Math 6 Curriculum Guide

Unit 1: Whole Numbers/Decimals

* Base Ten Place-Value System/Decimal
* Exponents (Positive and Negative)
* Order of Operations with Whole Numbers/Decimals
* Expanded Notation (including decimals)
* Scientific Notation
* Properties of Addition and Multiplication
* Four Operations with Whole Numbers and Decimals
* Rounding Whole Numbers and Decimals
* Problem Solving with Whole Numbers and Decimals

Unit 2: Number Theory

* Divisibility
* Prime Factorization/Prime & Composite
* LCM & GCF

Unit 3: Fractions and Mixed Numbers

* Equivalent Fractions
* Simplest Form
* Fraction and Decimal Equivalents
* Comparing and Ordering Fractions
* Convert Mixed Numbers and Whole Numbers to Fractions
* Four Operations with Fractions
* Problem Solving with Fractions

Unit 4: Integers

* Introduction to Integers, Comparing and Ordering
* Absolute Value
* Four Operations with Integers

Unit 5: Algebra

* Variables and Expressions
* Translate Between Words and Math
* The Distributive Property
* Combining Like Terms
* Solving One-Step Equations with Whole Numbers/Fractions/Decimals
* Problem Solving-Writing Equations
* Solving Two-Step Equations
* Solving Multi-Step Equations
* Solving and Graphing Inequalities

Unit 6: Geometry:

* Coordinate Geometry
* Classify Triangles and Quadrilaterals
* Identify Polygons
* Perimeter
* Area: Rectangle, Triangle, Parallelogram, Square, Trapezoid
* Surface Area (Nets) and Volume of Rectangular and Triangular Prisms
* Problem Solving with Perimeter, Area and Volume

Unit 7: Ratio, Proportion and Percent:

* Ratio, rate and unit rate
* Proportions (cross products rule)
* Percent, Decimals, and Fractions
* Finding the Percent of a Number, Finding the Percent when the Part and Whole are Known, and Finding the Whole
* Tax, Tips and Discounts
* Similar Figures Problem Solving
* Indirect Measurement Problem Solving
* Customary Measurement System

Unit 8: Statistics and Probability:

* Introduction to Probability
* Theoretical and Experimental Probability of Simple Events
* Making Predictions
* Line and Bar Graphs
* Populations and Samples
* Mean, Median, Mode, Range and Outliers
* Frequency Tables and Histograms
* Dot Plot
* Box and Whisker Plot