

Math Curriculum

Sixth Grade

- Emphasize and reinforce problem solving strategies and skills
- Identify powers and exponents
- Apply the order of operations
- Review concepts and operations involving decimals
- Use and compare proper measures in the standard and metric system
- Show relationships amongst various fractions
- Using all operations of fractions and mixed numerals
- Show relationships among fractions, decimals, and percents
- Solve problems involving ratios, rates, and percents
- Identify, draw and measure the parts of geometric figures
- Find the perimeter, area, surface area, and volume of various geometric shapes
- Introduce the measures of central tendency
- Collect, organize, and explain various tables and graphs
- Identify, discuss, and estimate possible outcomes using probability
- Introduce the ordering and operations of integers
- Introduce basic algebraic concepts

Seventh Grade

- Add, subtract, multiply and divide number expressions involving rational numbers
- Locate and graph ordered pairs of real numbers and simple inequalities
- Explore number patterns
- Investigate and solve problems involving the perimeter, circumference, area and volume of two- and three-dimensional figures
- Use variables to evaluate and solve expressions, equations, and formulas
- Explain basic properties of real numbers
- Use proportion and percent to explore the relationship between fractions, decimals and all other numbers
- Solve real-world problems using fractions, decimals and percents
- Reason proportionally in situations involving similar figures and scale drawings
- Compare and contrast the various properties of two-and three-dimensional figures
- Solve and explain solutions to problems using a variety of strategies and logical reasoning
- Solve problems involving the probability of simple events.

Eighth Grade

- Emphasize sets and subsets of real numbers
- Introduce and emphasize simplifying expressions
- Introduce and emphasize multi-step equations
- Reinforce problems involving proportions and percents
- Emphasize the problem-solving process involving various concepts
- Emphasize the written explanations of various problem-solving problems
- Introduce and emphasize problems involving the Pythagorean theorem
- Emphasize and reinforce the use of perimeter, area, surface area, and volume formulas in various situations
- Introduce and emphasize factoring
- Introduce and emphasize polynomials
- Emphasize measures of central tendency and statistics
- Introduce and emphasize functions and graphs
- Introduce and emphasize linear equations and their graphs

Glencoe Mathematics Website:

<http://www.glencoe.com/sites/illinois/student/mathematics/index.html>

Sixth Grade

Glencoe Math Connects: Concepts, Skills, and Problem Solving
Course 2 - 2009

Sixth Grade Enrichment

Glencoe Math Connects: Concepts, Skills, and Problem Solving
Course 3 - 2009

Seventh Grade and Eighth Grade

Glencoe Pre-Algebra 2008
Glencoe Algebra: Concepts and Applications 2008

Seventh and Eighth Grade Enrichment

Glencoe Algebra 1 2008