



Mathematics Curriculum: 6th Grade

Based on Indiana Department of Education Academic Standards

Week 1

Number Sense

- + Integers
 - Positive and negative numbers
 - Number lines
- + Magnitude
- + Absolute value
- + Real Numbers
- + Rational Numbers
- + Prime and composite numbers
- + Fractions and their equivalents in decimals and percentages
 - Conversions
 - Unit Rate
 - Ratios (a/b, a to b, a:b)
- + Greatest Common Factor
- + Least Common Multiple

Week 2

Computation

- + Standard algorithmic approach to divide multi-digit whole numbers (Long Division)
- + Standard algorithmic approach to multiply multi-digit whole numbers

Week 3

Computation (Continued)

- + Exponents
- + Order of Operations

Week 4

Computation (Continued)

- + Fractions, Decimals, Percentages
- + Add, Subtract, Multiply, Divide Fractions and Decimals

Week 5

Algebra and Functions

- + Properties of Operations
 - Identity Property of Addition
 - Identity Property of Multiplication
 - Inverse Property of Addition
 - Inverse Property of Multiplication
 - Commutative Property of Addition
 - Commutative Property of Multiplication
 - Associative Property of Addition
 - Associative Property of Multiplication
 - Distributive Property of Multiplication

Week 6

Algebra and Functions (Continued)

- + Independent and Dependent Variables
- + Equations Solving for x
 - $x + p = q$
 - $x - p = q$
 - $px = q$
 - $x/p = q$
- + Inequalities
 - $x > c$
 - $x \geq c$
 - $x < c$
 - $x \leq c$
- + Graphing points with rational number coordinates on a coordinate plane
 - Ordered Pair (x, y)
 - Quadrants
 - Axes
 - Reflections

Week 7

Geometry and Measurement

- + Converting between English and Metric System (Conversion Factors)
- + Coordinate Planes, Shapes, Angles
 - Sum of Interior Angles (Quadrilaterals and Triangles)
 - Drawing Polygons in the Coordinate Plane given the coordinates of the vertices
 - Use coordinates to find the length of a side joining points
 - Area of Complex Shapes
 - Composing and Decomposing Complex Shapes Composed of Polygons
 - Volume of a Right Rectangular Prism using formulas
 - $v = lwh$ and $v = Bh$
 - Surface Area of a Right Rectangular Prism

Week 8

Data Analysis and Statistics

- + Statistics and Graphics
 - Variability
 - Distribution
 - Center
 - Spread
 - Line Plots
 - Histograms
 - Box Plots
- + Data Analysis
 - Mean
 - Median
 - Mode
 - Spread
 - Range
 - Outlier



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