expressions are not explicitly stated). Limit to problems with whole numbers and having whole-number answers.</p> <p>M03.B-O.3.1.6 Create or match a story to a given combination of symbols (+, −, ×, ÷, <, >, and =) and numbers.</p>
<p style="text-align: center;"><u>Unit/Chapter/Selection of Study</u></p> <p>Multiplying Larger Factors</p>	<p style="text-align: center;"><u>Approx # of weeks - % of time</u></p> <p style="text-align: center;">.5 week</p>	<p style="text-align: center;"><u>PA Core Standards</u></p> <p>CC.2.2.3.A.2 Understand properties of multiplication and the relationship between multiplication and division.</p>	<p style="text-align: center;"><u>Assessment Anchors & Eligible Content</u></p> <p>M03.B-O.2.1.2 Apply the associative property of multiplication (not identification or definition of the property).</p>

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Order of Operations and Number Sentences with Parentheses	1 week	<p>CC.2.2.3.A.2 Understand properties of multiplication and the relationship between multiplication and division.</p> <p>CC.2.2.3.A.4 Solve problems involving the four operations, and identify and explain patterns in arithmetic.</p>	<p>M03.B-O.2.1.2 Apply the associative property of multiplication (not identification or definition of the property).</p> <p>M03.B-O.3.1.4 Solve two-step equations using order of operations (equation is explicitly stated with no grouping symbols).</p> <p>M03.B-O.3.1.7 Identify the missing symbol (+, −, ×, ÷, <, >, and =) that makes a number sentence true.</p>
Application, Assessment, and Remediation of Math Skills	1.5 weeks	Includes all standards listed throughout the framework	Includes all eligible content/assessment anchors listed throughout the framework

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Big Idea(s) for 4th nine weeks	Concept(s) of 4th nine weeks	Competencies of 4th nine weeks	Essential Questions for 4th nine weeks
<p>Fractions tools are used to determine equivalency and to compare values of fractions.</p> <p>Measuring precisely to the nearest quarter inch ensures accuracy and demonstrates the proper use of math tools.</p>	<p>Students will know...</p> <ul style="list-style-type: none"> ● number stories with measurements ● fractions on a number line, fraction comparisons, and fraction number stories ● the steps to measure to the nearest quarter inch ● the application of extended multiplication and division facts ● factors pairs for products ● shapes to include 2-D and 3-D and their characteristics ● multiplying and dividing with multiples of ten 	<p>Students will be able to...</p> <ul style="list-style-type: none"> ● analyze, discuss and solve measurements' number stories ● identify and compare fractions using different fraction tools ● measure to the nearest quarter inch using a ruler ● recall and apply basic facts to solve extended multiplication and division problems ● examine and conclude upon factor pairs for a given product ● investigate and examine the shared attributes of 3D shapes/prisms ● compare 2-D and 3-D shapes ● multiply and divide with multiples of ten 	<p>What are the steps to solving a measurement number story?</p> <p>What tool can you use to compare these fractions?</p> <p>How do you use the ruler to measure to the nearest quarter inch?</p> <p>What basic fact will help you solve the extended fact?</p> <p>What are the factor pairs for this product?</p> <p>How are the 2-D shape and 3-D shape alike and different?</p>

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<u>Unit/Chapter/Selection of Study</u>	<u>Approx # of weeks - % of time</u>	<u>PA Core Standards</u>	<u>Assessment Anchors & Eligible Content</u>
Measurement Number Stories	1 week	CC.2.4.3.A.1 Solve problems involving measurement and estimation of temperature, liquid volume, mass, and length.	M03.D-M.1.2.2 Add, subtract, multiply, and divide to solve one step word problems involving masses or liquid volumes that are given in the same units.
Fractions on a Number Line, Fraction Comparisons, and Fraction Number Stories	2 weeks	CC.2.1.3.C.1 Explore and develop an understanding of fractions as numbers.	<p>M03.A-F.1.1.2 Represent fractions on a number line (limit denominators to 2, 3, 4, 6, and 8; limit numerators to whole numbers less than the denominator; and no simplification necessary).</p> <p>M03.A-F.1.1.5 Compare two fractions with the same denominator (limit denominators to 1, 2, 3, 4, 6, and 8), using the symbols $>$, $=$, or $<$, and/or justify the conclusions.</p>

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Measuring to the Nearest Quarter Inch	.5 week	CC.2.4.3.A.1 Solve problems involving measurement and estimation of temperature, liquid volume, mass, and length.	M03.D-M.1.2.3 Use a ruler to measure lengths to the nearest quarter inch or centimeter.
Extended Multiplication and Division Facts	.5 week	CC.2.2.3.A.1 Represent and solve problems involving multiplication and division.	M03.B-O.1.2.1 Use multiplication (up to and including 10×10) and/or division (limit dividends through 50 and limit divisors and quotients through 10) to solve word problems in situations involving equal groups, arrays, and/or measurement quantities.
Factors	1 week	CC.2.2.3.A.1 Represent and solve problems involving multiplication and division.	M03.B-O.1.2.2 Determine the unknown whole number in a multiplication (up to and including 10×10) or division (limit dividends through 50 and limit divisors and quotients through 10) equation relating three whole numbers. Example: Determine the unknown number that makes an

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			equation true.
<u>Unit/Chapter/Selection of Study</u> Multiplying and Dividing with Multiples of Ten	<u>Approx # of weeks - % of time</u> 1 week	<u>PA Core Standards</u> CC.2.1.3.B.1 Apply place-value understanding and properties of operations to perform multi-digit arithmetic.	<u>Assessment Anchors & Eligible Content</u> M03.A-T.1.1.3 Multiply one-digit whole numbers by two-digit multiples of 10 (from 10 through 90).
<u>Unit/Chapter/Selection of Study</u> Application and Review of Math Skills	<u>Approx # of weeks - % of time</u> 3 weeks	<u>PA Core Standards</u> Includes all standards listed throughout the framework	<u>Assessment Anchors & Eligible Content</u> Includes all eligible content/assessment anchors listed throughout the framework

Standards Legend: Essential Important Supplementary

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