

**Big Idea: Routines, Review and Assessment , Adding and Subtracting Whole Numbers  
Unit 1 and 2**

Math		Grade: 3			Unit Time Frame: <b>5 weeks</b> <b>September 8- October 23</b>		
Essential Questions	PARCC	Content	Skills	Key Terms	Assessment	College and career Readiness Standards	CC
<p>How can we practice routines and review?</p> <p>How can we add and subtract whole numbers?</p>	N/A	<p>To review types and uses of numbers.</p> <p>To introduce the Math Message routine; to review patterns on number grids.</p> <p>To introduce the Students Reference book</p> <p>To review telling time, measuring lengths, and using calculators</p> <p>To review data concepts</p> <p>To review the idea that there are many names for a number.</p> <p>To introduce the vocabulary of chance.</p> <p>To guide children as they identify number-grid patterns and use them to find differences between number pairs.</p> <p>To review calculator skills.</p> <p>To review money amounts with coins.</p>	<p>Number and Number Sequences</p> <p>Number Grids</p> <p>Introducing the Student Reference Book</p> <p>Tools for Mathematics</p> <p>Analyzing and Displaying Data</p> <p>Equivalent Names</p> <p>The Language of Chance Events</p> <p>Finding Differences</p> <p>Calculator Routines</p> <p>Money</p> <p>Solving Problems with Dollars and Cents</p>	<p>Answer Key</p> <p>Arrow rule</p> <p>Bar graph</p> <p>Calculate</p> <p>Centimeter</p> <p>Data Bank</p> <p>Decimal</p> <p>Decimal point</p> <p>Difference</p> <p>Elapsed time</p> <p>Equivalent</p> <p>Essay</p> <p>Estimate</p> <p>Estimation</p> <p>Event</p> <p>Frame</p> <p>Frames-and-arrows diagram</p> <p>Glossary</p> <p>Inch</p> <p>Index</p> <p>Line plot</p> <p>Make change</p> <p>Mathematical tools</p> <p>Maximum</p> <p>Median</p> <p>Minimum</p> <p>Mode</p>	<p>Unit Tests</p> <p>Chapter Quizzes</p> <p>Math Journal pages</p> <p>Skill links pages</p> <p>Homework</p> <p>Classroom observations</p>	<p>CCR-R1</p> <p>CCR-R2</p> <p>CCR-R3</p> <p>CCR-R7</p> <p>CCR-R10</p> <p>CCR-W2</p> <p>CCR-W5</p> <p>CCR-W10</p> <p>CCR-L4</p> <p>CCR-L6</p> <p>CCR-SL1</p> <p>CCR-SL2</p> <p>CCR-SL6</p>	<p>3.OA.1</p> <p>3.OA.2</p> <p>3.OA.3</p> <p>3.OA.4</p> <p>3.OA.5</p> <p>3.OA.6</p> <p>3.OA.7</p> <p>3.OA.8</p> <p>3.OA.9</p> <p>3.NBT.1</p> <p>3.NBT.2</p> <p>3.NBT.3</p> <p>3.NF.1</p> <p>3.NF.2</p> <p>3.NF.2</p> <p>3.NF.2</p> <p>3.NF.3</p> <p>3.NF.3</p> <p>3.NF.3</p> <p>3.NF.3</p> <p>3.NF.3</p> <p>3.MD.1</p> <p>3.MD.2</p> <p>3.MD.3</p> <p>3.MD.4</p> <p>3.MD.5</p> <p>3.MD.5</p>

		<p>To guide children as they explore number patterns.</p> <p>To review telling time and finding elapsed time.</p> <p>To review fact families and number families.</p> <p>To review ways in which basic addition and subtraction facts are used to solve problems with larger numbers.</p> <p>To provide opportunities to review and solve “What’s my Rule?” problems.</p> <p>To guide children as they use parts-and-total diagrams to help solve parts-and-total number stories.</p> <p>To guide children as they use comparison diagrams to help solve comparison number stories.</p> <p>To guide children as they make ballpark estimates.</p> <p>To review making ballpark estimates.</p> <p>To guide children as they solve number stories having three or more addends.</p>	<p>Patterns</p> <p>The Length of Day Project</p> <p>Fact Families</p> <p>Extensions of Addition and Subtraction Facts</p> <p>“What’s My Rule?”</p> <p>Part-and-Total Number Stories</p> <p>Change Number Stories</p> <p>Comparison The Partial-Sums Algorithm</p> <p>Subtraction Algorithms</p> <p>Addition with Three or More Addends</p>	<p>Museum</p> <p>Name-collecti on box</p> <p>Number gird</p> <p>Number-grid puzzle</p> <p>Range</p> <p>Regular price</p> <p>Sale price</p> <p>Table of Contents</p> <p>Tally chart</p> <p>Toolkit Units</p>			<p>3.MD.1</p> <p>3.MD.2</p> <p>3.MD.3</p> <p>3.MD.4</p> <p>3.MD.5</p> <p>3.MD.6</p> <p>3.MD.7</p> <p>3.MD.8</p> <p>3.MD.9</p> <p>3.G.1</p> <p>3.G.2</p>
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**Big Idea: Linear Measure and Area; Multiplication and Division**

**Unit 3 and**

Math		Grade: 3			Unit Time Frame: <b>5 weeks</b> <b>October 67 – December 4</b>		
Essential Questions	PARCC	Content	Skills	Key Terms	Assessment	College and career Readiness Standards	CC
<p>How can we practice linear measurements and finding area?</p> <p>How can we practice multiplication and division?</p>	N/A	<p>To discuss the need for standard units of measure.</p> <p>To guide children as they measure line segments to the nearest inch, ½ inch, ¼ inch, centimeter, ½ centimeter and millimeter.</p> <p>To review US customary and metric units of length.</p> <p>To review polygons and the concept of perimeter.</p> <p>To guide children as they collect, tabulate and interpret experimental data.</p> <p>To guide children as they make rectangles with given perimeters, relate tiling to area, and construct triangles using given lengths and then find the perimeters.</p> <p>To guide children as they develop the concept of area, demonstrate the measure of area by using 1-foot and 1-yard squares, and find areas by counting squares.</p>	<p>A “Class Shoes” unit of Length</p> <p>Measuring with a Ruler</p> <p>Standard Linear Measures</p> <p>Perimeter</p> <p>A Pattern-Block Toss Experiment</p> <p>EXPLORATIONS: Exploring Perimeter and Area</p> <p>Area</p> <p>Number Models for Area</p> <p>Diameter and Circumference</p> <p>Multiples of Equal Groups</p>	<p>About 3 times circle rule</p> <p>Area</p> <p>Center</p> <p>Centi-Centimeter</p> <p>Circumference</p> <p>Deci-Diameter</p> <p>Foot</p> <p>Inch</p> <p>Length</p> <p>Line segment</p> <p>Meter</p> <p>Metric system</p> <p>Milli-Millimeter</p> <p>Parallelogram</p> <p>Perimeter</p> <p>Personal references</p> <p>Polygon</p> <p>Rectangle</p> <p>Rhombus</p> <p>Square</p> <p>Square feet</p> <p>Square yards</p> <p>Standard unit</p> <p>Tiling</p>	<p>Unit Tests</p> <p>Chapter Quizzes</p> <p>Math Journal pages</p> <p>Skill links pages</p> <p>Homework</p> <p>Classroom observations</p>	<p>CCR-R1</p> <p>CCR-R2</p> <p>CCR-R3</p> <p>CCR-R7</p> <p>CCR-R10</p> <p>CCR-W2</p> <p>CCR-W5</p> <p>CCR-W10</p> <p>CCR-L4</p> <p>CCR-L6</p> <p>CCR-SL1</p> <p>CCR-SL2</p> <p>CCR-SL6</p>	<p>3.OA.1</p> <p>3.OA.2</p> <p>3.OA.3</p> <p>3.OA.4</p> <p>3.OA.5</p> <p>3.OA.6</p> <p>3.OA.7</p> <p>3.OA.8</p> <p>3.OA.9</p> <p>3.NBT.1</p> <p>3.NBT.2</p> <p>3.NBT.3</p> <p>3.NF.1</p> <p>3.NF.2</p> <p>3.NF.2</p> <p>3.NF.2</p> <p>3.NF.3</p> <p>3.NF.3</p> <p>3.NF.3</p> <p>3.NF.3</p> <p>3.NF.3</p> <p>3.NF.3</p> <p>3.MD.1</p> <p>3.MD.2</p> <p>3.MD.3</p> <p>3.MD.4</p> <p>3.MD.5</p> <p>3.MD.5</p>

		<p>To guide children as they develop the concept of area by measuring with identical squares.</p> <p>To guide children as they relate circumference and diameter through the “about 3 times” rule.</p> <p>To review multiplication and equal groups.</p> <p>To provide opportunities to use arrays, multiplication/division diagrams, and number models to represent multiplication number stories.</p> <p>To review division as equal sharing and equal grouping.</p> <p>To provide opportunities to model division number stories with arrays, multiplication/division diagrams, and number models.</p> <p>To discuss multiplication facts and the importance of fact power.</p> <p>To review fact families and the Multiplication/Division Facts Table.</p> <p>To practice multiplication facts.</p> <p>To provide opportunities for children to estimate the number of dots in a large array, solve a problem involving factors of whole numbers, and practice multiplication facts.</p> <p>To introduce the use of a map scale to estimate distances.</p>	<p>Multiplication Arrays</p> <p>Equal Shares and Equal Groups</p> <p>Division Ties to Multiplication</p> <p>Multiplication Fact Power and Shortcuts</p> <p>Multiplication and Division Fact Families</p> <p>Baseball Multiplication</p> <p>EXPLORATIONS: Exploring Arrays and Facts</p> <p>Estimating Distances with a Map Scale</p> <p>A Coin-Toss Experiment</p>	<p>Trapezoid</p> <p>Triangle</p> <p>US customary system</p> <p>Yard</p> <p>Array</p> <p>As the crow flies</p> <p>Dividend</p> <p>Divisor</p> <p>Equally likely</p> <p>Fact power</p> <p>Factor</p> <p>Fair</p> <p>Heads</p> <p>Map scale</p> <p>Multiples of equal groups</p> <p>Multiplication</p> <p>Product</p> <p>Quotient</p> <p>Remainder</p> <p>Scale factor</p> <p>Square numbers</p> <p>Tails</p> <p>Turn-around shortcut</p>			<p>3.MD.8</p> <p>3.MD.9</p> <p>3.MD.10</p> <p>3.MD.11</p> <p>3.MD.12</p> <p>3.MD.13</p> <p>3.MD.14</p> <p>3.MD.15</p> <p>3.MD.16</p> <p>3.MD.17</p> <p>3.MD.18</p> <p>3.G.1</p> <p>3.G.2</p>
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		To guide children as they develop intuition about equally likely events.					
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			Polyhedrons, Part2				
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<b>Big Idea: Multiplication and Division, Fractions Unit 7 and 8</b>							
		Math	Grade: 3			Unit Time Frame: <b>5 weeks</b> January 25 – March 4	
Essential Questions	PARCC	Content	Skills	Key Terms	Assessment	College and career Readiness Standards	CCCS
<p>Why is multiplication and division important in our everyday life?</p> <p>How have you used fractions before?</p>	<p><b>3.NF.2</b></p> <p>Extra Fraction worksheets</p> <p>Number line fraction worksheets</p> <p>Fractions part of the number system worksheets</p>	<p>Review square number facts, multiplication, and division patterns</p> <p>Guide children as they determine which multiplication facts they still need to learn</p> <p>Guide children as they practice multiplication and division facts</p> <p>Introduce parentheses in number sentences</p> <p>Provide opportunities to express numbers as sums of products using number models that contain parentheses</p> <p>Guide children as they multiply 1 digit numbers by multiples of 10, 100, and 1,000</p> <p>Guide children as they determine when an estimate is appropriate</p>	<p>Patterns in products</p> <p>Multiplication facts survey</p> <p>Fact power</p> <p>Number models with parentheses</p> <p>Scoring in basketball: an application</p> <p>Extended facts: multiplication and division</p> <p>Estimating costs</p> <p>Extended facts: products of ten</p> <p>Explorations: exploring ratios and</p>	<p>Estimate</p> <p>Extended facts</p> <p>Factor</p> <p>Parentheses</p> <p>Product</p> <p>Similar figures</p> <p>Square number</p> <p>Square product</p> <p>Denominator</p> <p>Equal</p> <p>Equivalent fractions</p> <p>Mixed number</p> <p>Numerator</p> <p>Random draw</p> <p>Unit fraction</p> <p>Whole (the one)</p>	<p>Unit tests</p> <p>Chapter quizzes</p> <p>Math journal pages</p> <p>Homework</p> <p>Skill link pages</p> <p>Classroom observation</p>	<p><b>CCR-R1</b></p> <p><b>CCR-R2</b></p> <p><b>CCR-R3</b></p> <p><b>CCR-R7</b></p> <p><b>CCR-R10</b></p> <p><b>CCR-W2</b></p> <p><b>CCR-W5</b></p> <p><b>CCR-W10</b></p> <p><b>CCR-L4</b></p> <p><b>CCR-L6</b></p> <p><b>CCR-SL1</b></p> <p><b>CCR-SL2</b></p> <p><b>CCR-SL6</b></p>	<p><b>3.OA.1</b></p> <p><b>3.OA.2</b></p> <p><b>3.OA.3</b></p> <p><b>3.OA.4</b></p> <p><b>3.OA.5</b></p> <p><b>3.OA.6</b></p> <p><b>3.OA.7</b></p> <p><b>3.OA.8</b></p> <p><b>3.OA.9</b></p> <p><b>3.NBT.1</b></p> <p><b>3.NBT.2</b></p> <p><b>3.NBT.3</b></p> <p><b>3.NF.1</b></p> <p><b>3.NF.2</b></p> <p><b>3.NF.2a</b></p> <p><b>3.NF.2b</b></p> <p><b>3.NF.3</b></p> <p><b>3.NF.3a</b></p> <p><b>3.NF.3b</b></p> <p><b>3.NF.3c</b></p> <p><b>3.NF.3d</b></p> <p><b>3.MD.1</b></p> <p><b>3.MD.2</b></p> <p><b>3.MD.3</b></p> <p><b>3.MD.4</b></p> <p><b>3.MD.5</b></p> <p><b>3.MD.5a</b></p> <p><b>3.MD.5b</b></p> <p><b>3.MD.6</b></p> <p><b>3.MD.7</b></p>

		<p>and as they practice estimates</p> <p>Guide children as they multiply multiples of 10 by multiples of 10</p> <p>Explore similar polygons, solving ratio problems, and exploring geometric configurations</p> <p>Guide children as they use fractions to name a of b equal parts</p> <p>Guide children as they make predictions based on outcomes and construct situations that meet given conditions</p> <p>Provide opportunities to explore fractional relationships, spatial relationships, and combinations</p> <p>Introduce the number line as a model for fractions</p> <p>Guide children as they find equivalent fractions</p> <p>Guide children as they compare fractions using region models</p> <p>Demonstrate naming quantities greater than 1</p>	<p>geometric figures</p> <p>Naming parts with fractions</p> <p>Blocks in a bag experiment</p> <p>Explorations: exploring fractions, re-forming squares, and combinations</p> <p>Number line posters for fractions</p> <p>Equivalent fractions</p> <p>Comparing fractions</p> <p>Fractions greater than one</p> <p>Fractions in number stories</p>				<p><b>3.MD.7a</b>  <b>3.MD.7b</b>  <b>3.MD.7c</b>  <b>3.MD.7d</b>  <b>3.MD.8</b>  <b>3.G.1</b>  <b>3.G.2</b></p>
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		with fractions and mixed numbers  Provide experiences with solving number stories involving fractions					
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<b>Big Idea: Multiplication and Division, Measurement and Data</b>							
<b>Unit 9 and 10</b>							
	Math		Grade: 3			Unit Time Frame: <b>5 weeks</b> March 7 – April 15	
Essential Questions	PARCC	Content	Skills	Key Terms	Assessment	College and career Readiness Standards	CCCS
<p>How do we use multiplication and division?</p> <p>How can you measure and use data?</p>	<p><b>3.MD.2</b></p> <p>Worksheets on: Liquid volume Mass Measuring quantities</p> <p>Fraction arithmetic with measuring quantities</p>	<p>Multiply and divide with multiples of 10, 100, and 1,000</p> <p>Guide children as they use mental math to multiply 1-digit numbers by multidigit numbers</p> <p>Model multiplication with base-10 blocks, explore area relationships, find fractions of fractions</p> <p>Multiply 1-digit numbers by multidigit numbers using a partial-products algorithm</p> <p>Identify whole number factors of whole numbers</p> <p>Share whole-dollar amounts equally</p> <p>Explore computational strategies for division and interpret remainders</p>	<p>Multiply and Divide with Multiples of 10, 100, and 1,000</p> <p>Using mental math to multiply</p> <p>Exploring arrays, areas, and fractions</p> <p>A multiplication algorithm</p> <p>Buying at the stock-up sale</p> <p>Factors of a whole number</p> <p>Sharing money</p> <p>Broken calculator division</p>	<p>Algorithm Celsius scale Degrees Celsius Degrees Fahrenheit Equilateral triangle Factors Fahrenheit scale Lattice multiplication Partial-products algorithm Average Capacity of a container Capacity of a scale Coordinate Coordinate grid Cubic centimeter Frequency table Height of a prism Mean</p>	<p>Unit tests Chapter quizzes Math journal pages Homework Skill link pages Classroom observation</p>	<p><b>CCR-R1</b> <b>CCR-R2</b> <b>CCR-R3</b> <b>CCR-R7</b> <b>CCR-R10</b></p> <p><b>CCR-W2</b> <b>CCR-W5</b> <b>CCR-W10</b></p> <p><b>CCR-L4</b> <b>CCR-L6</b></p> <p><b>CCR-SL1</b> <b>CCR-SL2</b> <b>CCR-SL6</b></p>	<p><b>3.OA.1</b> <b>3.OA.2</b> <b>3.OA.3</b> <b>3.OA.4</b> <b>3.OA.5</b> <b>3.OA.6</b> <b>3.OA.7</b> <b>3.OA.8</b> <b>3.OA.9</b></p> <p><b>3.NBT.1</b> <b>3.NBT.2</b> <b>3.NBT.3</b></p> <p><b>3.NF.1</b> <b>3.NF.2</b> <b>3.NF.2a</b> <b>3.NF.2b</b> <b>3.NF.3</b> <b>3.NF.3a</b> <b>3.NF.3b</b> <b>3.NF.3c</b> <b>3.NF.3d</b></p> <p><b>3.MD.1</b> <b>3.MD.2</b> <b>3.MD.3</b> <b>3.MD.4</b> <b>3.MD.5</b> <b>3.MD.5a</b> <b>3.MD.5b</b> <b>3.MD.6</b> <b>3.MD.7</b></p>

		<p>Introduce the lattice method of multiplication</p> <p>Explore 2-digit multiplication, number patterns, and rigidity of triangles</p> <p>Extend the partial-products method to products of 2-digit numbers and 2-digit multiples of 10</p> <p>Extend the partial-products method to products of 2-digit numbers and 2-digit multiples of 10</p> <p>Investigate positive and negative numbers</p> <p>Review units, tools, and measuring length in U.S. customary and metric systems</p> <p>Explore the volume of rectangular prisms</p> <p>Concept of capacity</p> <p>Mean of a set of data, review median of a set of data</p> <p>Calculate the mean of a set of data, review the median</p>	<p>Lattice multiplication</p> <p>Exploring arrays, equilateral triangles, and strength of paper</p> <p>Products of 2-digit numbers, part 1 and 2</p> <p>Positive and negative numbers</p> <p>Length</p> <p>Volume</p> <p>Weight</p> <p>Capacity</p> <p>Mean and median</p> <p>Calculating the mean</p> <p>Calculator memory</p> <p>Frequency distributions</p> <p>Coordinate grids</p>	<p>Median</p> <p>Memory</p> <p>Memory key</p> <p>Mode</p> <p>Ordered pair</p> <p>Plotting the point</p> <p>Precision</p> <p>Square centimeter</p> <p>Square inch</p> <p>Volume weight</p>			<p><b>3.MD.7a</b></p> <p><b>3.MD.7b</b></p> <p><b>3.MD.7c</b></p> <p><b>3.MD.7d</b></p> <p><b>3.MD.8</b></p> <p><b>3.G.1</b></p> <p><b>3.G.2</b></p>
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		Memory keys on a calculator					
		plotting coordinates on coordinate grids					