**Pre-Algebra**

**Scope & Sequence**

**Unit 1: Integers & Expressions (14 days)**

* Integers, Absolute Value, & the Coordinate Plane
* Adding Integers
* Subtracting Integers
* Multiplying & Dividing Integers
* Exponents, Order of Operations, & Evaluating Expressions
* Writing Algebraic Expressions
* Properties
* The Distributive Property
* Simplifying Algebraic Expressions

**Unit 2: Rational Numbers (10 days)**

* Fractions & Decimals
* Real Number System
* Adding & Subtracting Rational Numbers
* Multiplying Rational Numbers
* Dividing Rational Numbers

**Unit 3: Equations & Inequalities (13 days)**

* Addition & Subtraction Equations
* Multiplication & Division Equations
* 2-Step Equations
* Variables on Both Sides
* Multi-Step Equations
* Writing Equations & Equation Applications
* Inequalities
* Solving Inequalities
* Multi-Step Inequalities

**Unit 4: Ratios & Proportion (10 days)**

* Ratios, Rates, & Unit Rates
* Convert Rates (Unit Analysis)
* Solving Proportions
* Scale Drawings
* Similar Figures
* Indirect Measurement

**Unit 5: Percent (11 days)**

* Fractions, Decimals, & Percent
* Percent Proportion
* Percent of a Number
* Percent Equation
* Percent of Change
* Simple & Compound Interest
* Circle Graphs

**Unit 6: Linear Functions (13 days)**

* Ordered Pairs, Relations, & Functions
* Scatterplots
* Rate of Change & Slope
* Words, Equations, Tables, & Graphs
* Direct Variation
* Slope-Intercept Form
* Writing Linear Equations
* Systems of Equations

**Unit 7: Geometry (14 days)**

* Angle-Line Relationships
* Polygons & their Angles
* Perimeter & Area of 2D Figures
* Composite Figures
* 3D Figures
* Volume & Surface Area of 3D Figures
* Translations, Reflections, Rotations, & Dilations

**Unit 8: Right Triangles & Radicals (11 days)**

* Square Roots & Simplifying Radicals
* Pythagorean Theorem
* Distance & Midpoint
* Special Right Triangles
* Trigonometric Ratios

**Unit 9: Powers (12 days)**

* Prime Factorization
* GCF & LCM of Monomials
* Multiplying & Dividing Monomials
* Negative Exponents
* Powers of Monomials
* Scientific Notation
* Geometric Sequences

**Unit 10: Statistics & Probability (13 days)**

* Measures of Central Tendency
* Stem-and-Leaf Plots
* Box-and-Whisker Plots
* Histograms
* Theoretical & Experimental Probability
* Using Sampling to Predict
* Counting Outcomes
* Permutations & Combinations
* Probability of Compound Events

**Unit 11: Polynomials (8 days)**

* Classifying & Simplifying Polynomials
* Adding Polynomials
* Subtracting Polynomials
* Multiplying Polynomials