# Curriculum Map

| QTR 1 & QTR 2: | Grade: 5th Grade Math | YEAR:2018-2019 |
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| Math | | | |
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| Date | Standard | Assessment | Additional Info. |
| Week 1 | Multiplication & Division and Place Value | Cut and paste activities | |
| 8/8-9/15 | Unit 1: Order of Operations and Whole Numbers | Pretest and Posttest on Order of Operations and Whole Numbers | Unit 1 Pretest Week 1 |
| Week 2 | MGSE.5.OA.1: Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols. | Quiz, informal and formal assessments | **Enrichment: Create your own equation…** |
| Week 3 | MGSE.5.OA.2: Write simple expressions that record | Quiz, informal and formal assessments | |

| | calculations with numbers, and interpret numerical expressions without evaluating them. | | **Enrichment: Write a letter to a student about order of operations that missed class…** |
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| Week 4 | MGSE.5.NBT.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.<br><br>MGSE.5.NBT.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 of 10. | Quizzes, informal and formal assessments | **Enrichment: Create a script (talk show script)**<br>**or**<br>**Enrichment: Dominos** |
| Week 5 | MGSE.5.NBT.5:<br>Fluently multiply multi-digit whole numbers using the standard algorithm (or other strategies demonstrating understanding of multiplication) up to a 3 digit by | Quiz, informal and formal assessments | **Enrichment: Comic Strip** |

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| | two digit factor. | | |
| Week 6 | MGSE.5.NBT.6: Fluently divide up to 4- digit dividends and 2-digit divisors by using at least one of the following methods: 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 or concrete models. (e.g., rectangular arrays, area models) | Quiz, informal and formal assessments | Unit 1 Posttest Week 6<br><br>**Enrichment: Flipbook** |
| | Unit 2: Adding and Subtracting with Decimals | Pretest and Posttest on Adding and Subtracting Decimals | Unit 2 Pretest 7 |
| Weeks 7 and 8 | MGSE.5.NBT.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.<br><br>MGSE.5.NBT.3 Read, write, and compare decimals to thousandths. a. Read and write decimals to thousandths using base-ten | Quizzes, informal and formal assessments | **Enrichment: Place Value Choice Board; create a PowerPoint to explain place value** |

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| | numerals, number names, and expanded form, e.g., 347.392 = 3 × 100 + 4 × 10 + 7 × 1 + 3 × (1/10) + 9 × (1/100) + 2 × (1/1000). b. Compare two decimals to thousandths based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons | | |
| Weeks 9 and 10 | MGSE.5.NBT.4: Use place value understanding to round decimals up to the hundredths place.<br><br>MGSE.5.NBT.7: 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. | Quizzes, informal and formal assessments | Unit 2 Posttest Week 10<br><br>**Enrichment: Organized Chart**<br><br><br>**Enrichment: Jeopardy** |
| | Unit 3: Multiplying and Dividing with Decimals | | Unit 3 Pretest Week 11 |
| Week 11 | MGSE.5.NBT.2: | Quiz, informal and formal assessments | **Enrichment: Classifieds** |

| | 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 | | |
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| Weeks 11 and 12 | MGSE.5.NBT.7: 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. | Quiz, informal and formal assessments | **Enrichment: Brochure** |
| Week 13 | MGSE.5.NBT.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 | Quiz, informal and formal assessments | **Enrichment: Lesson Plan** |

| | denote powers of 10 | | |
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| Week 14 | MGSE.5.NBT.7:<br>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. | Quiz, informal and formal assessments | |
| | Unit 3: Review and Unit 3 Posttest | Unit 3 Review 11/28 | Unit 3 Posttest Week 14 |
| Week 15 | Unit 5: 2D Figures | | Unit 5 Pretest Week 15 |
| Week 16 | MGSE.5.G.3:<br>Understand that attributes belonging to a category of two-dimensional figures also belong to all subcategories of that category. | | **Enrichment: Hidden Triangles** |
| Week 17 | MGSE.5.G.4:<br>Classify two-dimensional figures in a hierarchy based on properties (polygons, triangles, and quadrilaterals) | | Unit 5 Posttest Week 17<br><br>**Enrichment: Hierarchy Diagram** |

| Week 18 | MGSE.5.G.3:<br>Understand that attributes belonging to a category of two-dimensional figures also belong to all subcategories of that category.<br><br>MGSE.5.G.4:<br>Classify two-dimensional figures in a hierarchy based on properties (polygons, triangles, and quadrilaterals) | | **Enrichment: Quadrilateral or Not**<br><br><br><br>**Enrichment: Wanted Poster/Hierarchy Diagram** |

**Curriculum Map**

| Quarter 3 & 4 | Grade: 5th | Year: 2018-2019 |
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| Math | | | |
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| **Date** | **Standard** | **Assessment** | **Additional Info.** |
| **W1** | MGSE.5.G.3<br>Understand that attributes belonging to a category of two-dimensional figures also belong to all subcategories of that category. | Formative | Unit 4: 2D Figures (continued)<br>● Properties of Triangles<br>● Properties of Quadrilaterals<br>**Enrichment: Hidden Triangles** |
| **W2** | MGSE.5.G.4.<br>Classify two-dimensional figures in a hierarchy based on properties (polygons, triangles, and quadrilaterals). | Formative Summative | ● Classifications in a Hierarchy<br>**Enrichment: Hierarchy Diagram** |
| **W3** | MGSE.5.NF.1<br>Add and subtract fractions and mixed numbers with unlike denominators by finding a common denominator and equivalent fractions to produce like denominators. | Pre-Assessment Formative | Unit 5: Fraction Operations<br>● Addition/Subtraction<br>● Find a Common Denominator<br>**Enrichment: Bingo Game** |
| **W4** | MGSE.5.NF.2<br>Solve word problems involving addition and subtraction of fractions, including cases of unlike denominators (e.g., by using | Formative | ● Word Problems<br>● Benchmark Fractions & Number Sense of<br>**Enrichment: Real World Application** |

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| | 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. For example, recognize an incorrect result 2/5 + ½ = 3/7, by observing that 3/7 < ½. | | Fractions<br>● Mental Estimation & Reasonableness of Answers |
| **W5** | MGSE.5.NF.3<br>Interpret a fraction as division of the numerator by the denominator (a/b = a ÷ b). 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. Example: 35 can be interpreted as "3 divided by 5 and as 3 shared by 5".<br>MGSE.5.NF.4<br>Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction. | Formative | ● Fractions as Division<br>● Visual Fraction Models<br>● Equation Representations<br>● Fraction Multiplication<br><br>**Enrichment: Candy Story** |
| **W6** | MGSE.5.NF.5<br>Interpret multiplication as scaling (resizing), by:<br>  a. 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. Example 4 x 10 is twice as large as 2 x 10.<br>  b. Explaining why multiplying a given number by a fraction greater than 1 results in a product greater than the given number (recognizing multiplication by whole numbers 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 a/b = (n×a)/(n×b) to the effect of multiplying a/b by 1. | Formative | ● Multiplication as Scaling<br>● Factor Sizes<br>● <1, >1<br>● Fraction Equivalence<br><br>**Enrichment: Advertisement** |
| **W7** | MGSE.5.NF.6<br>Solve real world problems involving multiplication of fractions and mixed numbers, e.g., by using visual fraction models or | Formative | ● Real-World Problems<br>● Visual Fraction Models<br><br>**Enrichment: Area World Problems** |

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| | equations to represent the problem. | | |
| **W8** | MGSE.5.NF.7<br>Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions.<br>  a.  Interpret division of a unit fraction by a non-zero whole number, and compute such quotients. For example, create a story context for $(1/3) \div 4$, and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that $(1/3) \div 4 = 1/12$ because $(1/12) \times 4 = 1/3$.<br>  b.  Interpret division of a whole number by a unit fraction, and compute such quotients. For example, create a story context for $4 \div (1/5)$, and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that $4 \div (1/5) = 20$ because $20 \times (1/5) = 4$.<br>  c.  Solve real world problems involving division of unit fractions by non-zero whole numbers and division of whole numbers by unit fractions, e.g., by using visual fraction models and equations to represent the problem. For example, how much chocolate will each person get if 3 people share 1/2 lb of chocolate equally? How many 1/3-cup servings are in 2 cups of raisins? | Formative | <ul><li>Unit Fraction by Whole Number Division</li><li>Whole Number by Unit Fraction Division</li><li>Story Contexts</li><li>Relationship between Multiplication & Division</li><li>Real-World Problems</li></ul><br>**Enrichment: Bookmark or I have, who has** |
| **W9** | MGSE.5.MD.2<br>Make a line plot to display a data set of measurements in fractions of a unit (1/2, 1/4, 1/8). Use operations on fractions for this grade to solve problems involving information presented in line plots. | Formative Summative | <ul><li>Line Plots</li><li>Measure Fractions</li></ul>**Enrichment: Cookbook Line Plot or Hopping Line Plot** |
| **W10** | MGSE.5.MD.1<br>Convert among different-sized standard measurement units (mass, weight, length, time, etc.) within a given measurement | Pre-Assessment Formative | Unit 6: Volume & Measurement<ul><li>Unit Conversions</li></ul>**Enrichment: Would you Rather? or Chart** |

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| | system (customary and metric) (e.g., convert 5cm to 0.05m), and use these conversions in solving multi-step, real world problems.<br>MGSE.5.MD.2<br>Make a line plot to display a data set of measurements in fractions of a unit (1/2, 1/4, 1/8). Use operations on fractions for this grade to solve problems involving information presented in line plots. For example, given different measurements of liquid in identical beakers, find the amount of liquid each beaker would contain if the total amount in all the beakers were redistributed equally. | | **Enrichment: Cookbook or Line Plot** |
| **W11** | MGSE.5.MD.3<br>Recognize volume as an attribute of solid figures and understand concepts of volume measurement.<br>    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.<br>    b. A solid figure which can be packed without gaps or overlaps using n unit cubes is said to have a volume of n cubic units. | Formative | • Attributes of Solids<br>• Unit Solids<br><br>**Enrichment: PowerPoint or Volume Investigation** |
| **W12** | MGSE.5.MD.4<br>Measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ft, and improvised units. | Formative | • Measure Volumes<br>• Unit Volumes<br>**Enrichment: Sand Castle Blueprints or Pool Design** |
| **W13** | MGSE.5.MD.5<br>Relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume.<br>a. 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 | Formative Summative | • Find Volumes Using Operations<br>• Real-World Applications<br>• Right Rectangular Prisms<br>• Volume is Additive<br>• Associative Property of Multiplication<br>**Enrichment: Real World Connection or Volume** |

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| | whole-number products as volumes, e.g., to represent the associative property of multiplication.<br>    b.  Apply the formulas V = l × w × h and V = b × h 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.<br>    c.  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. | | |
| **W14** | MGSE.5.G.1<br>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). | Pre-Assessment Formative | Unit 7: Geometry & the Coordinate Plane<br>  ●  Coordinate System<br>  ●  Ordered Pairs<br>  ●  Naming the Axes<br><br>**Enrichment: buried in the yard or Constellations** |
| **W15** | MGSE.5.G.2<br>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. | Formative |   ●  Graph Points<br>  ●  Real-World Problems<br>  ●  Values in Context<br>**Enrichment: Carnival Map or How-to paragraph** |
| **W16** | MGSE.5.OA.3<br>Generate two numerical patterns using a given rule. Identify apparent relationships between corresponding terms by completing a function table or input/output table. Using the terms created, form and graph ordered pairs on a coordinate plane. | Formative Summative |   ●  Numerical Patterns<br>  ●  Function Tables<br>**Enrichment: Treasure Map or patterns book.** |

| W17 | Review | End of Course Assessment | |
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| W18 | Review | End of Course Assessment | |