

5th Grade Math Curriculum

Month	Content	Skills	Assessments	Standards
Aug./May	Problem of the Day	Solve grade appropriate problem on a daily basis	-Individual solving of problems -Group discussion	
	Math vocabulary	Define terminology used in daily lessons	-Chapter review	
	Problem solving	<ol style="list-style-type: none"> 1. Use models 2. Draw a diagram 3. Find a pattern 4. Guess and check 5. Make an organized list 6. Make a table 7. Solve a simpler problem 8. Use logical reasoning 9. Work backward 10. Write an equation 	-Group discussion -Problem solving quizzes -Written assignments	<p>5.A.3.1. (Application) Write and solve number sentences that represent two-step word problems using whole numbers.</p> <p>5.A.3.2. (Application) Identify information and apply it to a given formula.</p> <p>5.A.4.1 (Application) Solve problems using patterns involving more than one operation.</p> <p>5.M.1.2. (Application) Solve problems involving money including making change.</p> <p>5.N.3.1. (Application) Use different estimation strategies to solve problems involving whole numbers, decimals, and fractions to the nearest whole number.</p> <p>5.S.2.2. (Application) Use models to display possible outcomes.</p>
August/September	Place value of whole numbers and decimals	<ol style="list-style-type: none"> 1. Read and write numbers through hundred thousands in standard and expanded form 2. Read and write numbers through hundred thousands with exponents 	<ol style="list-style-type: none"> 1. Written assignment on numbers with place value and exponents 2. Working in partners, students will take turns reading and writing decimals through 	5.N. 1.1. (Comprehension) Read, write, order, and compare numbers from .001 to 1,000,000,000.

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		3. Determine the value of square numbers 1-12 4. Read and write numbers through hundred billions in standard and expanded form 5. Compare, order, and round whole numbers through hundred billions 6. Read and write decimals through thousandths 7. Compare, order, and round decimals	thousandths General assessments: -chapter review -chapter test	5.N.1.5. (Comprehension) Determine the squares of numbers 1-12. 5.N.3.1. (Application) Use different estimation strategies to solve problems involving whole numbers, decimals, and fractions to the nearest whole number.
October	Add and subtract whole numbers	1. Read, write, and evaluate expressions containing variables and apply addition properties 2. Estimate sums and differences 3. Add and subtract whole numbers with up to five digits 4. Use mental math to solve addition and subtraction equations	1. Written assignment on reading, writing, and evaluating expressions containing variables and applying addition properties 2. Worksheet on adding and subtracting whole numbers with up to five digits General assessments: -chapter review -chapter test	5.A.1.1. (Application) Use a variable to write an addition expression. 5.A.1.2. (Application) Recognize and use the associative property of addition and multiplication. 5.A.2.1. (Application) Write one-step first degree equation using the set of whole numbers and find a solution. (HM p. 28-30) 5.N.3.1. (Application) Use different estimation strategies to solve problems involving whole numbers, decimals, and fractions to the nearest whole number.
	Multiply whole numbers	1. Evaluate algebraic expressions and use the properties of multiplication 2. Multiply by one-digit numbers 3. Use mental math to multiply	1. Written assignment on multiplying by one-digit numbers 2. Written assignment on estimating products using front-end estimation and	5.A.1.2. (Application) Recognize and use the associative property of addition and multiplication. 5.N.3.1. (Application) Use different estimation strategies to

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		a number by a multiple of 10 4. Estimate products using front-end estimation and rounding 5. Multiply by a two-digit number	rounding 3. Worksheet on multiplying by a two-digit number General assessments: -chapter review -chapter test	solve problems involving whole numbers, decimals, and fractions to the nearest whole number.
November	Divide by one-digit and two-digit numbers	1. Estimate quotients 2. Divide by one-digit and two-digit divisors 3. Use the rules for divisibility 4. Solve multiplication and division equations using mental math 5. Divide with greater numbers 6. Use the correct order of operations	1. Worksheet on dividing by one-digit and two-digit divisors 2. Worksheet on dividing with greater numbers General assessments: -chapter review -chapter test	5.N.1.2 (Comprehension) Find prime, composite, and factors of whole numbers from 1 to 50. 5.N.2.1. (Application) Find the quotient of whole numbers using two-digit divisors. 5.N.3.1. (Application) Use different estimation strategies to solve problems involving whole numbers, decimals, and fractions to the nearest whole number.
December	Units of measure	1. Measure and convert customary units of length, capacity, weight, temperature, and elapsed time	1. Measure to a given precision and complete conversion problems	5.M.1.1. (Comprehension) Determine elapsed time within an a.m. or p.m. period on the quarter-hour. 5.M.1.3. (Application) Use and convert U.S. Customary units of length (inches, feet, yard), and weight (ounces, pounds). 5.M.1.4. (Application) Use appropriate tools to measure length, weight, temperature, and area in problem solving.

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	Graph data and statistics	<ol style="list-style-type: none"> 1. Identify and analyze misleading graphs 2. Represent and interpret data in graphs 3. Decide which graph is most appropriate to display data 4. Collect and organize data in graphs 5. Calculate the mean, median, mode, and range of a set of data 6. Draw conclusions and make predictions from data displays 7. Use a stem-and-leaf plot to display data 	<ol style="list-style-type: none"> 1. Worksheet on stem-and-leaf plots 2. Find the range, mean, median, and mode for a set of data 3. Read a graph and answer questions about the data <p>General assessments: -chapter review -chapter test</p>	<p>5.S.1.1 (Application) Gather, graph, and interpret data.</p> <p>5.S.1.2 (Application) Calculate and explain mean for a whole number data set.</p>
January	Number theory and fraction concepts	<ol style="list-style-type: none"> 1. Identify prime and composite numbers and write factorization of numbers from 1-50 2. Find common factors, common multiples, the greatest common factor, and the least common multiple of sets of numbers 3. Find equivalent fractions and write fractions in simplest form 4. Relate and compare fractions, mixed numbers, and decimals 5. Apply different estimation strategies to solve problems involving fractions 	<ol style="list-style-type: none"> 1. Make a factor tree 2. Written assignment on common factors, common multiples, greatest common factor, and least common multiple of sets of numbers 3. Students demonstrate equivalent fractions and write the fractions in simplest form 4. Written assignment on estimating fractions <p>General assessments: -chapter review -chapter test</p>	<p>5.N.1.2. (Comprehension) Find prime, composite, and factors of whole numbers from 1 to 50.</p> <p>5.N.1.3. (Knowledge) Identify alternative representations of fractions and decimals involving tenths, fourths, halves, and hundredths.</p> <p>5.N.2.2. (Application) Determine equivalent fractions including simplification (lowest terms of fractions).</p> <p>5.N.3.1. (Application) Use different estimation strategies to solve problems involving whole numbers, decimals, and fractions to the nearest whole number.</p>

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February	Decimals	<ol style="list-style-type: none"> 1. Add and subtract decimals (including money) 2. Estimate decimal sums and differences 3. Multiply and divide decimals 4. Estimate decimal products and quotients 5. Multiply and divide with decimals and whole numbers 6. Relate and compare percents, decimals, fractions, and mixed numbers 7. Find a percent of a number 	<ol style="list-style-type: none"> 1. Worksheet on adding and subtracting decimals (including money) 2. Written assignment on estimating decimal sums and differences 3. Worksheet on multiplying and dividing decimals by natural numbers (1-9) <p>General assessments: -chapter review -chapter test</p>	<p>5.M.1.2. (Application) Solve problems involving money including making change.</p> <p>5.N.2.3. (Application) Multiply and divide decimals by natural numbers (1-9).</p> <p>5.N.3.1. (Application) Use different estimation strategies to solve problems involving whole numbers, decimals, and fractions to the nearest whole number.</p>
March	Plane figures and geometric concepts	<ol style="list-style-type: none"> 1. Identify and label points, lines, line segments and rays 2. Measure, draw, and classify angles 3. Classify triangles 4. Identify congruent figures 5. Identify, classify, and compare polygons 6. Identify translations (slides), rotations (turns), and reflections (flips) 7. Draw circles and construct and identify parts of a circle 8. Identify line symmetry 9. Identify, classify, and find two-dimensional views of solid figures 	<ol style="list-style-type: none"> 1. Students draw and measure right, obtuse, and acute angles 2. Students will locate the line of symmetry in various rectangles, squares, and triangles <p>General assessments: -chapter review -chapter test</p>	<p>5.G.1.1 (Knowledge) Describe and identify isosceles and equilateral triangles, pyramids, rectangular prisms, and cones.</p> <p>5.G.1.2. (Knowledge) Identify acute, obtuse, and right angles.</p> <p>5.G.2.1. (Comprehension) Determine lines of symmetry in rectangles, squares, and triangles.</p> <p>5.G.2.2. (Knowledge) Identify a turn or flip (rotation or reflection) of a given figure.</p>
	Ratio, proportion, and probability	<ol style="list-style-type: none"> 1. Read, write, and use ratios, equivalent ratios, and rates 2. Use proportions to interpret similar figures and scale drawings 3. Find all possible combinations of given items 	<ol style="list-style-type: none"> 1. Written assignment on reading, writing, and using ratios, equivalent ratios, and rates 2. Students will use a spinner to show the likelihood and impossibility of an event 	<p>5.S.2.1. (Application) Classify probability of simple events as certain, likely, unlikely, or impossible.</p> <p>5.S.2.2. (Application) Use models to display possible outcomes.</p>

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		4. Find the theoretical probability of single and compound events	General assessments: -chapter review -chapter test	
	Integers	1. Locate integers on a number line 2. Compare and order integers	1. Worksheet on locating integers on a number line 2. Lesson quiz on comparing and ordering integers	5.N.1.4 (Comprehension) Locate negative integers on a number line.
	Coordinate graphing	1. Graph ordered pairs in the four quadrants of the coordinate plane 2. Complete functions tables using integers and graph a line in the coordinate plane	1. Locate ordered pairs on a grid 2. Worksheet on completing function tables and graphing lines in the coordinate plane Dakota Step Test	5.G.2.3. (Application) Use two-dimensional coordinate grids to find location and represent points and simple figures.
April/May	Perimeter, area, and circumference	1. Find the perimeter of polygons and complex and irregular figures 2. Find the area of parallelograms, triangles, and complex and irregular figures 3. Use pi to find the circumference of a circle	1. Written assignment finding area and perimeter of a figure	5.M.1.4. (Application) Use appropriate tools to measure length, weight, temperature, and area in problem solving.