5th Grade Mathematics Curriculum Map 2023

Pacing Guide	Standard Code & Indicator	Sample Learning Activities	Sample Assessments	Additional Standards
August-November	**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. **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 powers of 10. **5.NBT.3** Read, write, and compare decimals to thousandths. **5.NBT.3a** Read and write decimals to thousandths using base-ten numerals, number names, and expanded form. **5.NBT.3b** Compare two decimals to thousandths based on meanings of the	-Place Value with Whole Numbers and Decimals -Identify patterns when applying the power of 10 -Compare and Order Decimals to the thousandths place -Round and Estimate Decimals -Adding and subtracting decimals -Multiply and divide Whole numbers -Understand the Order of Operations	**Formative Assessments:** Quizzes Homework/Classwork Teacher Observation Task Cards "I have, who has" **Summative Assessments**: -Chapter Test -Place Value, Comparing, and Rounding Decimals Google Forms Assessment **Benchmark Assessment:** LinkIt BOY Benchmark BOY Benchmark	**Interdisciplinary Standard:** **Science 5-ESS1-1** - Use patterns with powers of 10 to compare the distance of the sun to Earth's relative distance. **Technology Standard:** 8.2.5.ED.2: Collaborate with peers to collect information, brainstorm to solve a problem, and evaluate all possible solutions to provide the best results with supporting sketches or models.

	digits in each place, using >, =, and < symbols to record the results of comparisons. **5.NBT.4** Use place value understanding to round decimals to any place. **5.NBT.5** Fluently multiply multi-digit whole numbers using the standard algorithm. **5.NBT.6** 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. **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. **5.OA.1** Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols.	(including parentheses, brackets, or braces) -Read, write and solve Numerical Expressions **Instructional Resources:** -Big Ideas -Decimals Place Value Spiral Review Google Slides **Teacher Technology:** Activ Panel **Student Technology:** Google Classroom Chromebooks Pearsonrealize.com Google Slides - Multiplication Bingo Google Forms IXL	Accommodations and Modifications	

	5.OA.2 Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them.			
December-March	**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. **5.NF.1** 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. **5.NF.2** 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. **5.NF.5a** Interpret multiplication as scaling by comparing the size of a product to the size of one factor on the basis of the size	-Multiply and divide decimals -Define, identify and apply understanding Prime and Composite Numbers -Determine if a number is prime or composite -Understand and apply the steps to Prime Factorization -Relate Fractions to Division -Determine the GCF and LCM - Explore Fractions, Mixed Numbers, and Improper Fractions -Understand how to determine Equivalent Fractions	**Formative Assessments:** Quizzes Homework/Classwork Teacher Observation Prime Factorization Quiz **Summative Assessments**: Chapter Test Lemonade Stand Operations with Fractions and Decimals Project [Accommodations and Modifications](#)	**Interdisciplinary Standard: Career Readiness** **9.1.5.PB.1:** Lemonade Stand Operations with Fractions and Decimals Project - Use budget to create items to be purchased. Use multiplication and division of decimals to determine how much to sell each item for. Use decision making strategies to determine price. **Technology Standard:** 8.2.5.ED.2: Collaborate with peers to collect information, brainstorm to solve a problem, and evaluate all possible solutions to provide the best results with supporting sketches or models.

	of the other factor, without performing the indicated multiplication. **5.NF.5b** Interpret multiplication as scaling by 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 $a/b = (n \times a)/(n \times b)$ to the effect of multiplying a/b by 1. **5.NF.B.7** Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction. **5.NF.B.4** Interpret the product $(a/b) \times q$ as a parts of a partition of q into b equal parts; equivalently, as the result of a sequence of operations $a \times q \div b$. **5.NF.B.6** Solve real world problems involving multiplication of fractions and mixed numbers, e.g., by using visual fraction models or equations to represent the problem. **5.NF.B.7** Apply and extend previous understandings of division to divide unit	-Apply the steps to putting a fraction into simplest form -Add and Subtract Fractions and Mixed Numbers - Add, Subtract, Multiply and Divide Decimals -Identify and discuss Decimal Zero Patterns -Interpret multiplication as scaling - Understand and apply the steps to multiplying a fraction by a fraction/whole number -Use visual fraction models to assist in problem solving -Understand and apply the steps to dividing a fraction		**Performing Arts 1.5.5.Cr1a:-** Dog House Project - Create dog house using fractions to determine amount of material needed, at each point of dog's life as puppy develops through adulthood. **Technology Standard:** 8.2.5.ED.2: Collaborate with peers to collect information, brainstorm to solve a problem, and evaluate all possible solutions to provide the best results with supporting sketches or models.

	fractions by whole numbers and whole numbers by unit fractions. **5.NF.B.7A** Interpret division of a unit fraction by a non-zero whole number, and compute such quotients. **5.NF.B.7B** Interpret division of a whole number by a unit fraction, and compute such quotients. **5.NF.B.7C** 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. **5.NF.B.3** Interpret a fraction as division of the numerator by the denominator 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.	**Instructional Resources:** Big Ideas Textbook Task Cards Dividing Fractions Prime Factorization Maze **Teacher Technology:** Activ Panel Dividing Fractions Song **Student Technology:** Google Classroom Chromebooks IXL Google Slides & Forms		
April	**5.G.3** 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	-Define, identify and describe: points, lines, line segments and rays -Understand the characteristics of polygons	**Formative Assessments:** Quizzes Homework/Classwork Teacher Observation	**Interdisciplinary Standard:** **Performing Arts 1.5.5.Cr1a:** - Design Dream House Project using angles & area of compound figures

	rectangles, so all squares have four right angles. **5.G.4** Classify two-dimensional figures in a hierarchy based on properties. **5.NF.4.b** Find the area of a rectangle with fractional side lengths by tiling it with unit squares of the appropriate unit fraction side lengths, and show that the area is the same as would be found by multiplying the side lengths. Multiply fractional side lengths to find areas of rectangles, and represent fraction products as rectangular areas. **5.MD.C3** Recognize volume as an attribute of solid figures and understand concepts of volume measurement. **5.MD.C3a** 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. **5.MD.C3b** 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. **5.MD.C4** Measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ft, and non-standard units.	-Classify quadrilaterals and other 2D shapes -Identify and recognize angles -Recognize triangles and describe their attributes -Identify and describe the attributes of different 3D figures -Determine perimeter and area -Recognize and measure volume -Find the volume of a right rectangular prism **Instructional Resources:** Big Ideas Textbook Task Cards **Teacher Technology:** Activ Panel	**Summative Assessments**: Chapter Test Dream House Project Accommodations and Modifications	**Technology Standard:** 8.2.5.ED.2: Collaborate with peers to collect information, brainstorm to solve a problem, and evaluate all possible solutions to provide the best results with supporting sketches or models.

	5.MD.C5 Relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume. **5.MD.C5a** 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. **5.MD.C5b** Apply the formulas $V = l \times w \times h$ and $V = B \times h$ 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. **5.MD.C5c** 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.	**Student Technology:** Google Classroom Chromebooks Google Slides & Forms IXL		

| May-June | **5.MD.1** Convert among different-sized standard measurement units within a given measurement system and use these conversions in solving multi-step, real world problems.

5.MD.2 Make a line plot to display a data set of measurements in fractions of a unit. Use operations on fractions for this grade to solve problems involving information presented in line plots.

5.OA.3 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

5.G.1 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 | -Change units in customary measurement

-Understand and use the metric system

-Convert measurement units

-Create a line plot to display data (using measurements in fractions)

-Create and analyze number patterns and sequences

- Form and understand ordered pairs

-Understand integers

-Use a coordinate grid

-Identify x and y axis

-Graph ordered pairs applying knowledge of grid and axes | **Formative Assessments:**
Quizzes
Homework/Classwork
Teacher Observation
Conversion Quiz

Summative Assessments:
Chapter Test
"This Old Recipe" Challenge

Benchmark Assessment:
LinkIt EOY Benchmark
EOY Benchmark

Accommodations and Modifications | **Interdisciplinary Standard :**
5-ESS1-1 - Solar System Project - Convert measurements based on relative distances from the Sun.

Technology Standard:
8.2.5.ED.2: Collaborate with peers to collect information, brainstorm to solve a problem, and evaluate all possible solutions to provide the best results with supporting sketches or models. |

	and the coordinates correspond (e.g., *x*-axis and *x*-coordinate, *y*-axis and *y*-coordinate). **5.G.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.	**Instructional Resources:** Big Ideas Textbook Task cards "Hollywood Squares" game Coordinate Planes Song **Teacher Technology:** Activ Panel Activ View **Student Technology:** Google Classroom Chromebooks Google Slides & Forms iPads IXL		

Alternate Assessments: Mystery Picture Coordinate Project, Solar System Project, Variety of worksheets
21st Century Standards: 9.1.8.A.6, 9.1.8.B.5, 9.1.8.E.1

21st Century Skills: Creativity, Collaboration, Critical Thinking

Career Ready Practices: CRP2, CRP8, CRP12