



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

Course: 7th Grade Math

| # OF DAYS | TOPICS |
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| 11 | <p>Chapter 1: Adding and Subtracting Rational Numbers Major Topic: Understanding Adding and Subtracting Rational Numbers Concepts: Represent rational numbers on a number line. Explain the rules of adding and subtracting integers using absolute value. Apply addition and subtractions with rational numbers to model real-life problems. Solve problems involving addition and subtraction of rational numbers.</p> |
| 11 | <p>Chapter 2: Multiplying and Dividing Rational Numbers Major Topic: Understanding Multiplying and Dividing Rational Numbers Concepts: Explain the rules for multiplying integers. Explain the rules for dividing integers. Evaluate expressions involving rational numbers. Solve real-life problems involving multiplication and division of rational numbers.</p> |
| 10 | <p>Chapter 3: Expressions Major Topic: Understanding Algebraic Expressions Concepts: Identify parts of an algebraic expression. Write algebraic expressions. Solve problems using algebraic expressions. Interpret algebraic expressions in real-life problems.</p> |
| 13 | <p>Chapter 4: Equations and Inequalities Major Topic: Understanding Equations and Inequalities Concepts: Identify key words and phrases to write equations and inequalities. Write word sentences as equations and inequalities. Solve equations and inequalities using properties. Use equations and inequalities to model and solve real-life problems.</p> |

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| 12 | <p>Chapter 5: Ratios and Proportions</p> <p>Major Topic: Understanding Ratios and Proportions</p> <p>Concepts: Write and interpret ratios.</p> <p>Describe ratio relationships and proportional relationships.</p> <p>Represent equivalent ratios.</p> <p>Model ratio relationships and proportional relationships to solve real-life problems.</p> |
| 13 | <p>Chapter 6: Percents</p> <p>Major Topic: Understanding Fractions, Decimals, and Percents</p> <p>Concepts: Rewrite fractions, decimals, and percents.</p> <p>Compare and order fractions, decimals, and percents.</p> <p>Use the percent proportion or percent equation to find a percent, part or a whole.</p> <p>Apply percents to solve real-life problems.</p> |
| 10 | <p>Chapter 7: Probability</p> <p>Major Topic: Understanding Probability</p> <p>Concepts: Identify the possible outcomes of a situation.</p> <p>Explain the meaning of experimental and theoretical probability.</p> <p>Make predictions using probability.</p> <p>Solve real-life problems using probability.</p> |
| 10 | <p>Chapter 8: Statistics</p> <p>Major Topic: Understanding Statistics</p> <p>Concepts: Determine the validity of a conclusion.</p> <p>Explain variability in samples of a population.</p> <p>Solve a problem using statistics.</p> <p>Compare populations.</p> |
| 11 | <p>Chapter 9: Geometric Shapes and Angles</p> <p>Major Topic: Understanding Geometry</p> <p>Concepts: Explain how to find the circumference of a circle.</p> <p>Find the area of circles and composite figures.</p> <p>Solve problems involving angle measure.</p> <p>Construct a polygon.</p> |
| 12 | <p>Chapter 10: Surface Area and Volume</p> <p>Major Topic: Understanding Surface Area and Volume</p> <p>Concepts: Describe the surface area and volume of different shapes.</p> <p>Use formulas to find surface areas and volumes of solids.</p> <p>Solve real-life problems involving surface area and volume.</p> <p>Describe cross sections of 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.