

Strand: Solve real-world and mathematical problems involving area, surface area, and volume.			
<p><b>Standard 6.G.1: I can find the area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles, and other shapes. I can apply these techniques in the context of solving real-world and mathematical problems</b></p>			
<p><b>Learning Targets</b></p> <ul style="list-style-type: none"> <li>Classify special quadrilaterals: square, rhombus, trapezoid, parallelogram, rectangle, kite.</li> <li>Relate the area of triangles and the area of rectangles.</li> <li>Solve problems in a real-world context.</li> <li>Identify the relationship between bases and heights in polygons.</li> <li>Determine the area of polygons.</li> </ul>	<p><b>Academic Vocabulary &amp; Notation</b></p> <ul style="list-style-type: none"> <li>compose, decompose, base, height, right triangle, polygon, special quadrilaterals, perpendicular</li> </ul>	<p><b>Question Stems</b></p> <ul style="list-style-type: none"> <li>Illustrate how you can find the area of a trapezoid by composing and decomposing the shapes.</li> <li>Justify how you can derive the formula for triangles from rectangles.</li> <li>This new math idea is like....</li> </ul>	<p><b>Possible Assessments</b></p> <ul style="list-style-type: none"> <li><a href="#"><u>District CFA Geometry</u></a></li> </ul>
<p><b>Standard 6.G.2: I can find the volume of a right rectangular prism with appropriate unit fraction edge lengths.</b></p>			
<p><b>Learning Targets</b></p> <ul style="list-style-type: none"> <li>Apply the formulas <math>V=lwh</math> and <math>V=Bh</math> to find volumes of right rectangular prisms with fractional edge lengths.</li> <li>Relate measuring fractional units with multiplication of fractions.</li> </ul>	<p><b>Academic Vocabulary &amp; Notation</b></p> <ul style="list-style-type: none"> <li>volume, rectangular prism, length, width, height, base, cubic units, fraction edge length, unit fraction</li> </ul>	<p><b>Question Stems</b></p> <ul style="list-style-type: none"> <li>Draw a diagram with the following dimensions:  <math>12\frac{1}{2}</math> in = l; <math>8\frac{1}{4}</math>in=w;  <math>12\frac{1}{2}</math> in = h</li> <li>The steps I followed were...</li> </ul>	<p><b>Possible Assessments</b></p> <ul style="list-style-type: none"> <li><a href="#"><u>District CFA Geometry</u></a></li> </ul>

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<p><b>Standard 6.G.3: I can draw polygons in the coordinate plane given coordinates for the vertices; use coordinates to find the length of a side joining points with the same first coordinate or the same second coordinate. I can apply these techniques in the context of solving real-world and mathematical problems.</b></p>			
<p><b>Learning Targets</b></p> <ul style="list-style-type: none"> <li>Understand that a line segment from one coordinate pair to another represents a distance.</li> <li>Distance between two points on a coordinate plane is an absolute value.</li> <li>Plot a polygon on a coordinate plane with given ordered pairs.</li> </ul>	<p><b>Academic Vocabulary &amp; Notation</b></p> <ul style="list-style-type: none"> <li>coordinate planes, origin, x-axis, y-axis, Quadrant I, Quadrant II, Quadrant III, Quadrant IV, vertex, vertices, coordinates, polygons, x-coordinate, y-coordinate, length, Cartesian coordinate plane</li> </ul>	<p><b>Question Stems</b></p> <ul style="list-style-type: none"> <li>I found _____ challenging, because....</li> <li>What did you have to do to solve the problem?</li> </ul>	<p><b>Possible Assessments</b></p> <ul style="list-style-type: none"> <li><u>District CFA Geometry</u></li> </ul>
<p><b>Standard 6.G.4: I can represent three-dimensional figures using nets made up of rectangles and triangles, and use the nets to find the surface area of these figures. Apply these techniques in the context of solving real-world and mathematical problems.</b></p>			
<p><b>Learning Targets</b></p> <ul style="list-style-type: none"> <li>The surfaces of 3-dimensional shapes are composed of 2-dimensional faces.</li> <li>Understanding surface area using nets can be used in real-world contexts</li> <li>Use a net to represent a 3-D figure.</li> <li>Use a net to find the surface area of a 3-D figure made up of rectangles and triangles.</li> </ul>	<p><b>Academic Vocabulary &amp; Notation</b></p> <ul style="list-style-type: none"> <li>net, three-dimensional figures, surface area, vertices, face, edge, length, width, base, height, polyhedron, prism, pyramid</li> </ul>	<p><b>Question Stems</b></p> <ul style="list-style-type: none"> <li>Show how you might prove that there is a relationship between 2-D and 3-D shapes.</li> <li>How is this like something you have done before?</li> </ul>	<p><b>Possible Assessments</b></p> <ul style="list-style-type: none"> <li><u>District CFA Geometry</u></li> </ul>