

## Common Core Standards - Resource Page

The resources below have been created to assist teachers' understanding and to aid instruction of this standard.

<b>Domain</b>	<b>Standard:</b> G.C.2 - Identify and describe relationships among inscribed angles, radii, and chords. Include the relationship between central, inscribed, and circumscribed angles; inscribed angles on a diameter are right angles; the radius of a circle is perpendicular to the tangent where the radius intersects the circle.
<b><u>Circles</u></b> <b>Understand and apply theorems about circles</b>	<p><u>Questions to Focus Learning</u></p> <p>What are the relationships between parts of a circle? Can those relationships be used to find unknown parts of a circle?</p> <p>All circles are similar; therefore many relationships exist between the parts of the circles.</p> <p><u>Student Friendly Objectives</u></p> <p><i>Knowledge Targets</i></p> <p>I can identify and describe relationships among inscribed angles, radii, and chords. I can identify and describe the relationship between central, inscribed, and circumscribed angles. I know inscribed angles on a diameter are right angles. I know the radius of a circle is perpendicular to the tangent where the radius intersects the circle.</p> <p><i>Reasoning Targets</i></p> <p>I can compute the unknown lengths of parts of circles. I can compute the unknown measures of angles and arcs in circles.</p>

Vocabulary

arc  
central angle  
chord  
circumscribed angle  
inscribed angle  
major arc  
minor arc  
point of tangency  
secant  
semicircle  
tangent

Teacher Tips

Vertical Progression

G.C.3 - Construct the inscribed and circumscribed circles of a triangle, and prove properties of angles for a quadrilateral inscribed in a circle.

G.C.4 - Construct a tangent line from a point outside a given circle to the circle.

G.C.5 - Derive using similarity the fact that the length of the arc intercepted by an angle is proportional to the radius, and define the radian measure of the angle as the constant of proportionality; derive the formula for the area of a sector.

The above information and more can be accessed for free on the [Wiki-Teacher](#) website.

Direct link for this standard: [G.C.2](#)