

Mathematics Grade 6 is a two-semester course that is 100% aligned to Maryland College and Career Ready Standards for Mathematics. The course is designed to help students develop computational fluency, deepen their conceptual understanding, and apply mathematical practices. Students will learn to reason with ratios and rates; perform operations with fractions, decimals, and exponents; and solve equations and inequalities. They will also graph points on all four quadrants of the coordinate plane; explore geometric concepts of area, surface area, and volume; analyze data using measures of center and variability, box plots, dot plots, and histograms; and calculate probabilities. In addition, this course includes unit-level discussion activities in which students will learn techniques for having productive group conversations and will reflect on their own thinking and the thinking of others.

There are no required materials for this course.

Length: Two Semesters

Unit 1: Number Sense

- Dividing Multi-Digit Whole Numbers
- Decimal Operations
- Greatest Common Factor and Least Common Multiple
- Fraction Multiplication and Division
- Solving Problems with Fractions
- Wrap-Up: Number Sense

Unit 2: Integers

- Integers
- Inequalities and Comparison
- Absolute Value
- Wrap-Up: Integers

Unit 3: The Coordinate Plane

- Plotting Points on the Coordinate Plane
- Quadrants and Axes
- Using Graphs to Solve Problems
- Wrap-Up: The Coordinate Plane

Unit 4: Numerical and Algebraic Expressions

- Exponents
- Expressions and Equations
- Evaluating Expressions
- Equivalent Expressions
- Wrap-Up: Numerical and Algebraic Expressions

Unit 5: Ratios and Unit Rates

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- Ratios
 - Rates and Unit Rates
 - Solving Percent Problems
 - Unit Conversions
 - Wrap-Up: Ratios and Unit Rates

Unit 6: Semester 1 Exam

- Semester Wrap Up