**Lesson Plan Outline Geometry in Construction**

**Title:**

Area of Circles & Sectors

**Objective(s):**

Students will calculate the area of a sector of a circle

**Learning Standard(s):**

[CCSS.MATH.CONTENT.HSG.C.B.5](http://www.corestandards.org/Math/Content/HSG/C/B/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.

**Activities:**

Students will work together to solve problems involving area of a sector and segment of a circle.  Students will solve application problems with area.

**Materials:**

Sector Area Application W.S.