**Lesson Plan Outline Geometry in Construction**

**Title:**

Interior and Exterior Angles of a Polygon

**Objective(s):**

The students will discover the properties of interior and exterior angles of polygons

**Learning Standard(s):**

[CCSS.MATH.CONTENT.HSG.CO.C.9](http://www.corestandards.org/Math/Content/HSG/CO/C/9/)Prove theorems about lines and angles. *Theorems include: vertical angles are congruent; when a transversal crosses parallel lines, alternate interior angles are congruent and corresponding angles are congruent; points on a perpendicular bisector of a line segment are exactly those equidistant from the segment's endpoints*.

[CCSS.MATH.CONTENT.HSG.CO.A.1](http://www.corestandards.org/Math/Content/HSG/CO/A/1/)Know precise definitions of angle, circle, perpendicular line, parallel line, and line segment, based on the undefined notions of point, line, distance along a line, and distance around a circular arc.

**Activities:**

Quadrilaterals Formative Assessment

Students will be given different shapes and a protractor.  They will explore the interior and exterior angles to come up with rules.

**Materials:**

Protractor

Quadrilaterals Formative Assessment