*Please see the SCUC ISD Focused Planning Guides for the critical content, unit overview, TEKS specificity, vocabulary, recommended learning experiences, and resources. The Focused Planning Guides are in the TEKS Resource System. Data will be pulled 2 days after the testing window.*
<table>
<thead>
<tr>
<th>Unit 1 - Value and Magnitude of Rational Numbers</th>
<th><strong>7.4</strong> - Solve problems involving ratios, rates, and percents, including multi-step problems involving percent increase and percent decrease, and financial literacy problems. <strong>Readiness Standard</strong></th>
</tr>
</thead>
</table>
| Unit 2 - One-Variable Equations, Inequalities, and their Applications | **8.8A** - Write one-variable equations or inequalities with variables on both sides that represent problems using rational number coefficients and constants. **Supporting Standard**  
**8.8C** - Model and solve one-variable equations with variables on both sides of the equal sign that represent mathematical and real-world problems using rational number coefficients and constants. **Readiness Standard**  
**8.12D** - Calculate and compare simple interest and compound interest earnings. **Readiness Standard** |
| Unit 3 - Proportional Reasoning with Ratios and Rates | **8.3** - Use an algebraic representation to explain the effect of a given positive rational scale factor applied to two-dimensional figures on a coordinate plane with the origin as the center of dilation. **Readiness Standard**  
**8.6** - Write an equation in the form \( y = mx + b \). **Readiness Standard**  
**8.7** - Use the Pythagorean Theorem and its converse to solve problems. **Readiness Standard**  
**8.8D** - Use informal arguments to establish facts about the angle sum and exterior angle of triangles, the angles created when parallel lines are cut by a transversal, and the angle-angle criterion for similarity of triangles. **Supporting Standard** |
| Unit 4 - Proportional and Non-Proportional Functions | **8.4** - Represent proportional relationships in mathematical and real-world problems given pictorial, tabular, verbal, numeric, graphical, and algebraic representations, including d = rt. **Readiness Standard**  
**8.4B** - Graph proportional relationships, interpreting the unit rate as the slope of the line that models the relationship. **Readiness Standard**  
**8.5G** - Identify functions using sets of ordered pairs, tables, mappings, and graphs. **Readiness Standard**  
**8.4C** - Use data from a table or graph to determine the rate of change or slope and \( y \)-intercept in mathematical and real-world problems. **Readiness Standard** |
| Unit 5 - Developing Understanding of Slope and \( y \)-Intercept | **7.6** - Solve problems using qualitative and quantitative predictions and comparisons from simple experiments. **Readiness Standard**  
**7.6I** - Determine experimental and theoretical probabilities related to simple and compound events using data and sample spaces. **Readiness Standard**  
**8.12D** - Calculate and compare simple interest and compound interest earnings. **Readiness Standard** |
| Unit 6 - Statistics with Univariate and Bivariate Data | **7.7A** - Represent linear relationships using verbal descriptions, tables, graphs, and equations that simplify to the form \( y = mx + b \). **Readiness Standard**  
**8.4B** - Graph proportional relationships, interpreting the unit rate as the slope of the line that models the relationship. **Readiness Standard**  
**8.5D** - Use a trend line that approximates the linear relationship between bivariate sets of data to make predictions. **Readiness Standard**  
**8.5I** - Write an equation in the form \( y = mx + b \) to model a linear relationship between two quantities using verbal, numerical, tabular, and graphical representations. **Readiness Standard** |
| Unit 7 - Transformational Geometry | **7.5** - Solve mathematical and real-world problems involving similar shape and scale drawings. **Readiness Standard**  
**8.3C** - Use an algebraic representation to explain the effect of a given positive rational scale factor applied to two-dimensional figures on a coordinate plane with the origin as the center of dilation. **Readiness Standard**  
**8.10C** - Explain the effect of translations, reflections over the \( x \)- or \( y \)-axis, and rotations limited to 90°, 180°, 270°, and 360° as applied to two-dimensional shapes on a coordinate plane using an algebraic representation. **Readiness Standard** |
| Unit 8 - Exploring Triangle Functions with Real Interest | **7.9** - Determine the area of composite figures containing combinations of rectangles, squares, parallelograms, trapezoids, triangles, semicircles, and quarter circles. **Readiness Standard**  
**8.7A** - Solve problems involving the volume of cylinders, cones, and spheres. **Readiness Standard**  
**8.7B** - Use previous knowledge of surface area to make connections to the formulas for lateral and total surface area and determine solutions for problems involving rectangular prisms, triangular prisms, and cylinders. **Readiness Standard** |
| Unit 9 - Understanding the Process of Data Collection, Representation, and Interpretation | **8.8D** - Use informal arguments to establish facts about the angle sum and exterior angle of triangles, the angles created when parallel lines are cut by a transversal, and the angle-angle criterion for similarity of triangles. **Supporting Standard** |
| Unit 10 Probability | **7.9A** - Solve problems involving the volume of rectangular prisms, triangular prisms, rectangular pyramids, and triangular pyramids. **Readiness Standard**  
**7.9C** - Determine the area of composite figures containing combinations of rectangles, squares, parallelograms, trapezoids, triangles, semicircles, and quarter circles. **Readiness Standard**  
**8.7A** - Solve problems involving the volume of cylinders, cones, and spheres. **Readiness Standard**  
**8.7B** - Use previous knowledge of surface area to make connections to the formulas for lateral and total surface area and determine solutions for problems involving rectangular prisms, triangular prisms, and cylinders. **Readiness Standard** |
| Unit 11 Financial Planning | **8.12C** - Use informal arguments to establish facts about the angle sum and exterior angle of triangles, the angles created when parallel lines are cut by a transversal, and the angle-angle criterion for similarity of triangles. **Supporting Standard** |
| Unit 12 Making Connections | **8.12D** - Calculate and compare simple interest and compound interest earnings. **Readiness Standard**  
**7.4A** - Represent constant rates of change in mathematical and real-world problems given pictorial, tabular, verbal, numeric, graphical, and algebraic representations, including \( d=rt \). **Readiness Standard**  
**7.7A** - Represent linear relationships using verbal descriptions, tables, graphs, and equations that simplify to the form \( y = mx + b \). **Readiness Standard** |