

## Grade 7 Math Curriculum

- Algebra
  - substitution
  - solving equations by adding, subtracting, multiplying and dividing
  - solving inequalities by adding, subtracting, multiplying and dividing
  - working with like terms
  - ordered pairs and graphing
- Integers and Exponents
  - adding, subtracting, multiplying and dividing
  - solving equations by adding, subtracting, multiplying and dividing
  - solving inequalities by adding, subtracting, multiplying and dividing
  - working with exponents both positive and negative
- Rational and Real Numbers
  - adding, subtracting, multiplying and dividing
  - solving equations by adding, subtracting, multiplying and dividing
  - solving inequalities by adding, subtracting, multiplying and dividing
- Collecting, Displaying and Analyzing Data
  - samples and surveys
  - organizing data (stem-and-leaf, back-to-back stem-and-leaf, tables)
  - mean, median, mode
  - range, quartiles, box-and-whisker plots
  - scatterplots
- Plane Geometry
  - points, lines, planes, angles
  - triangles
  - polygons
  - coordinate geometry
  - congruence
  - transformations
  - symmetry
- Perimeter, Area and Volume
  - perimeter and area of rectangles, parallelograms, triangles, trapezoids
  - Pythagorean Theorem
  - Circles (area and circumference)
  - Volume of prisms, cylinders, pyramids, cones
  - Surface area of prisms, cylinders, pyramids, cones
- Ratios
  - ratios, proportions, rates, unit rates
  - solving proportions

- similar figures
- scale drawings and models
  
- Percents
  - relating decimals, fractions and percents
  - finding percents
  - increase and decrease
  - applications of percents
  
- Probability
  - probability (experimental, theoretical)
  - fundamental counting principle
  - permutations and combinations
  - independent and dependent events
  - odds