**Lesson Plan Outline Geometry in Construction**

**Title:**

Proving two triangles are congruent

**Objective(s):**

Students will prove two triangles are congruent by postulates and theorems.

**Learning Standard(s):**

[SS.MATH.CONTENT.HSG.CO.B.6](http://www.corestandards.org/Math/Content/HSG/CO/B/6/)

Use geometric descriptions of rigid motions to transform figures and to predict the effect of a given rigid motion on a given figure; given two figures, use the definition of congruence in terms of rigid motions to decide if they are congruent.

[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.

**Activities:**

Students will organize statements and reasons for a congruent triangles proofs using triangle postulates and theorems.

Proof corrections; students will find flaws and make corrections to triangle proofs

**Materials:**

Proof Statements Cut-Up

Writing Proofs W.S.