

CURRICULUM PROFILE

7th GRADE MATHEMATICS

Rational Numbers and Percents

- Compare and order rational numbers
- Operations with rational numbers
- Read, write and interpret of positive powers of 10
- Apply primes, factors, divisors, multiples, common factors and common multiples in solving problems
- Represent repeated factors with exponents
- Identify and apply properties of rational numbers
- Estimate with rational numbers
- Interchange fractions, decimals and percents
- Solve problems with rational numbers

Reference: Chapter 2, 3, 4, Skills Bank

State Goals: 6A, 6B, 6C, 8A

Ratios, Proportions and Percents

- Identify, write and compare ratios, rates and proportions
- Solve proportions in word problems, similar figures and scale drawings
- Solve percent problems including percent of change and simple interest

Reference: Chapter 5, 6

State Goals: 6D, 7C, 8D, 9A

Measurement and Geometry

- Find perimeter, circumference, area, surface area and volume
- Unit conversions within the same measurement system
- Measure with rulers
- Recognize common 2- and 3-dimensional shapes
- Solve problems involving properties of triangles and quadrilaterals
- Identify and sketch common geometric figures
- Identify, sketch, and solve problems involving angles
- Graph points and identify coordinates in a coordinate plane
- Recognize, describe and show transformations or combinations of transformations

Reference: Chapter 3, 7, 8, 9

State Goals: 7A, 7B, 9A, 9B,

Probability and Statistics

- Solve problems involving probability including permutations and combinations
- Read, interpret and make predictions from data and many types of graphs
- Create graphs
- Determine and use mean, median, mode and range to interpret data

Reference: Chapter 1, 3, 11

State Goals: 10A, 10B, 10C

Algebra

- Understand geometric and arithmetic sequences
- Write, simplify and evaluate algebraic expressions
- Graph linear equations with integers
- Solve one and two step equations with integers
- Identify, interpret, and graph inequalities with integers
- Solve one and two step equations with rational numbers
- Solve and graph one step inequalities with rational numbers
- More graphing on the coordinate plane

Reference: Chapter 1, 5, 6, 7, 8, 9 10

State Goals: 8A, 8B, 8C, 8D