

Expectations and Outcomes

Grade Level/Course: Sixth Grade

Content Area: Advanced Math

Unit Title	Guarantees
Numerical Expressions and Factors	<ul style="list-style-type: none"> • Compute fluently with multi-digit numbers. • Find and use LCM and GCF. • Compute the value of a number with an exponent. • Use the order of operations to accurately solve multiple step problems.
Fractions and Decimals	<ul style="list-style-type: none"> • Using the standard algorithms, students will be able to add, subtract, multiply and divide multi digit decimals. • Students will be able solve real world problems using fractions.
Algebraic Expressions and Properties	<ul style="list-style-type: none"> • Students will use algebraic language to write and evaluate math expressions. • Students will be able to use the distributive property to simplify one and two digit variable expressions.
Areas of Polygons	<ul style="list-style-type: none"> • Students will be able to draw simple polygons and solve for area in a coordinate plane given the coordinates for the vertices. • Students will be able to solve for surface area of simple and composite figures given measurements.
Ratio and Rates	<ul style="list-style-type: none"> • Students will be able to complete ratio tables and write an expression for the pattern. • Solve real life problems using unit rate. • Find a percent of a quantity.
Integers and the Coordinate Plane	<ul style="list-style-type: none"> • Students will be able to order integers and rational numbers on a number line. • Recognize opposite numbers. • Understand absolute value as a distance from 0. • Accurately plot coordinates on a 4 quadrant graph.
Equations and Inequalities	<ul style="list-style-type: none"> • Understand that inequalities can have an infinite number of solutions. • Write expressions using variables in real life problems. • Solving expressions using opposite operations.

Unit Title	Guarantees
Surface Area and Volume	<ul style="list-style-type: none"> • Students will be able to draw 3-D polygons. • Students will be able to calculate surface area of prisms and pyramids. • Students will calculate the volume of a rectangular prism.
Statistical Measures	<ul style="list-style-type: none"> • Students will be able to recognize and create a statistical question. • Students will collect data and describe the information using center, spread and shape.
Data Displays	<ul style="list-style-type: none"> • The student will be able to display numerical data using a number line, dot plot, histogram and/or box plot. • Student will explain data using quantitative measures (mean, median, mode, quartile range).
Integers	<ul style="list-style-type: none"> • Students will be able to use additive inverse to solve problems. • Accurately add, subtract, multiply and divide integers • in real world problems.
Rational Numbers	<ul style="list-style-type: none"> • Accurately add, subtract, multiply and divide rational numbers. • Convert between fractions and decimals. • Order rational numbers. • Use rational numbers in real world situations (sea-level, temperature ...)
Expressions and Equations	<ul style="list-style-type: none"> • Students will be able to use variables to represent real-life problems. • Students will be able to solve multiple step equations and inequalities within the context of the problem.
Ratios and Proportions	<ul style="list-style-type: none"> • Students will be able to compute unit rates. • Determine if 2 quantities are proportional and represent this in equations. • Explain the meaning of slope or direct variation (in context of the problem) and plot points from a table.
Percent's	<ul style="list-style-type: none"> • Students will be able to convert the forms fractions, decimals and percent's and order them on a number line. • Using proportional relationships, solve multi-step ratio/percent problems.