**Lesson Plan Outline Geometry in Construction**

**Title:**

Tools for Geometry & Algebra Review

**Objective(s):**

Students will learn how to use a compass and protractor to take measurements and perform basic geometric definitions and constructions.

Students will review skills from Algebra including solving an equation, graphing lines in the coordinate plane, and key algebraic terms

**Learning Standard(s):**

[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.

[CCSS.MATH.CONTENT.HSG.CO.D.12](http://www.corestandards.org/Math/Content/HSG/CO/D/12/)

Make formal geometric constructions with a variety of tools and methods (compass and straightedge, string, reflective devices, paper folding, dynamic geometric software, etc.).*Copying a segment; copying an angle; bisecting a segment; bisecting an angle; constructing perpendicular lines, including the perpendicular bisector of a line segment; and constructing a line parallel to a given line through a point not on the line*.

**Activities:**

Geometric Constructions Practice

Washer & String Lifting Activity

*Students will work as a team to life tennis ball using only strings and a washer*

Algebra Review

**Materials:**

Fractions in Construction Quiz

Compass, Protractor, and Ruler

Large Washer, String, and a Tennis Ball

Constructions Instruction Packet

Constructions with Compass & Straight Edge