

# Math Curriculum Map for Fifth Grade

	September	October	November	December	January	
Unit Name or Theme	Number Theory	Estimation and Computation	Division	Fractions >>	<< and Decimals	Unit Name or Theme
Enduring Understandings and Performance Indicators	<p>Numbers can be expressed in multiple forms</p> <p>Whole numbers can be manipulated within the distributive property</p> <p>The associative and commutative properties can be utilized to simplify computations</p> <p>Numbers share relationships</p> <p>Logical reasoning can help me solve mathematical and real-world problems</p>	<p>Addition, subtraction, and multiplication share a relationship</p> <p>Logical reasoning and estimation</p>	<p>Division shares a relationship with multiplication</p> <p>Numbers can be divided using a variety of strategies</p>	<p>Relationships exist among fractions, decimals and percentages</p> <p>Fractions demonstrate numbers, decimals, measurements and percentages</p> <p>Numerical values can be communicated in decimals</p> <p>Decimals can be converted into fractions and percentages</p>	>>	Enduring Understandings and Performance Indicators
Essential Questions	<p>How can I determine the GCF?</p> <p>How do I identify the LCM?</p>	<p>How can I use the appropriate strategies to solve a given situation or problem?</p> <p>How do I apply logical reasoning to a mathematical situation?</p>	<p>What is the relationship between multiplication and division?</p> <p>How can I divide fractions?</p> <p>How can I divide unit fractions by whole numbers and whole numbers by unit fractions?</p>	<p>How can I demonstrate the connection among fractions, decimals and percentages?</p> <p>How can decimals be rounded?</p> <p>How can models help me demonstrate decimals?</p> <p>How would you compare and order whole numbers and decimals?</p>	>>	Essential Questions
Assessment Strategies Formative & Summative	<p>Math binders</p> <p>Cal Quizzes</p> <p>Tests</p> <p>Group work (Weekly math challenge)</p> <p>Singapore math model drawing</p> <p>Paper/pencil class work</p> <p>Homework</p> <p>Morning journal</p> <p>Math binders</p> <p>Daily mental math</p> <p>Weekly math challenge</p> <p>Dyna-Math</p>	<p>Quizzes</p> <p>Tests</p> <p>Group work (Weekly math challenge)</p> <p>Singapore math model drawing</p> <p>Paper/pencil class work</p> <p>Homework</p> <p>Morning journal</p> <p>Math binders</p> <p>Daily mental math</p> <p>Weekly math challenge</p> <p>Dyna-Math</p>	<p>Quizzes</p> <p>Tests</p> <p>Group work (Weekly math challenge)</p> <p>Singapore math model drawing</p> <p>Paper/pencil class work</p> <p>Homework</p> <p>Morning journal</p> <p>Math binders</p> <p>Daily mental math</p> <p>Weekly math challenge</p> <p>Dyna-Math</p>	<p>Quizzes</p> <p>Tests</p> <p>Group work (Weekly math challenge)</p> <p>Singapore math model drawing</p> <p>Paper/pencil class work</p> <p>Homework</p> <p>Morning journal</p> <p>Math binders</p> <p>Daily mental math</p> <p>Weekly math challenge</p> <p>Dyna-Math</p>	<p>Quizzes</p> <p>Tests</p> <p>Group work (Weekly math challenge)</p> <p>Singapore math model drawing</p> <p>Paper/pencil class work</p> <p>Homework</p> <p>Morning journal</p> <p>Math binders</p> <p>Daily mental math</p> <p>Weekly math challenge</p> <p>Dyna-Math</p>	Assessment Strategies Formative & Summative

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Instructional Skills and Strategies	<p><b>Instructional Skills and Strategies:</b> Singapore math strategies (word problems for model drawing practice)</p> <p>Identify even and odd numbers</p> <p>Find factors of a number</p> <p>Understand prime and composite numbers</p> <p>Find prime factorization of a number</p> <p>Identify greatest common factor and least common multiple</p> <p>Recognize square numbers and square roots</p> <p>Roman numerals Prime Numbers Factors Rules of divisibility</p>	<p><b>Instructional Skills and Strategies:</b> Review addition, subtraction, and multiplication facts</p> <p>Apply estimation and mental math strategies</p>	<p><b>Instructional Skills and Strategies:</b> Interpret fractions as division of the numerator by the denominator</p> <p>Solve word problems involving division of whole numbers</p> <p>Find fractions or mixed fractions from dividing whole numbers</p> <p>Apply and extend multiplication to division</p> <p>Apply and extend division to divide unit fractions by whole numbers and whole numbers by unit fractions</p>	<p><b>Instructional Skills and Strategies:</b> Use decimal notation for fractions</p> <p>Compare two decimals to hundredths by reasoning about size</p> <p>Record comparisons among decimals</p> <p>Justify conclusions in mathematical terms</p> <p>Use a visual model to represent decimal values</p>	<p><b>Instructional Skills and Strategies:</b> Compare decimals to fractional benchmarks</p> <p>Shade grids to represent fractions as decimals</p> <p>Order fractions and mixed numbers</p> <p>Add and subtract fractions</p> <p>Compare percentages; ordering from least to greatest</p>	Instructional Skills and Strategies
Primary Resources	<p>EveryDay Math Daily Mental Math Weekly Math Challenge Math binders Dyna-Math</p>	<p>Everyday Math Math binders Calculators Daily mental math Weekly math challenge Dyna-Math</p>	<p>Everyday Math Math binders Calculators Daily mental math Weekly math challenge Dyna-Math</p>	<p>Everyday Math Math binders Calculators Daily mental math Weekly math challenge Dyna-Math</p>	<p>Everyday Math Math binders Calculators Daily mental math Weekly math challenge Dyna-Math</p>	Primary Resources
Links with CCSS/ NCTM	<p>CCSS 5.NBT NCTM Number and Operation Standard, Problem Solving, Communication, Connection, Representation</p>	<p>NCTM Number and Operations, Problem Solving, Communications, Connections, Representation</p>	<p>CCSS 5.NF.3, 5.NF.4, 5.NF.7 NCTM Numbers and Operations, Algebra, Communications, Connections, Representation</p>	<p>CCSS 5.NBT.1, 5.MD.2 NCTM Measurement, Problem Solving, Reasoning and Proof Communications, Connections, Representation,</p>	<p>NCTM Problem Solving, Communications, Connections, Representation</p>	Links with CCSS/NCTM

# Math Curriculum Map for Fifth Grade

	February	March	April	May	June	
Unit Name or Theme	Using Data	Exponents (and Negative Numbers)	Geometry	Area, Perimeter >>>	<<< and Volume	Unit Name or Theme
Enduring Understandings and Performance Indicators	<p>The possible results of an experiment can be described &amp; graphed</p> <p>Data can be represented and interpreted</p> <p>Data can be documented in appropriate units</p> <p>A difference can be determined between predicted and actual outcomes</p>	<p>Numerical expressions can be demonstrated in a variety of ways</p> <p>Numerical patterns exist between and among corresponding terms</p>	<p>Geometric shapes share attributes</p> <p>Geometric shapes can be described, classified &amp; compared according to their characteristics</p> <p>Geometric patterns can be recognized, described, extended &amp; created based on attributes &amp; numbers</p> <p>Geometric shapes can be partitioned</p> <p>2 and 3 dimensional shapes</p>	<p>Linear and area measurements can be determined</p> <p>Real world mathematical problems can be solved with measurement</p> <p>Perimeter is an attribute of plane figures</p> <p>Equations can help me solve measurement problems</p>	<p>Volume is an attribute of solid figures</p> <p>Volume can be measured</p>	Enduring Understandings and Performance Indicators
Essential Questions	How can we quantify an event or data without whole numbers?	<p>How can I interpret numerical expressions?</p> <p>What is an exponent?</p>	<p>How can I represent a shape as a 2 or 3 dimensional figure?</p> <p>How can I record characteristics of geometric shapes?</p> <p>What is the relationship among geometric shapes or patterns?</p>	<p>What is area?</p> <p>How do I determine area?</p> <p>How do I determine the perimeter of a given space?</p>	<p>What is volume?</p> <p>How do I determine the volume of a given space or container?</p> <p>How is volume correlated with multiplication and addition?</p>	Essential Questions
Assessment Strategies Formative & Summative	<p>Quizzes</p> <p>Tests</p> <p>Group work (Weekly math challenge)</p> <p>Singapore math model drawing</p> <p>Paper/pencil class work</p> <p>Homework</p> <p>Morning journal</p> <p>Math binders</p> <p>Daily mental math</p> <p>Weekly math challenge</p> <p>Dyna-Math</p>	<p>Quizzes</p> <p>Tests</p> <p>Group work (Weekly math challenge)</p> <p>Singapore math model drawing</p> <p>Paper/pencil class work</p> <p>Homework</p> <p>Morning journal</p> <p>Math binders</p> <p>Daily mental math</p> <p>Weekly math challenge</p> <p>Dyna-Math</p>	<p>Quizzes</p> <p>Tests</p> <p>Group work (Weekly math challenge)</p> <p>Singapore math model drawing</p> <p>Paper/pencil class work</p> <p>Homework</p> <p>Morning journal</p> <p>Math binders</p> <p>Daily mental math</p> <p>Weekly math challenge</p> <p>Dyna-Math</p>	<p>Quizzes</p> <p>Tests</p> <p>Group work (Weekly math challenge)</p> <p>Singapore math model drawing</p> <p>Paper/pencil class work</p> <p>Homework</p> <p>Morning journal</p> <p>Math binders</p> <p>Daily mental math</p> <p>Weekly math challenge</p> <p>Dyna-Math</p>	<p>Quizzes</p> <p>Tests</p> <p>Group work (Weekly math challenge)</p> <p>Singapore math model drawing</p> <p>Paper/pencil class work</p> <p>Homework</p> <p>Morning journal</p> <p>Math binders</p> <p>Daily mental math</p> <p>Weekly math challenge</p> <p>Dyna-Math</p>	Assessment Strategies Formative & Summative

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Instructional Skills and Strategies	<p><b>Instructional Skills and Strategies:</b> Solve real world problems</p> <p>Represent and interpret data</p> <p>Convert standard measurement units within a given measurement system in solving multi-step problems</p> <p>Make a line plot to display a data set of measurements in fractions</p>	<p><b>Instructional Skills and Strategies:</b> Use parentheses, brackets or braces in numerical expressions</p> <p>Write simple expressions that record calculations with numbers or negative numbers</p> <p>Interpret numerical expressions</p> <p>Generate two numerical patterns using two given rules</p> <p>Solve real world problems using equations</p>	<p><b>Instructional Skills and Strategies:</b> Classify two dimensional figures and shapes based on their properties</p> <p>Use axes to define a coordinate system</p> <p>Represent real world problems by graphing points in the first quadrant of the coordinate plane</p>	<p><b>Instructional Skills and Strategies:</b> Find area with mini-society project (e.g. square feet representations, rental pricing)</p> <p>Apply the formula, <math>A=l \times w \times h</math></p> <p>Find the area of several different shapes and figures</p> <p>Find the area of rectangles with fractional side lengths</p>	<p><b>Instructional Skills and Strategies:</b> Recognize volume as an attribute of solid figures</p> <p>Measure volumes by counting unit cubes, use cubic cm, cubic in, cubic ft and improvised units</p> <p>Relate volume to the operations of multiplication and addition</p> <p>Apply the formula <math>v=l \times w \times h</math> and <math>v=b \times h</math> for rectangular prisms</p> <p>Find volumes of solid figures composed of two non-overlapping right rectangular prisms</p>	Instructional Skills and Strategies
Primary Resources	<p>Everyday Math Math binders Calculators Daily mental math Weekly math challenge Dyna-Math</p>	<p>Everyday Math Math binders Calculators Daily mental math Weekly math challenge Dyna-Math</p>	<p>Everyday Math Math binders Calculators Daily mental math Weekly math challenge Dyna-Math</p>	<p>Everyday Math Math binders Calculators Daily mental math Weekly math challenge Dyna-Math</p>	<p>Everyday Math Math binders Calculators Daily mental math Weekly math challenge Dyna-Math</p>	Primary Resources
Links with CCSS/NCTM	<p>CCSS 5.NF.6, 5.MD.1, 5.MD.2 NCTM Problem Solving, Communications, Connections and Representation</p>	<p>CCSS 5.OA.1, 5.OA.2, 5.OA.3, 5.NF.6 NCTM Algebra, Problem Solving, Communications, Connections, Representation</p>	<p>CCSS 5.G.1, 5.G.2, 5.G.3, 5.G.4 NCTM Problem Solving, Communications, Connections, Representation</p>	<p>CCSS 5.NF.6 NCTM Problem Solving, Communications, Connections, Representation</p>	<p>CCSS 5.MD. 3ab,5.MD.4, 5.MD.5abc, 5.G.3, 5.G.4 NCTM Data Analysis and Probability, Problem Solving, Reasoning and Proof, Communications, Connections, Representation</p>	Links with CCSS/NCTM