**Chapter 2 Segments and Angles**

* What is the difference between a segment bisector and an angle bisector? What are they?
* How can you get information from a diagram?
* What is the difference between complementary, supplementary, vertical angles, and linear pairs?

**2.1 Segment Bisectors (G-CO.1 and G-CO.2)**

* I can bisect a segment and define what that means.
* I can find the coordinates of a midpoint of a segment.
* I can write and apply the midpoint formula ( $\frac{x\_{1+}x\_{2}}{2}, \frac{y\_{1+}y\_{2}}{2}$) to determine if a point is the midpoint.

**2.2 Angle Bisectors (G-CO.9, G-CO.2, G-CO.4, G-CO.5, G-CO.6)**

* I can define and create an angle bisector.
* I can use the definition of an angle bisector to solve for unknown quantities.
* I can use symbols to show that my angles are congruent.
* I can use angle bisectors to determine if an able is acute, obtuse, straight, or right.

**2.3 Complementary and Supplementary Angles (G-CO.9 and G-CO.2)**

* I can define and sketch an example of adjacent angles, complementary, or supplementary angles.
* I can apply the Congruent Complements Theorem and the Congruent Supplements Theorem to prove that angles are congruent.

**2.4 Vertical Angles (G-CO.9 and G-CO.2)**

* I can define and sketch and example of vertical angles and a linear pair.
* I can use the Vertical Angles Theorem to prove angles are congruent.
* I can find the measure of an unknown angle using the Vertical Angles Theorem, Linear Pair Postulate, and definition of complementary and supplementary angles.

**2.5 If-Then Statements and Deductive Reasoning (G-CO.9, G-CO.2, G-CO.4, G-CO.5, G-CO.6)**

* I can write "If-then" statements and identify the hypothesis and the conclusion.
* I can apply laws of logic to determine if a statement is true.
* I can form a conclusion when given a hypothesis.

**2.6 Properties of Equality and Congruence (G-CO.2, G-CO.4, G-CO.5, G-CO.6, and G-CO.7)**

* I can define the Reflexive Property, Symmetric Property, and Transitive Property to prove equality and congruence.
* I can identify and apply the Reflexive Property, Symmetric Property, and Transitive Property.
* I can define, identify, and apply the Addition Property of Equality, Subtraction Property of Equality, Multiplication Property of Equality, Division Property of Equality, and Substitution Property of Equality.