

Any standard **highlighted in yellow** has been determined by our WCSD teachers, district and state experts as essential for students to master.

<p><b>Strand 10.G.C: I can understand and apply theorems about circles (Standard G.C.1-4). I can find arc lengths and areas of sectors of circles. I can use this basis for introducing the radian as a unit of measure (Standard G.C.5).</b></p>			
<p><b>Standard 10.G.C.1: I can prove that all circles are similar.</b></p>			
<p><b>Learning Targets</b></p> <ul style="list-style-type: none"> <li>I can define a circle as the set of points equidistant to a given center point.</li> </ul>	<p><b>Academic Vocabulary &amp; Notation</b></p> <ul style="list-style-type: none"> <li>circle, radius, dilation, equidistant, center point</li> </ul>	<p><b>Question Stems</b></p> <ul style="list-style-type: none"> <li>Prove that two shapes are similar and justify your answer.</li> <li>A question I had was.....</li> <li>What strategy did you use?</li> </ul>	<p><b>Possible Assessments</b></p> <ul style="list-style-type: none"> <li><u>District CFAs</u></li> </ul>
<p><b>Standard 10.G.C.2: I can identify and describe relationships among inscribed angles, radii, and chords.</b></p>			
<p><b>Learning Targets</b></p> <ul style="list-style-type: none"> <li>I can use circle relationships to find the measures of central, inscribed, and circumscribed angles of a circle.</li> <li>I can use circle relationships to show that the measure of the inscribed angle on a diameter is a right angle.</li> <li>I can use circle relationships to show that the radius of a circle is perpendicular to a tangent line where the radius intersects the circle.</li> </ul>	<p><b>Academic Vocabulary &amp; Notation</b></p> <ul style="list-style-type: none"> <li>inscribed angle, central angle, circumscribed angle, radius, radii, chord, diameter, perpendicular, tangent line</li> </ul>	<p><b>Question Stems</b></p> <ul style="list-style-type: none"> <li>Why are all inscribed angles that intersect the same points equal regardless of where the vertex is on the circle? Justify your answer.</li> </ul>	<p><b>Possible Assessments</b></p> <ul style="list-style-type: none"> <li><u>District CFAs</u></li> </ul>

<p><b>Standard 10.G.C.3: I can construct the inscribed and circumscribed circles of a triangle, and prove properties of angles for a quadrilateral inscribed in a circle.</b></p>			
<p><b>Learning Targets</b></p> <ul style="list-style-type: none"> <li>I can inscribe a circle in a triangle.</li> <li>I can circumscribe a circle about a triangle.</li> <li>I can prove that opposite angles in a quadrilateral inscribed in a circle are supplementary.</li> </ul>	<p><b>Academic Vocabulary &amp; Notation</b></p> <ul style="list-style-type: none"> <li>inscribed, circumscribed, angle quadrilateral</li> </ul>	<p><b>Question Stems</b></p> <ul style="list-style-type: none"> <li>Find the unique relationships between the angles of a quadrilateral inscribed within a circle if the quadrilateral is a square, a rectangle, or an isosceles trapezoid.</li> <li>How have you shown your thinking?</li> </ul>	<p><b>Possible Assessments</b></p> <ul style="list-style-type: none"> <li><u>District CFAs</u></li> </ul>
<p><b>Standard 10.G.C.4: I can construct a tangent line from a point outside a given circle to the circle.</b></p>			
<p><b>Learning Targets</b></p> <ul style="list-style-type: none"> <li>I can construct a tangent line from a point outside a given circle.</li> </ul>	<p><b>Academic Vocabulary &amp; Notation</b></p> <ul style="list-style-type: none"> <li>construct, tangent line, point, circle</li> </ul>	<p><b>Question Stems</b></p> <ul style="list-style-type: none"> <li>A question I had was.....</li> </ul>	<p><b>Possible Assessments</b></p> <ul style="list-style-type: none"> <li><u>District CFAs</u></li> </ul>
<p><b>Standard 10.G.C.5: I can derive, using similarity, the fact that the length of the arc intercepted by an angle is proportional to the radius. I can define the radian measure of the angle as the constant of proportionality. I can derive the formula for the area of a sector.</b></p>			
<p><b>Learning Targets</b></p> <ul style="list-style-type: none"> <li>I can derive the fact that the length of the arc intercepted by an angle is proportional to the radius.</li> <li>I can define the radian measure of the angle as the constant of proportionality.</li> <li>I can derive the formula for the area of a sector.</li> </ul>	<p><b>Academic Vocabulary &amp; Notation</b></p> <ul style="list-style-type: none"> <li>similarity, arc, intercept, proportional, radius, radian measure, constant, derive the formula, sector, area</li> </ul>	<p><b>Question Stems</b></p> <ul style="list-style-type: none"> <li>What changes did you have to make to solve the problem?</li> <li>Justify your answer.</li> </ul>	<p><b>Possible Assessments</b></p> <ul style="list-style-type: none"> <li><u>District CFAs</u></li> </ul>