

Math Curriculum Map: 4th Grade

Common Core Performance Standards								
Key Areas of Focus for Mathematics								
Trimester 1		Trimester 2		Trimester 3				
Units: 1, 2, 3, 5 (rounding)		Units: 4, 5, 6, 7, 9		Units: 6, 7, 8, 10, 11, 12				
<p>Computation</p> <p>Demonstrate automaticity with multiplication and division facts.</p> <p>Operations and Algebraic Thinking</p> <p>Interpret multiplication problems. Find factor pairs. Recognize a whole number is a multiple of its factors. Determine multiples of given numbers. Identify numbers as prime or composite. Generate patterns that follow a given rule. Analyze patterns.</p> <p>Number and Operations in Base Ten</p> <p>Read and write multi-digit numbers using base-ten numerals, number names, and expanded form. Compare numbers and record results using symbols. Round multi-digit whole numbers to any place. Fluently add and subtract multi-digit whole numbers using the standard algorithm.</p> <p>Measurement and Data</p> <p>Solve problems involving measurements and conversion of measurements from a larger unit to a smaller unit.</p> <ul style="list-style-type: none"> • Units: hour, minute, second; pound, ounce <p>Make a line plot to display a data set of measurements in fractions of a unit ($\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$). Interpret the data.</p> <p>Geometry</p> <p>Draw points, lines, line segments, rays, and angles; identify these in two-dimensional figures. Classify shapes. Recognize right triangles as a category, and identify right triangles.</p>	<p>Computation</p> <p>Operations and Algebraic Thinking</p> <p>Distinguish multiplicative comparison from additive comparison. Solve and represent word problems involving multiplication and division involving multiplicative comparison.</p> <p>Number and Operations in Base Ten</p> <p>Generalize understanding of place value to multi-digit numbers; recognize that a digit in a given place represents ten times what it represents in the place to its right. Multiply numbers including 4-digit by 1-digit and 2-digit by 2-digit; illustrate and explain calculations. Divide numbers with up to 4-digit dividends and 1-digit divisor; illustrate and explain calculations.</p> <p>Number and Operations-Fractions</p> <p>Explain equivalent fractions. Recognize and generate equivalent fractions. Compare fractions to each other and to benchmark fractions. (Recognize the importance of the whole). Record comparison results with symbols; justify conclusions. Use decimal notation for fractions with denominators of 10, 100. Compare decimals to hundredths, and record comparison results with symbols; justify conclusions.</p> <p>Measurement and Data</p> <p>Solve problems involving measurements and conversion of measurements from a larger unit to a smaller unit.</p> <ul style="list-style-type: none"> • Units: km, m, cm; kg, g; ml, l <p>Represent and Interpret data. Understand concepts of angle and measure angles.</p> <p>Geometry</p>		<p>Computation</p> <p>Operations and Algebraic Thinking</p> <p>Solve and represent multi-step word problems (all operations) using a letter for the unknown. Interpret remainders. Assess reasonableness of answers using mental computation, estimation, and rounding.</p> <p>Number and Operations in Base Ten</p> <p>Number and Operations-Fractions</p> <p>Understand unit fractions. Decompose fractions. Multiply a whole number by fraction. Add and subtract mixed numbers with like denominators. Solve word problems involving addition and subtraction of fractions with like denominators.</p> <p>Measurement and Data</p> <p>Solve problems involving addition and subtraction of fractions by using information presented in line plots. Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money. Solve problems involving conversions of measurements. Represent measurement quantities using diagrams (including the number line).</p> <p>Geometry</p> <p>Identify line-symmetry figures and draw lines of symmetry.</p>					
Standards Key								
<p>OA=Operations and Algebraic Thinking, NBT=Number and Operations in Base Ten, NF=Number and Operations-Fractions, MD=Measurement and Data, G=Geometry CM=Computation Multiplication Facts, CD=Computation Division Facts</p>								
<p>Mastery: CM, CD 4.OA.1, 4, 5</p>	<p>4.NBT.2, 3, 4, 4. MD.1, (hr., min., sec.; lb., oz.), 4 (Make line plots in fractional units.) 4.G.1, 2</p>	<p>Mastery: 4.OA.2, 4.NBT.1, 5, 6</p>	<p>4.NF.1, 2, 6, 7 4.MD.1 (metric), 5,6,7 4.G</p>	<p>Mastery: 4.OA.3 4.NBT</p>	<p>4.NF.3, 4, 5 4. MD.2, 3, 4 (Solve fraction problems when interpreting data.) 4.G.3</p>			
Standards for Mathematical Practice			Math Claims					
<p>1. Make sense of problems and persevere in solving them. 2. Reason abstractly and quantitatively. 3. Construct viable arguments and critique the reasoning of others. 4. Model with mathematics.</p>			<p>5. Use appropriate tools strategically. 6. Attend to precision. 7. Look for and make use of structure. 8. Look for and express regularity in repeated reasoning.</p>			<p>Claim 1: Concepts and Procedures Claim 2: Problem Solving Claim 3: Communicating Reasoning Claim 4: Modeling and Data Analysis</p>		