

Quarter 1	<p style="text-align: center;">Number Sense and Operations</p> <p>1: Rewrite numbers in equivalent forms.</p> <ul style="list-style-type: none"><input type="checkbox"/> 1.1: Know and apply the Laws of Exponents to evaluate numerical expressions and generate equivalent numerical expressions, limited to whole-number exponents and rational number bases.<input type="checkbox"/> 1.2: Rewrite rational numbers in different but equivalent forms including fractions, mixed numbers, repeating decimals and percentages to solve mathematical and real-world problems. <p>2: Add, subtract, multiply and divide rational numbers.</p> <ul style="list-style-type: none"><input type="checkbox"/> 2.1: Solve mathematical problems using multi-step order of operations with rational numbers including grouping symbols, whole-number exponents and absolute value.<input type="checkbox"/> 2.2: Add, subtract, multiply and divide rational numbers with procedural fluency.<input type="checkbox"/> 2.3: Solve real-world problems involving any of the four operations with rational numbers. <p style="text-align: center;">Algebraic Reasoning</p> <p>1: Rewrite algebraic expressions in equivalent forms.</p> <ul style="list-style-type: none"><input type="checkbox"/> 1.1: Apply properties of operations to add and subtract linear expressions with rational coefficients.<input type="checkbox"/> 1.2: Determine whether two linear expressions are equivalent.
Quarter 2	<p style="text-align: center;">Algebraic Reasoning</p> <p>2: Write and solve equations and inequalities in one variable.</p> <ul style="list-style-type: none"><input type="checkbox"/> 2.1: Write and solve one-step inequalities in one variable within a mathematical context and represent solutions algebraically or graphically.<input type="checkbox"/> 2.2: Write and solve two-step equations in one variable within a mathematical or real-world context, where all terms are rational numbers. <p>3: Use percentages and proportional reasoning to solve problems.</p> <ul style="list-style-type: none"><input type="checkbox"/> 3.1: Apply previous understanding of percentages and ratios to solve multi-step real-world percent problems.<input type="checkbox"/> 3.2: Apply previous understanding of ratios to solve real-world problems involving proportions.

<h2>Quarter 2</h2>	<ul style="list-style-type: none"> <input type="checkbox"/> 3.3: Solve mathematical and real-world problems involving the conversion of units across different measurement systems. <p style="text-align: center;">Algebraic Reasoning</p> <p>4: <u>Analyze and represent two-variable proportional relationships.</u></p> <ul style="list-style-type: none"> <input type="checkbox"/> 4.1: Determine whether two quantities have a proportional relationship by examining a table, graph or written description. <input type="checkbox"/> 4.2: Determine the constant of proportionality within a mathematical or real-world context given a table, graph or written description of a proportional relationship. <input type="checkbox"/> 4.3: Given a mathematical or real-world context, graph proportional relationships from a table, equation or a written description. <input type="checkbox"/> 4.4: Given any representation of a proportional relationship, translate the representation to a written description, table or equation. <input type="checkbox"/> 4.5: Solve real-world problems involving proportional relationships.
<h2>Quarter 3</h2>	<p style="text-align: center;">Geometric Reasoning</p> <p>1: <u>Solve problems involving two-dimensional figures, including circles.</u></p> <ul style="list-style-type: none"> <input type="checkbox"/> 1.1: Apply formulas to find the areas of trapezoids, parallelograms and rhombi. <input type="checkbox"/> 1.2: Solve mathematical or real-world problems involving the area of polygons or composite figures by decomposing them into triangles or quadrilaterals. <input type="checkbox"/> 1.3: Explore the proportional relationship between circumferences and diameters of circles. Apply a formula for the circumference of a circle to solve mathematical and real-world problems. <input type="checkbox"/> 1.4: Explore and apply a formula to find the area of a circle to solve mathematical and real-world problems. <input type="checkbox"/> 1.5: Solve mathematical and real-world problems involving dimensions and areas of geometric figures, including scale drawings and scale factors. <p>2: <u>Solve problems involving three-dimensional figures, including right circular cylinders.</u></p> <ul style="list-style-type: none"> <input type="checkbox"/> 2.1: Given a mathematical or real-world context, find the surface area of a right circular cylinder using the figure's net. <input type="checkbox"/> 2.2: Solve real-world problems involving surface area of right circular cylinders. <input type="checkbox"/> 2.3: Solve mathematical and real-world problems involving volume of right circular cylinders.

Quarter 4

Data Analysis and Probability

1: Represent and interpret numerical and categorical data.

- 1.1:** Determine an appropriate measure of center or measure of variation to summarize numerical data, represented numerically or graphically, taking into consideration the context and any outliers.
- 1.2:** Given two numerical or graphical representations of data, use the measure(s) of center and measure(s) of variability to make comparisons, interpret results and draw conclusions about the two populations.
- 1.3:** Given categorical data from a random sample, use proportional relationships to make predictions about a population.
- 1.4:** Use proportional reasoning to construct, display and interpret data in circle graphs.
- 1.5:** Given a real-world numerical or categorical data set, choose and create an appropriate graphical representation.

2: Develop an understanding of probability. Find and compare experimental and theoretical probabilities.

- 2.1:** Determine the sample space for a simple experiment.
- 2.2:** Given the probability of a chance event, interpret the likelihood of it occurring. Compare the probabilities of chance events.
- 2.3:** Find the theoretical probability of an event related to a simple experiment.
- 2.4:** Use a simulation of a simple experiment to find experimental probabilities and compare them to theoretical probabilities.