



East Carter Co. R-II School District
Course Scope and Sequence

Course: 8th Grade Math

# OF DAYS	TOPICS
10	Chapter 1: Equations Major Topic: Understanding Equations Concepts: Identify key words and phrases to solve equations. Write word sentences as equations. Explain how to solve equations. Model different types of equations to solve real-life problems.
13	Chapter 2: Transformations Major Topic: Understanding Transformations Concepts: Identify a translation. Describe a transformation. Describe a sequence of rigid motions between two congruent figures. Solve real-life problems involving transformations.
10	Chapter 3: Angles and Triangles Major Topic: Understanding Angles and Angle Relationships Concepts: Identify angle relationships. Find angle measurements. Compare angles. Apply angle relationships to solve real-life problems.
13	Chapter 4: Graphing and Writing Linear Equations Major Topic: Understanding Graphing Linear Equations Concepts: Identify key features of a graph. Explain the meaning of different forms of linear equations. Interpret the slope and intercepts of a line. Create graphs of linear equations.

10	<p>Chapter 5: Systems of Linear Equations</p> <p>Major Topic: Understanding Systems of Linear Equations</p> <p>Concepts: Identify a linear equation. Describe a system of linear equations. Solve a system of linear equations. Model solving systems with different numbers of solutions.</p>
10	<p>Chapter 6: Data Analysis and Displays</p> <p>Major Topic: Understanding Data Displays</p> <p>Concepts: Identify a data set. Use appropriate data displays to represent a situation. Interpret a data set. Compare different data sets.</p>
11	<p>Chapter 7: Functions</p> <p>Major Topic: Understanding Functions</p> <p>Concepts: Identify functions. Represent functions in a variety of ways. Evaluate functions. Solve problems using function rules.</p>
13	<p>Chapter 8: Exponents and Scientific Notation</p> <p>Major Topic: Understanding Exponents and Scientific Notation</p> <p>Concepts: Write products using exponents. Describe the value of powers. Evaluate expressions. Compare quantities using scientific notation.</p>
12	<p>Chapter 9: Real Numbers and the Pythagorean Theorem</p> <p>Major Topic: Understanding Square Roots</p> <p>Concepts: Describe a square root. Find the square root(s) of a number. Approximate the value of the square root of a number. Explain the Pythagorean Theorem.</p>
10	<p>Chapter 10: Volume and Similar Solids</p> <p>Major Topic: Understanding Volume</p> <p>Concepts: Explain how to find the volumes of cylinders, cones, and spheres. Use formulas to find volumes of solids. Find missing dimensions of solids. Find surface areas and volumes of similar solids.</p>

Course Description

In this course, students will be taught the Missouri Learning Standards for Mathematics. We will use a balance of procedural fluency, conceptual understanding, and real-life applications. Students develop conceptual understanding through exploration (inquiry-based learning), continue that development in lessons while gaining procedural fluency during concept and skills practice, and tie it all together with real-life examples. Every lesson set reflects this balance, giving students the rigorous practice they need to be college- and career-ready.