

## 5th Grade Math Curriculum Map

<u>Quarter 1:</u>	<u>Standards /Skills:</u>	<u>Resources/ Technology:</u>
Unit 3~ Multiplying Whole #'s <ul style="list-style-type: none"> <li>• 5 Formal Formative Assessments</li> <li>• 1 Summative Assessment</li> </ul>	<b>5.NBT.B.5</b> -Fluently multiply multi-digit whole numbers using the standard algorithm. <ul style="list-style-type: none"> <li>• Lesson 3-1 thru 3-9</li> </ul>	<ul style="list-style-type: none"> <li>• Envisions Book: Volume 1</li> <li>• Envisions Online-Resources in SAVVAS</li> <li>• Additional Teacher Resources (as needed for student mastery)</li> </ul>
Unit 16~ Geometry Classifying 2-Dimensional Figures <ul style="list-style-type: none"> <li>• 2 Formal Formative Assessments</li> <li>• 1 Summative Assessment</li> </ul>	<b>5.G.B.3</b> -Understand 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. <ul style="list-style-type: none"> <li>• Lesson 16-1 thru 16-4</li> </ul> <b>5.G.B.4</b> -Classify two-dimensional figures in a hierarchy based on properties. <ul style="list-style-type: none"> <li>• Lesson 16-1 thru 16-4</li> </ul>	<ul style="list-style-type: none"> <li>• Envisions Book: Volume 2</li> <li>• Envisions Online-Resources in SAVVAS</li> <li>• Additional Teacher Resources (as needed for student mastery)</li> </ul>

<p>Unit 1~ Place Value</p> <ul style="list-style-type: none"> <li>• Focus 1st on Mastery of Whole #'s (as students show need)</li> <li>• 2 Formal Formative Assessments</li> </ul>	<p><b>5.NBT.A.3</b>-Read, write, and compare decimals to Thousandths.</p> <ul style="list-style-type: none"> <li>• Lesson 1-2</li> </ul> <p><b>5.NBT.A.3.A</b>-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>.</p> <ul style="list-style-type: none"> <li>• Lesson 1-2</li> </ul> <p><b>5.NBT.A.1</b>-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 <math>1/10</math> of what it represents in the place to its left.</p> <p><b>5.NBT.A.2</b>-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.</p> <ul style="list-style-type: none"> <li>• Lesson 1-1</li> </ul>	<ul style="list-style-type: none"> <li>• Envisions Book: Volume 1</li> <li>• Envisions Online-Resources in SAVVAS</li> <li>• Additional Teacher Resources (as needed for student mastery)</li> </ul>
<p><u>Quarter 2:</u></p> <p>Unit 1~Place Value</p> <ul style="list-style-type: none"> <li>• Focus on Decimals</li> <li>• 2 Formal Formative Assessments</li> <li>• 1 Summative Assessment</li> </ul>	<p><b>5.NBT.A.3</b>-Read, write, and compare decimals to Thousandths.</p> <ul style="list-style-type: none"> <li>• Lesson 1-4 thru 1-6</li> </ul> <p><b>5.NBT.A.3.A</b>-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>.</p> <ul style="list-style-type: none"> <li>• Lesson 1-4</li> </ul> <p><b>5.NBT.A.1</b>-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 <math>1/10</math> of what it represents in the place to its left.</p> <ul style="list-style-type: none"> <li>• Lesson 1-3</li> </ul> <p><b>5.NBT.A.2</b>-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.</p> <ul style="list-style-type: none"> <li>• Lesson 1-1</li> </ul>	<ul style="list-style-type: none"> <li>• Envisions Book: Volume 1</li> <li>• Envisions Online-Resources in SAVVAS</li> <li>• Additional Teacher Resources (as needed for student mastery)</li> </ul>
<p>Unit 2 ~Adding &amp; Subtracting Decimals</p>	<p><b>5.NBT.B.7</b>-Add, subtract, multiply, and 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.</p> <ul style="list-style-type: none"> <li>• Lessons 2-1 thru 2-5</li> </ul>	<ul style="list-style-type: none"> <li>• Envisions Book: Volume 1</li> <li>• Envisions Online-Resources in SAVVAS</li> <li>• Additional Teacher Resources (as needed for student mastery)</li> </ul>
<p>Unit 11~ Volume</p>	<p><b>5.MD.C.3</b>-Recognize volume as an attribute of solid figures and understand</p>	<ul style="list-style-type: none"> <li>• Envisions Book: Volume 2</li> </ul>

	<p>concepts of volume measurement.</p> <p><b>5.MD.C.3a</b>-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.</p> <ul style="list-style-type: none"> <li>• Lesson 11-1</li> </ul> <p><b>5.MD.C.3b</b>-A solid figure which can be packed without gaps or overlaps using <math>n</math> unit cubes is said to have a volume of <math>n</math> cubic units.</p> <ul style="list-style-type: none"> <li>• Lesson 11-1 &amp; 11-2</li> </ul> <p><b>5.MD.C.4</b>-Measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ft, and improvised units.</p> <ul style="list-style-type: none"> <li>• L11-1 &amp; 11-2</li> </ul> <p><b>5.MD.C.5a</b>-Find the volume of a right rectangular prism with whole-number side lengths by packing it with unit cubes, and show that the volume is the same as would be found by multiplying the edge lengths, equivalently by multiplying the height by the area of the base. Represent threefold whole-number products as volumes, e.g., to represent the associative property of multiplication.</p> <ul style="list-style-type: none"> <li>• Lesson 11-2</li> </ul> <p><b>5.MD.C.5b</b>-Apply the formulas <math>V = l \times w \times h</math> and <math>V = b \times h</math> for rectangular prisms to find volumes of right rectangular prisms with whole-number edge lengths in the context of solving real world and mathematical problems.</p> <ul style="list-style-type: none"> <li>• Lessons 11-2</li> </ul> <p><b>5.MD.C.5c</b>-Recognize volume as additive. Find volumes of solid figures composed of two non-overlapping right rectangular prisms by adding the volumes of the non-overlapping parts, applying this technique to solve real world problems.</p> <ul style="list-style-type: none"> <li>• Lessons 11-3 &amp; 11-4</li> </ul>	<ul style="list-style-type: none"> <li>• Envisions Online-Resources in SAVVAS</li> <li>• Additional Teacher Resources (as needed for student mastery)</li> </ul>
<p>Unit 7 Adding &amp; Subtracting Fractions</p> <p>*Focus on Mastery of Review Skills needed for Unit</p>	<p><b>5.NF.A.1</b>-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. For example, <math>2/3 + 5/4 = 8/12 + 15/12 = 23/12</math>. (In general, <math>a/b + c/d = (ad + bc)/bd</math>.)</p> <p>*Skills to review to help support this standard:</p> <ol style="list-style-type: none"> <li>1. Equivalent Fractions</li> <li>2. Simplifying Fractions</li> <li>3. Converting Improper Fractions to mixed numbers (<b>5.NF.B.3</b>)</li> <li>4. Adding &amp; Subtracting with Like Denominators</li> </ol> <p><b>5.NF.B.3</b>-Interpret a fraction as division of the numerator by the denominator (<math>a/b = a \div b</math>). Solve word problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers, e.g., by using visual fraction models or equations to represent the problem.</p>	<ul style="list-style-type: none"> <li>• Fraction Bars</li> <li>• Additional Teacher Resources (as needed for student mastery)</li> </ul>

Unit 7 Adding & Subtracting Fractions	<p><b>5.NF.A.1</b>-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. <i>For example, <math>2/3 + 5/4 = 8/12 + 15/12 = 23/12</math>. (In general, <math>a/b + c/d = (ad + bc)/bd</math>.)</i></p> <ul style="list-style-type: none"> <li>Lesson 7-1 thru 7-12</li> </ul> <p><b>5.NF.A.2</b>-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. <i>For example, recognize an incorrect result <math>2/5 + 1/2 = 3/7</math>, by observing that <math>3/7 &lt; 1/2</math>.</i></p> <ul style="list-style-type: none"> <li>Lesson 7-1 thru 7-12</li> </ul>	<ul style="list-style-type: none"> <li>Envisions Book: Volume 1</li> <li>Envisions Online-Resources in SAVVAS</li> <li>Additional Teacher Resources (as needed for student mastery)</li> </ul>
Quarter 3:	<u>Standards /Skills:</u>	<u>Resources/ Tech.:</u>
Unit 4 Multiplying Decimals	<p><b>5.NBT.B.7</b>-Add, subtract, <b>multiply</b>, and 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.</p>	<ul style="list-style-type: none"> <li>Envisions Book: Volume 1</li> <li>Envisions Online-Resources in SAVVAS</li> <li>Additional Teacher Resources (as needed for student mastery)</li> </ul>

Units 14 Graph Points on the Coordinate Plane  Unit 15 Analyze Patterns & Relationships	<p><b>5.G.A.1</b>-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., x-axis and x-coordinate, y-axis and y-coordinate).</p> <ul style="list-style-type: none"> <li>Lessons 14-1 thru 14-4</li> </ul> <p><b>5.G.A.2</b>-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.</p> <ul style="list-style-type: none"> <li>Lessons 14-1 thru 14-4</li> </ul> <p><b>5.OA.B.3</b>-Generate two numerical patterns using two given rules. Identify the apparent relationship between corresponding terms. Form ordered pairs consisting of corresponding terms from the two patterns, and graph the ordered pairs on a coordinate plane. <i>For example, given the rule "Add 3" and the starting number 0, and given the rule "Add 6" and the starting number 0, generate terms in the resulting sequences, and observe that the terms in one sequence are twice the corresponding terms in the other sequence. Explain informally why this is so.</i></p> <ul style="list-style-type: none"> <li>Lessons 15-1 thru 15-4</li> </ul>	<ul style="list-style-type: none"> <li>Envisions Book: Volume 2</li> <li>Envisions Online-Resources in SAVVAS</li> <li>Additional Teacher Resources (as needed for student mastery)</li> </ul>
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Unit 8 Multiplying Fractions	<p><b>5.NF.B.4</b>-Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction.</p> <ul style="list-style-type: none"> <li>• Lessons 8-1 thru 8-6</li> </ul> <p><b>5.NF.B.5</b>-Interpret multiplication as scaling (resizing), by:</p> <ul style="list-style-type: none"> <li>* 5.NF.B.5a-Comparing the size of a product to the size of one factor on the basis of the size of the other factor, without performing the indicated multiplication and</li> <li>* 5.NF.B.5b-Explaining why multiplying a given number by a <b>fraction</b> greater than 1 results in a product greater than the given number (recognizing multiplication by <b>whole numbers</b> greater than 1 as a familiar case); explaining why multiplying a given number by a fraction less than 1 results in a product smaller than the given number; and relating the principle of fraction equivalence <math>a/b = (n \times a)/(n \times b)</math> to the effect of multiplying <math>a/b</math> by 1.</li> </ul> <ul style="list-style-type: none"> <li>• Lesson 8-8</li> </ul> <p><b>5.NF.B.6</b>-Solve real world problems involving multiplication of fractions and mixed numbers, e.g., by using visual fraction models or equations to represent the problem.</p> <ul style="list-style-type: none"> <li>• Lessons 8-7 &amp; 8-9</li> </ul>	<ul style="list-style-type: none"> <li>• Envisions Book: Volume 2</li> <li>• Envisions Online-Resources in SAVVAS</li> <li>• Additional Teacher Resources (as needed for student mastery)</li> </ul>
<b>Quarter 4:</b>	<u>Standards /Skills:</u>	<u>Resources/ Tech.:</u>
Unit 5 Division	<p><b>5.NBT.B.6</b>-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.</p> <ul style="list-style-type: none"> <li>• Lessons 5-1 thru 5-8</li> </ul>	<ul style="list-style-type: none"> <li>• Envisions Book: Volume 1</li> <li>• Envisions Online-Resources in SAVVAS</li> <li>• Additional Teacher Resources (as needed for student mastery)</li> </ul>
Unit 13 Write & Interpret Numerical Expressions	<p><b>5.OA.A.1</b>-Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols.</p> <ul style="list-style-type: none"> <li>• Lessons 13-1 &amp; 13-4</li> </ul> <p><b>5.OA.A.2</b>-Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them. <i>For example, express the calculation “add 8 and 7, then multiply by 2” as <math>2 \times (8 + 7)</math>. Recognize that <math>3 \times (18932 + 921)</math> is three times as large as <math>18932 + 921</math>, without having to calculate the indicated sum or product.</i></p> <ul style="list-style-type: none"> <li>• Lesson 13-2 &amp; 13-3</li> </ul>	<ul style="list-style-type: none"> <li>• Envisions Book: Volume 2</li> <li>• Envisions Online-Resources in SAVVAS</li> <li>• Additional Teacher Resources (as needed for student mastery)</li> </ul>