Unit 1: Basics of Geometry & Logic
Essential Learning Standards (Ch 1 & 2)

Formal Unit Standards (Generic state standard language)	**Essential Learning Standards for Assessment and Reflection** (Student-friendly language)	**Daily Learning Targets What students have to know and be able to do.** (Unwrapped standards)
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. [G-CO1]	I can accurately define and identify basic geometric figures.	• Define angle, ~~circle~~, perpendicular line, parallel line, line segment, and distance. • Describe angle, ~~circle~~, perpendicular line, parallel line, line segment, and distance. • Identify angle, ~~circle~~, perpendicular line, parallel line, line segment, and distance. • Illustrate a point, line, distance along a line, and ~~distance around a circular arc~~.
Make formal geometric constructions with a variety of tools and methods such as compass and straightedge,string, reflective devices, paper folding, and dynamic geometric software. Constructions include 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. [G-CO12] (GEO A/B)	I can construct basic geometric figures using a variety of tools and methods.	• Construct a copy of a segment, copy of an angle, the bisection of a segment, the bisection of an angle, perpendicular line, perpendicular bisector of a line segment, and parallel lines. • Describe a specific construction process. • Demonstrate the proper use of a geometric construction tools.
Find the point on a directed line segment between two given points that partitions the segment in a given ratio. [G-GPE6] (GEO A)	I can use formulas to find information given two points.	• Define line segment, distance formula, and ratio. • Set-up an equation to find the missing endpoint. • Apply properties of ratios.

		• Solve equations using the distance formula • Find a point on a number line according to a given ratio from a given point.
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; and points on a perpendicular bisector of a line segment are exactly those equidistant from the segment's endpoints. [G-CO9]	I can prove theorems about lines and angles.	• Define vertical angle, transversal, parallel lines, alternate interior angles, corresponding angles, perpendicular bisector, line segment, equidistant, and endpoints. • Develop a process that demonstrates the logical order of properties to form a proof. • Illustrate vertical angle, transversal, parallel lines, alternate interior angles, corresponding angles, perpendicular bisector, line segment, equidistant, endpoints, and their properties. • Arrange statements to form a logical order. • Identify measures of vertical angles, alternate interior angles, and corresponding angles.
Apply geometric methods to solve design problems (e.g., designing an object or structure to satisfy physical constraints or minimize cost, working with typographic grid systems based on ratios).* [G-MG3]	I can apply geometric methods to solve problems.	• Demonstrate deductive reasoning skills. • Dissect the information in a given problem. • Recall geometric formulas and methods. • Apply the appropriate geometric formulas and methods.

(+) Denotes CP standard only.
Underline Denotes Essential Standards