**Lesson Plan Outline Geometry in Construction**

**Title:**

Geometric Constructions

**Objective(s):**

The students will perform the construction of a perpendicular line through a point on and off of a line.

The students will perform the construction of a parallel line through a given point

**Learning Standard(s):**

[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:**

The students will create various quadrilaterals using perpendicular lines and perpendicular bisectors using protractor and compass and using geometry software

The students will create various parallelograms using parallel and perpendicular lines using a protractor and compass and using geometry software

**Materials:**

Ruler, protractor, and compass

iPad with Geometry pad App

Geometric Constructions Packet