

**Scope and Sequence - 5th Grade Math**

Month and # of days spent	Title of Unit	Concepts being taught	Content being taught	Skills being taught	Resources Used	Assessments Used (Formative and Summative)
Aug. (7 day)	Topic 1 - Understand Place Value	Reason abstractly and quantitatively. Look for and make use of structure	Number & Operations in Base Ten: Understand the place value system	<ol style="list-style-type: none"> <li>1. Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and 1/10 of what it represents in the place to its left.</li> <li>2. Explain patterns in the number of zeros of the product when multiplying a number by powers of 10, and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10. Use whole-number exponents to denote powers of 10.</li> <li>3. Read, write, and compare decimals to thousandths.                             <ol style="list-style-type: none"> <li>a. Read and write decimals to thousandths using base-ten numerals, number names, and expanded form, e.g., <math>347.392 = 3 \times 100 + 4 \times 10 + 7 \times 1 + 3 \times 1/10 + 9 \times 1/100 + 2 \times 1/1000</math>.</li> <li>b. Compare two decimals to thousandths based on meanings of the digits in each place, using <math>&gt;</math>, <math>=</math>, and <math>&lt;</math> symbols to record the results of comparisons.</li> <li>4. Use place value understanding to round decimals to any place.</li> </ol> </li> </ol>	enVision Math, Mountain Math	Pre test, Formative: number talks, lesson assessments Summative: Unit test
7 days September	Topic 2 Add and Subtract Decimals to Hundredths	MP3. Construct viable arguments and critique the reasoning of others. MP5. Use appropriate tools strategically. MP7. Look for and make use of structure.	Number & Operations in Base Ten: Perform operations with multi-digit whole numbers and with decimals to hundredths	<ol style="list-style-type: none"> <li>5. Fluently multiply multi-digit whole numbers using the standard algorithm.</li> </ol>	enVisionMath Mountain Math	Pre test, Formative: number talks, lesson assessments Summative: Unit test
7 days September	Topic 3 Fluently Multiply Multi-Digit Whole Number	MP3. Construct viable arguments and critique the reasoning of others. MP5. Use appropriate tools strategically. MP7. Look for and make use of structure.	Number & Operations in Base Ten: Perform operations with multi-digit whole numbers and with decimals to hundredths	multiply decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used	enVision Math, Mountain Math	Pre test, Formative: number talks, lesson assessments Summative: Unit test
10 days	Topic 4 Use Models and Strategies to Multiply Decimals	MP3. Construct viable arguments and critique the reasoning of others. MP5. Use appropriate tools strategically. MP7. Look for and make use of structure.	Number & Operations in Base Ten: Perform operations with multi-digit whole numbers and with decimals to hundredths	Find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models. (CCSS: 5.NBT.B.6)	enVision Math, Mountain Math	Pre test, Formative: number talks, lesson assessments Summative: Unit test
8 days	Topic 5 Use Models and Strategies to Divide Whole Numbers	MP3. Construct viable arguments and critique the reasoning of others. MP5. Use appropriate tools strategically. MP7. Look for and make use of structure.	Number & Operations in Base Ten: Perform operations with multi-digit whole numbers and with decimals to hundredths	Divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. (CCSS: 5.NBT.B.7)	enVision Math, Mountain Math	Pre test, Formative: number talks, lesson assessments Summative: Unit test
9 days	Topic 6 Use Models and Strategies to Divide Decimals	MP3. Construct viable arguments and critique the reasoning of others. MP5. Use appropriate tools strategically. MP7. Look for and make use of structure.	Number & Operations in Base Ten: Perform operations with multi-digit whole numbers and with decimals to hundredths	**Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators. (CCSS: 5.NF.A.1) **Solve word problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators, e.g., by using visual fraction models or equations to represent the problem. Use benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers.	enVision Math, Mountain Math	Pre test, Formative: number talks, lesson assessments Summative: Unit test
12 days	Topic 7 Use Equivalent Fractions to Add and Subtract Fractions	MP3. Construct viable arguments and critique the reasoning of others. MP6. Attend to precision. MP7. Look for and make use of structure	Number & Operations—Fractions: Use equivalent fractions as a strategy to add and subtract fractions.	Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction. (CCSS: 5.NF.B.4)	enVision Math, Mountain Math	Pre test, Formative: number talks, lesson assessments Summative: Unit test
9 days	Topic 8 Apply Understanding of Multiplication to Multiply Fractions	MP5. Use appropriate tools strategically. MP6. Attend to precision. MP7. Look for and make use of structure.	5.NF.B. Number & Operations—Fractions: Apply and extend previous understandings of multiplication and division.			

### Scope and Sequence - 5th Grade Math

Month and # of days spent	Title of Unit	Concepts being taught	Content being taught	Skills being taught	Resources Used	Assessments Used (Formative and Summative)
8 days	Topic 9 Apply understanding of Division to divide fractions	MP5. Use appropriate tools strategically. MP6. Attend to precision. MP7. Look for and make use of structure.	5.NF.B. Number & Operations—Fractions: Apply and extend previous understandings of multiplication and division.	Interpret a fraction as division of the numerator by the denominator ( $aa \div bb = aa \div bb$ ). Solve word problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers, e.g.	enVision Math, Mountain Math	Pre test, Formative: number talks, lesson assessments Summative: Unit test
6 days	Topic 10 Understand Volume Concepts	MP2. Reason abstractly and quantitatively. MP5. Use appropriate tools strategically. MP7. Look for and make use of structure.	5.MD.C. Measurement & Data: Geometric measurement: Understand concepts of volume and relate volume to multiplication and to addition.	3. Recognize volume as an attribute of solid figures and understand concepts of volume measurement. (CCSS: 5.MD.C.3) a. A cube with side length 1 unit, called a "unit cube," is said to have "one cubic unit" of volume and can be used to measure volume. (CCSS: 5.MD.C.3.a) b. A solid figure which can be packed without gaps or overlaps using $nm$ unit cubes is said to have a volume of $nm$ cubic units. (CCSS: 5.MD.C.3.b) 4. Measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ft, and improvised units. (CCSS: 5.MD.C.4) 5. Relate volume to the operations of multiplication and addition and solve real-world and mathematical problems involving volume. (CCSS: 5.MD.C.5)	enVision Math, Mountain Math	Pre test, Formative: number talks, lesson assessments Summative: Unit test
8 days	Topic 11 Convert Measurements	MP6. Attend to precision.	Measurement & Data: Convert like measurement units within a given measurement system.	Convert among different-sized standard measurement units within a given measurement system (e.g., convert 5 cm to 0.05 m), and use these conversions in solving multi-step, real-world problems. (CCSS: 5.MD.A.1)	enVision Math, Mountain Math	Pre test, Formative: number talks, lesson assessments Summative: Unit test
4 days	Topic 12 Represent and Interpret Data	MP5. Use appropriate tools strategically.	Measurement & Data: Represent and interpret data.	Make a line plot to display a data set of measurements in fractions of a unit ( $\frac{1}{2}, \frac{1}{4}, \frac{1}{8}$ ). Use operations on fractions for this grade to solve problems involving information presented in line plots.	enVision Math, Mountain Math	Pre test, Formative: number talks, lesson assessments Summative: Unit test
5 days	Topic 13 Write and interpret numerical expressions	MP7. Look for and make use of structure.	5.OA.A. Operations & Algebraic Thinking: Write and interpret numerical expressions.	Use grouping symbols (parentheses, brackets, or braces) in numerical expressions, and evaluate expressions with these symbols. (CCSS: 5.OA.A.1) 2. Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them. For example, express the calculation "add 8 and 7, then multiply by 2" as $2 \times (8 + 7)$ . Recognize that $3 \times (18932 + 921)$ is three times as large as $18932 + 921$ , without having to calculate the indicated sum or product. (CCSS: 5.OA.A.2)	enVision Math, Mountain Math	Pre test, Formative: number talks, lesson assessments Summative: Unit test
4 days	Topic 14 Graph Points on the Coordinate Plane	MP2. Reason abstractly and quantitatively.	Geometry: Graph points on the coordinate plane to solve real-world and mathematical problems.	Use a pair of perpendicular number lines, called axes, to define a coordinate system, with the intersection of the lines (the origin) arranged to coincide with the 0 on each line and a given point in the plane located by using an ordered pair of numbers, called its coordinates. Understand that the first number indicates how far to travel from the origin in the direction of one axis, and the second number indicates how far to travel in the direction of the second axis, with the convention that the names of the two axes and the coordinates correspond (e.g., $xx$ -axis and $xx$ -coordinate, $yy$ -axis and $yy$ -coordinate). (CCSS: 5.G.A.1) 2. Represent real-world and mathematical problems by graphing points in the first quadrant of the coordinate plane, and interpret coordinate values of points in the context of the situation. (CCSS: 5.G.A.2)	enVision Math, Mountain Math	Pre test, Formative: number talks, lesson assessments Summative: Unit test
4 days	Topic 15 Algebra: Analyze Patterns and Relationships	MP3. Construct viable arguments and critique the reasoning of others. MP8. Look for and express regularity in repeated reasoning.	Operations & Algebraic Thinking: Analyze patterns and relationships.	Generate two numerical patterns using two given rules. Identify apparent relationships between corresponding terms. Form ordered pairs consisting of corresponding terms from the two patterns, and graph the ordered pairs on a coordinate plane.	enVision Math, Mountain Math	Pre test, Formative: number talks, lesson assessments Summative: Unit test

**Scope and Sequence - 5th Grade Math**

Month and # of days spent	Title of Unit	Concepts being taught	Content being taught	Skills being taught	Resources Used	Assessments Used (Formative and Summative)
4 days	Topic 16 Geometric Measurements: Classify Two-Dimensional Figures	MP3. Construct viable arguments and critique the reasoning of others. MP5. Use appropriate tools strategically. MP7. Look for and make use of structure.	5.G.B. Geometry: Classify two-dimensional figures into categories based on their properties.	Explain that attributes belonging to a category of two-dimensional figures also belong to all subcategories of that category. For example, all rectangles have four right angles and squares are rectangles, so all squares have four right angles. (CCSS: 5.G.B.3) 4. Classify two-dimensional figures in a hierarchy based on properties. (CCSS:	enVision Math, Mountain Math	Pre test, Formative: number talks, lesson assessments Summative: Unit test