**Lesson Plan Outline Geometry in Construction**

**Title:**

Corresponding Parts of Congruent Triangles are Congruent

**Objective(s):**

Students will use CPCTC to show that parts of congruent triangles are congruent

**Learning Standard(s):**

[CCSS.MATH.CONTENT.HSG.CO.B.8](http://www.corestandards.org/Math/Content/HSG/CO/B/8/)

Explain how the criteria for triangle congruence (ASA, SAS, and SSS) follow from the definition of congruence in terms of rigid motions.

[CCSS.MATH.CONTENT.HSG.CO.B.7](http://www.corestandards.org/Math/Content/HSG/CO/B/7/)

Use the definition of congruence in terms of rigid motions to show that two triangles are congruent if and only if corresponding pairs of sides and corresponding pairs of angles are congruent.

**Activities:**

Students will solve applications of congruent triangles through proof and using CPCTC

Students will look at construction pictures and determine if they can prove angles and sides of a figure are congruent.

**Materials:**

Proofs with CPCTC W.S.