



Content Area: Math

Grade Level: 6th

Curriculum Map/Scope & Sequence (2021)

<u>Unit Name/Time Period</u>	<u>BIG Ideas/Skills</u>	<u>IL Priority Learning Standards</u>	<u>I CAN Statements</u>	<u>Assessments</u>
August September	Fractions and Decimals	6.NS.1 (Quotients of fractions) 6.NS.2 (Divide multi-digit numbers) 6.NS.3 (Operations of Decimals)	I <b>CAN</b> solve real world problems involving the division of fractions and interpret the quotient in the context of the problem.  I <b>CAN</b> compute quotients of fractions.  I <b>CAN</b> solve word problems involving division of fractions by fractions, e.g., by using visual fraction models and equations to represent the problem.	Chapter Tests, Quizzes, Mid-Chapter Checkpoint and Freckle
October/November	Ratios, Rates and Percent	6.RP.1 (Ratios) 6.RP.2 (Unit Rate) 6.RP.3 (Solve real-world ratio problems) 6.EE.9 (Independent and dependent variables)	I <b>CAN</b> apply the concept of a ratio and use ratio language to describe a ratio relationship between two quantities.  I <b>CAN</b> explain the relationship that a ratio represents.  I <b>CAN</b> apply the concept of a unit rate $a/b$ associated with a ratio $a:b$ with $b \neq 0$ , and use rate language in the context of a ratio relationship.  I <b>CAN</b> convert a given ratio ( $a/b$ ) to a unit rate ( $a:b$ ).  I <b>CAN</b> describe the ratio relationship represented by a unit rate.  I <b>CAN</b> use ratio and rate reasoning to solve real-world and mathematical problems.  I <b>CAN</b> use variables to represent two quantities in a real-world problem that change in relationship to one another.  I <b>CAN</b> write an equation to express one quantity, thought of as the dependent variable, in terms of the	Chapter Tests, Quizzes, Mid-Chapter Checkpoint and Freckle

			<p>other quantity, thought of as the independent variable.</p> <p>I <b>CAN</b> analyze the relationship between the dependent and independent variables using graphs and tables, and relate these to the equation.</p>	
November	Ratios, Rates and Percent	<p>6.RP.1 (Ratios)</p> <p>6.RP.2 (Unit Rate)</p> <p>6.RP.3 (Solve real-world ratio problems)</p> <p>6.EE.9 (Independent and dependent variables)</p>		Chapter Tests, Quizzes, Mid-Chapter Checkpoint and Freckle
November/December	Rational Numbers	<p>6.NS.5 (Positive &amp; Negative numbers in real world contexts)</p> <p>6.NS.6 (Rational numbers on number line and coordinate plane)</p> <p>6.NS.7 (Ordering and absolute value)</p> <p>6.NS.8 (Solving real-world problems by graphing in coordinate plane)</p> <p>6.G.3 (Draw Polygons in coordinate plane)</p>	<p>I <b>CAN</b> explain why positive and negative numbers are used together to describe quantities having opposite directions or values.</p> <p>I <b>CAN</b> use positive and negative numbers to represent quantities in real-world contexts, explaining the meaning of 0 in each situation</p> <p>I <b>CAN</b> use number line diagrams and coordinate axes to represent points on the line and in the plane with negative number coordinates.</p> <p>I <b>CAN</b> describe a rational number as a point on the number line.</p> <p>I <b>CAN</b> order and find absolute value of rational numbers.</p> <p>I <b>CAN</b> graph points in any quadrant of the coordinate plane to solve real world problems.</p> <p>I <b>CAN</b> use absolute value to find distances between two points with the same x or y coordinate.</p>	Chapter Tests, Quizzes, Mid-Chapter Checkpoint and Freckle
January	Expressions	<p>6.EE.1 (Numerical expressions with exponents)</p> <p>6.EE.2 (Variable expressions)</p> <p>6.EE.3 (Generate equivalent expressions)</p> <p>6.EE.4 (Identify equivalent expressions)</p> <p>6.NS.4 (GCF, LSM, &amp; Distributive Property with expressions)</p>	<p>I <b>CAN</b> write and evaluate expressions involving whole-number exponents.</p> <p>I <b>CAN</b> write, read, and evaluate expressions in which letters stand for numbers.</p> <p>I can write expressions that record operations with numbers and with letters standing for numbers.,</p> <p>I <b>CAN</b> identify parts of an expression using mathematical terms (sum, term, product, factor, quotient, coefficient) and describe one or more parts</p>	Chapter Tests, Quizzes, Mid-Chapter Checkpoint and Freckle

			<p>of an expression as a single entity.</p> <p>I <b>CAN</b> evaluate expressions at specific values of their variables including expressions that arise from formulas used in real-world problems.</p> <p>I <b>CAN</b> apply the order of operations when evaluating both arithmetic and algebraic expressions.</p> <p>I <b>CAN</b> apply the properties of operations, especially the distributive property, to generate equivalent expressions.</p> <p>I <b>CAN</b> create a visual model to show equality between two expressions or equations.</p> <p>I <b>CAN</b> identify when two expressions are equivalent by using the same value to evaluate both expressions.</p>	
February	Equations and Inequalities	<p>6.EE.5 (True Equations and inequalities)</p> <p>6.EE.6 (Write expressions with variables when solving real-world problems)</p> <p>6.EE.7 (Solve real-world problems using equations)</p> <p>6.EE.8 (Write &amp; understand inequalities)</p> <p>6.EE.9 (Independent &amp; Dependant Variables)</p>	<p>I <b>CAN</b> describe solving an equation or inequality leads to finding the value or values of the variables.</p> <p>I <b>CAN</b> use substitution to determine whether a given number in a specified set makes an equation or inequality true.</p> <p>I <b>CAN</b> use variables to represent numbers and write expressions when solving a real-world or mathematical problem.</p> <p>I <b>CAN</b> recognize that a variable can represent an unknown number or any number in a specified set.</p> <p>I <b>CAN</b> solve real-world and mathematical problems by writing and solving equations of the form <math>x + p = q</math> and <math>px = q</math> for cases in which <math>p</math>, <math>q</math> and <math>x</math> are all nonnegative rational numbers.</p> <p>I <b>CAN</b> write an inequality of the form <math>x &gt; c</math> or <math>x &lt; c</math> to represent a constraint or condition in a real-world or mathematical problem.</p> <p>I <b>CAN</b> show that inequalities of the form <math>x &gt; c</math> or <math>x &lt; c</math> have infinitely many solutions; represent solutions of such inequalities on number line diagrams</p> <p>I <b>CAN</b> write an inequality of the form <math>x &gt; c</math> or <math>x &lt; c</math> to represent a constraint or condition in a real-world or</p>	Chapter Tests, Quizzes, Mid-Chapter Checkpoint and Freckle

			<p>mathematical problem.</p> <p>I <b>CAN</b> show that inequalities of the form <math>x &gt; c</math> or <math>x &lt; c</math> have infinitely many solutions; represent solutions of such inequalities on number line diagrams</p>	
March	Formulas and Graphs	<p>6.EE.9 (Independent and Dependent Variables)</p> <p>6.EE.8 (Solving real-world problems by graphing in coordinate plane)</p> <p>6.SP.4 (Display data)</p> <p>6.G.2 (Volume of prisms by packing and using the formula)</p>	<p>I <b>CAN</b> display numerical data in plots on a number line, including dot plots, histograms, and box plots.</p> <p>I <b>CAN</b> develop and apply formulas and procedures for volume of regular prisms. I can find the volume of a right rectangular prism with fractional edge lengths by packing it with unit cubes of the appropriate unit fraction edge lengths.</p> <p>I <b>CAN</b> show that volume is the same as multiplying the edge lengths of a rectangular prism.</p> <p>I <b>CAN</b> apply the formulas <math>V = l w h</math> and <math>V = b h</math> to find volumes of right rectangular prisms with fractional edge lengths in the context of solving real-world and mathematical problems.</p>	Chapter Tests, Quizzes, Mid-Chapter Checkpoint and Freckle
April	Geometry	<p>6.G.1 (Area of polygons)</p> <p>6.G.2 (Volume of prisms by packing and using the formula)</p> <p>6.G.4 (Nets of 3-D figures and surface area)</p>	<p>I <b>CAN</b> develop and apply formulas and procedures for area of plane figures. I can find the area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes.</p> <p>I <b>CAN</b> apply these techniques in the context of solving real-world and mathematical problems</p> <p>I <b>CAN</b> develop and apply formulas and procedures for the surface area. I can represent three-dimensional figures using nets made up of rectangles and triangles.</p> <p>I <b>CAN</b> use nets to find the surface area of figures.</p> <p>I <b>CAN</b> apply techniques for finding surface area in the context of solving real-world and mathematical problems.</p>	Chapter Tests, Quizzes, Mid-Chapter Checkpoint and Freckle
May	Statistics	<p>6.SP.1 (Statistical questions)</p> <p>6.SP.2 (Distributions have center, spread, and overall shape)</p>	<p>I <b>CAN</b> explain what makes a good statistical question.</p> <p>I <b>CAN</b> develop a question that can be used to collect</p>	Chapter Tests, Quizzes, Mid-Chapter Checkpoint and

		<p>6.SP.3 (Measures of center and variability)          6.SP.4 (Display Data)          6.SP.5 (Summarize Data)</p>	<p>statistical information.          I <b>CAN</b> demonstrate that a set of data collected to answer a statistical question has a distribution which can be described by its center, spread, and overall shape.</p> <p>I <b>CAN</b> describe mean, median, and mode.</p> <p>I <b>CAN</b> describe extremes, clusters, gaps, and outliers.</p> <p>I <b>CAN</b> describe the overall shape of the set of data in terms of its symmetry or skewness.</p> <p>I <b>CAN</b> explain that a measure of center for a numerical data set summarizes all of its values with a single number.</p> <p>I <b>CAN</b> measure how variations describe its values with a single number.</p> <p>I <b>CAN</b> summarize numerical data sets in relation to their context.</p>	<p>Freckle</p>
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- Green-Priority Standards
- Yellow-Supporting Standards
- Blue-Supporting Standards