**Grade 7 Big Ideas Math Syllabus**

**Unit 1 - Integers**

* 1. Integers and Absolute Values
  2. Adding Integers
  3. Subtracting Integers
  4. Multiplying Integers
  5. Dividing Integers

**Unit 2 - Rational Numbers**

2.1 Rational Numbers

2.2 Adding Rational Numbers

2.3 Subtracting Rational Numbers

2.4 Multiplying and Dividing Rational Numbers

**Unit 3 - Expressions and Equations**

3.1 Algebraic Expressions

3.3 Solving Equations Using Addition or Subtraction

3.4 Solving Equations Using Multiplication or Division

3.5 Solving Two-Step Equations

**Unit 4 - Inequalities**

4.1 Writing and Graphing Inequalities

4.2 Solving Inequalities Using Addition or Subtraction

4.3 Solving Inequalities Using Multiplication or Division

4.4 Solving Two-Step Inequalities

**Unit 5 - Ratios and Proportions**

6.1 (from Pre-Algebra Text) Ratio and Rates

6.2 (from Pre-Algebra Text) Writing and Solving Proportions

6.3 (from Pre-Algebra Text) Solving Proportions using Cross Products

6.4 (from Pre-Algebra Text) Similar and Congruent Figures

6.5 (from Pre-Algebra Text) Similarity and Measurement

6.6 (from Pre-Algebra Text) Scale Drawings

**Unit 6 - Percents**

7.1 (from Pre-Algebra Text) Percents and Fractions

7.2 (from Pre-Algebra Text) Percents and Proportions

7.3 (from Pre-Algebra Text) Percents and Decimals

7.5 (from Pre-Algebra Text) Percent of Change

7.6 (from Pre-Algebra Text) Percent Applications

7.7 (from Pre-Algebra Text) Simple Interest

**Unit 7 - Angle Relationships**

12.1 (from Pre-Algebra Text) Angle Relationships

7.1 Adjacent and Vertical Angles

7.2 Complementary and Supplementary Angles

7.3 Triangles

7.4 Quadrilaterals

7.5 Scale Drawings

**Unit 8 - Circles and Area**

8.1 Circles and Circumference

8.2 Perimeters and Composite Figures

8.3 Area of Circles

8.4 Area of Composite Figures

**Unit 9 - Surface Area and Volume**

9.1 Surface Area of Prisms

9.2 Surface Area of Pyramids

9.3 Surface Area of Cylinders

9.4 Volume of Prisms

9.5 Volume of Pyramids

**Unit 10 - Probability**

10.1 Outcomes and Events

10.2 Probability

10.3 Experimental and Theoretical Probability

10.4 Compound Events

10.5 Independent and Dependent Events

**Unit 11 - Data Analysis**

11.1 (from Pre-Algebra Text) Stem-and-Leaf Plots and Histograms

11.2 (from Pre-Algebra Text) Box-and-Whisker Plots

11.3 (from Pre-Algebra Text) Using Data Displays

11.4 (from Pre-Algebra Text) Collecting Data

11.5 (from Pre-Algebra Text) Interpreting Data

10.6 Samples and Populations

10.7 Comparing Populations

**Unit 13 - Graphing and Writing Linear Equations**

5.5 Slope

13.1 Graphing Linear Equations

13.2 Slope of a Line

13.3 Graphing Proportional Relationships

13.4 Graphing Linear Equations in Slope-Intercept Form

13.5 Graphing Linear Equations in Standard Form

13.6 Writing Equations in Slope-Intercept Form

13.7 Writing Equations in Point-Slope Form

**Unit 14 - Real Numbers and Right Triangles**

9.1 (from Pre-Algebra Text) Square Roots

9.2 (from Pre-Algebra Text) Simplifying Square Roots

9.3 (from Pre-Algebra Text) The Pythagorean Theorem

9.4 (from Pre-Algebra Text) Real Numbers