

| Concept                                    | Competencies   | Grade Level Vocabulary  |
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| <b>Ratios, Proportions and Percent</b>     | <p>Compute unit rates associated with ratios of fractions.</p> <p>Recognize and represent proportional relationships between quantities.</p> <p>Use proportional relationships to solve multistep ratio and percent problems. (CC.2.1.7.D.1)</p>   | <p><b>Ratios and Proportional Relationships</b></p> <p>unit rates, ratios, proportional relationships, proportions, constant of proportionality, complex fractions</p> <p>proportion, ratio,</p>  |
| <b>Rational Numbers</b>                    | <p>Solve real-world and mathematical problems involving the four operations with rational numbers. (CC.2.1.7.E.1)</p>  | <p>proportional relationships, percent, simple interest rate, principal, tax, discount, markup, markdown, gratuity, commissions, fees, percent of error</p>   |
| <b>Algebraic expressions and equations</b> | <p>Model and solve real world and mathematical problems using multiple representations such as algebraic, graphical and using tables</p> <p>Solve multi-step equations or inequalities with one variable.</p> <p>Solve and interpret multi-step real life and mathematical problems posed with positive and negative rational numbers.</p> <p>Apply properties of operations to generate equivalent expressions. (CC.2.2.7.B.1) (CC.2.2.7.B.3)</p> | <p><b>The Number System</b></p> <p>rational numbers, integers, additive inverse</p> <p><b>Expressions and Equations</b></p> <p>coefficients, like terms, distributive property, factor</p> <p>numeric expressions, algebraic expressions,</p> |

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| <p><b>Area, surface area, volume, angle measure, circumference</b></p> <p><b>Geometric figures</b></p> | <p>Use properties of angle types and properties of angles formed when two parallel lines are cut by a transversal line to solve problems.</p> <p>Solve problems involving area and circumference of a circle(s).</p> <p>Solve mathematical problems involving area, volume and surface area of two- and three-dimensional objects.<br/>(CC.2.3.7.A.1)</p> <p>Solve problems involving scale drawings of geometric figures.</p> <p>Apply the properties of all types of triangles based on angle and side measure including the triangle inequality theorem.</p> <p>Describe the two-dimensional figures that result from slicing three-dimensional figures.<br/>(CC.2.3.7.A.2)</p> | <p>maximum, minimum</p> <p><b>Geometry</b></p> <p>scale drawing, dimensions, scale factor, plane sections, right rectangular prism, right rectangular pyramids, parallel, perpendicular, scalene triangle, obtuse triangle, equilateral triangle</p> <p>area, surface area, and volume inscribed, circumference, radius, diameter, <math>\pi</math>, supplementary, vertical, adjacent, complementary, pyramids, face, base</p> <p><b>Statistics and Probability</b></p> |
| <p><b>Data, distributions and random sampling</b></p> <p><b>Probability</b></p>                        | <p>Draw inferences about two populations based on random sampling concepts.</p> <p>Determine and approximate relative frequencies and probabilities of events.</p> <p>Find the probability of a simple event, including the probability of a simple event not occurring.</p> <p>Draw informal comparative inferences about two populations using measures of center and measures of variability.<br/>(CC.2.4.7.B.1)<br/>(CC.2.4.7.B.2)</p> <p>Find probabilities of independent compound events.</p> <p>Predict the approximate relative frequency given the probability.<br/>(CC.2.4.7.B.3)</p>   | <p>random sampling, population, representative sample, inferences</p> <p>variation/variability distribution, measures of center, measures of variability</p> <p>sample spaces</p>  |