

Mathematics Grade 6 delivers instruction, practice, and review designed to develop computational fluency, deepen conceptual understanding, and apply mathematical practices. Course topics include ratios and rates, fraction and decimal operations, and signed numbers. Students continue to build their algebra skills by plotting points in all four quadrants of the coordinate plane and solving equations and inequalities. Geometry topics include area, surface area, and volume, and statistical work features measures of center and variability, box plots, dot plots, and histograms.

The two-semester course is arranged in themed units, each with three to five lessons. Each lesson includes a variety of activities such as direct instruction, application of skills, performance tasks, and formative and summative assessments. Students engage with the subject matter in an interactive, feedback-rich environment as they progress through standards-aligned content and demonstrate their learning through computer- and teacher-scored assignments. By constantly honing the ability to apply their knowledge in abstract and real-world scenarios, students build the depth of knowledge and higher-order skills required to demonstrate their mastery when put to the test.

This course is built to state standards.

Length: Two semesters

UNIT 1: OPERATIONS ON WHOLE NUMBERS

- Lesson 1: Multiplying Whole Numbers
- Lesson 2: Dividing Multi-Digit Whole Numbers
- Lesson 3: Using Operations
- Lesson 4: Wrap-Up: Operations on Whole Numbers

UNIT 2: FRACTIONS

- Lesson 1: Fraction Basics
- Lesson 2: Fraction Multiplication and Division
- Lesson 3: Solving Problems with Fractions
- Lesson 4: Wrap-Up: Fractions

UNIT 3: DECIMALS AND PERCENTS

- Lesson 1: Decimal Operations
- Lesson 2: Percents
- Lesson 3: Rewriting and Comparing Fractions, Decimals, and Percents
- Lesson 4: Wrap-Up: Decimals and Percents

UNIT 4: INTEGERS

- Lesson 1: Signed Numbers
- Lesson 2: Integer Operations
- Lesson 3: Absolute Value
- Lesson 4: Wrap-Up: Integers

UNIT 5: PLOTTING POINTS

- Lesson 1: Inequalities and Comparison
- Lesson 2: Plotting Points on the Coordinate Plane
- Lesson 3: Quadrants and Axes
- Lesson 4: Wrap-Up: Plotting Points

UNIT 6: RATES, RATIOS, AND PROPORTIONALITY

- Lesson 1: Ratios
- Lesson 2: Rates and Unit Rates
- Lesson 3: Proportional Relationships
- Lesson 4: Unit Conversions
- Lesson 5: Wrap-Up: Rates, Ratios, and Proportionality

UNIT 7: SEMESTER WRAP-UP

- Lesson 1: Semester Wrap-Up

UNIT 8: NUMERICAL AND ALGEBRAIC EXPRESSIONS

- Lesson 1: Exponents
- Lesson 2: Expressions
- Lesson 3: Evaluating Expressions
- Lesson 4: Equivalent Expressions
- Lesson 5: Wrap-Up: Numerical and Algebraic Expressions

UNIT 9: RELATIONSHIPS AND EQUATIONS

- Lesson 1: Independent and Dependent Variables
- Lesson 2: Multiple Representations: Tables, Graphs, and Equations
- Lesson 3: Solutions of Equations and Inequalities
- Lesson 4: Wrap-Up: Relationships and Equations

UNIT 10: SOLVING EQUATIONS AND INEQUALITIES

- Lesson 1: Solving Equations Using Addition and Subtraction
- Lesson 2: Solving Equations Using Multiplication and Division
- Lesson 3: Solving Linear Inequalities
- Lesson 4: Wrap-Up: Solving Equations and Inequalities

UNIT 11: GEOMETRY

- Lesson 1: Triangles
- Lesson 2: Area
- Lesson 3: Volume
- Lesson 4: Wrap-Up: Geometry

UNIT 12: INTRODUCTION TO STATISTICS

- Lesson 1: Displaying Data
- Lesson 2: Statistical Questions and Data Distributions
- Lesson 3: Measures of Center and Variability
- Lesson 4: Box Plots
- Lesson 5: Dot Plots, Histograms, and Stem-and-Leaf Plots
- Lesson 6: Summarizing Data Using Measures of Center and Variability
- Lesson 7: Wrap-Up: Introduction to Statistics

UNIT 13: FINANCIAL LITERACY

- Lesson 1: Bank Accounts
- Lesson 2: Credit Reports
- Lesson 3: College and Career Readiness
- Lesson 4: Wrap-Up: Financial Literacy

UNIT 14: SEMESTER 2 EXAM

- Lesson 1: Semester Wrap Up

