Learning Goal	Common Core Alignment	Blooms
LG 1: Students are to know the definitions of lines and angles and their properties. They are able to construct them given certain conditions.	**Common Core State Standard Alignment:** **Content:** Mathematics **Grade:** Eighth Grade **Domain:** Geometry **Cluster:** Prove Geometric Theorems **Standard:** CCSS.MATH.CONTENT.HSG.CO.C.9 Prove theorems about lines and angles.	Remembering
LG 2: Students will be able to understands a conditional statement and how every mathematical theorem is written as one, as well as beginning to write proofs.	**Common Core State Standard Alignment:** **Content:** Mathematics **Grade:** Eighth Grade **Domain:** Geometry **Cluster:** Prove Geometric Theorems **Standard:** CCSS.MATH.CONTENT.HSG.CO.C.10 Prove theorems about triangles.	Understanding, Creating
LG 3: Students will know the formal definition of what makes a line parallel and what makes a line perpendicular to another line.	**Common Core State Standard Alignment:** **Content:** Mathematics **Grade:** Eighth Grade **Domain:** Geometry **Cluster:** Use Coordinates to solve simple geometric theorems algebraically **Standard:** CCSS.MATH.CONTENT.HSG.GPE.B.5 Prove the slope criteria for parallel and perpendicular lines and use them to solve geometric problems	Analyzing
LG 4: Students will see algebraic problems involving shapes and definitions that they have learned in Geometry.	**Common Core State Standard Alignment:** **Content:** Mathematics **Grade:** Eighth Grade **Domain:** Algebra **Cluster:** Create equations that describe numbers or relationships **Standard:** CCSS.MATH.CONTENT.HSA.CED.A.1 Create equations and inequalities in one variable and use them to solve problems.	Applying, Evaluating

Learning Goal 1: Students are to know the definitions of lines and angles and their properties. They are able to construct them given certain conditions.

This learning goal picks up right where I took over the classroom. Most of my students understood the basic concepts of what a line, ray, and segment was based on my fist to five

pre-assessment. Although what was new for a majority of them is comprehending the properties that they maintained. For example, every student understood that if a = 3 and a = b, then b = 3. Although when it came to name what property was upholding that, they had no clue. This helped them create a deeper understanding of the content and answered some of their questions regarding the "why's." I assessed this understanding in a few different formats, although the one format that proved to be most telling was the Plickers assessment. This was a formative assessment that took place in the class following them learning this material. What I discovered was that they were remembering this material really well, which led me to believe that this made sense to them and that it wasn't simply just a new mathematical definition to memorize. As we continued through the unit, I made sure to constantly be assessing their understanding of the properties.

Bloom's Taxonomy: This learning goal applies with this level of Bloom's Taxonomy because it is the intro level and the students are just learning these definitions. Before we're able to fully use them we needed to be certain that we understand them. In this case, students will ask the questions "what is a line?" or "what is a point?" There is also a strong emphasis on the relationships lines, angles, and points have with each other.

Learning Goal 2: Students will be able to understands a conditional statement and how every mathematical theorem is written as one, as well as beginning to write proofs.

This learning goal is probably the most important learning goal since it creates a basis for everything else that we will learn in this course. This goal made me nervous at first, since it is so English focused. Although we were able to learn these definitions and forms of a conditional statement in a systematic manner such that it was accessible for all learners. Even my ESL learners were able to recognize the contrapositive of a statement versus the inverse. So the assignment that assessed this was our poser project. Students partnered up and had to come up with their own conditional statement and illustrations for each form. This went phenomenally, and we spent a good portion of class time on it as well. I believe this is a fundamental concept for writing proofs and understanding them at a higher level, so this learning goal was fundamental in promoting critical thinking in my math class.

Bloom's Taxonomy: These correspond with this level of Bloom's Taxonomy because this is where students begin to write their proofs. In order to complete a proof students must understand the content and just exactly what they're being asked. This isn't always as obvious as it may seem, thus it requires a sufficient understanding. We are creating proofs as well, and almost no two proofs should look the same for each student. Since we do written proofs, these will have the students voices in what they create.

Learning Goal 3: Students will know the formal definition of what makes a line parallel and what makes a line perpendicular to another line.

This goal is interesting a familiar concept in a new way for the students. So my biggest challenge with this learning goal was just how was I going to show them something they have seen before in a new and exciting way, while having them learn the concepts. So I had two massively kinesthetic activities for this learning goal that were aimed to help the students do something different in math class and stay focused on the material. One activity in particular that showed how well students were understanding this goal was the floor scavenger hunt. Sometimes not all students are actively engaged in a lesson or they may be zoning out because the material is something they have seen in academy. However with this activity every student engaged and focused, which shows they were interested in the material being shown to them.

Bloom's Taxonomy: Since students have seen parallel and perpendicular lines before, it is now time to analyze just exactly what makes them parallel and perpendicular. In addition to analyzing why they are perpendicular, we will also learn patterns and facts that help us assume and show when lines are parallel and perpendicular. This is not remembering definitions, but instead requires a deeper understanding of the content.

Learning Goal 4: Students will see algebraic problems involving shapes and definitions that they have learned in Geometry.

This one is fun for me as a teacher, because my students understand algebra. This was evident by my pre-assessments where we would review the previous tests or have the online Quizizz assignments. So in order for me to challenge them and understand why I'm having them solve for x, the algebra in geometry problems turned to be more of them simply recognizing what theorem or postulate is being applied and how to apply the algebra to it. They are essentially practing their theorems without realizing it by solving for x. This is great because it provides a great basis for all their proof writing, and allowed them to see just how the mathematics worked.

Bloom's Taxonomy: Students have spent a whole year solving for x, now they are to apply what they know about algebra and solve for x in the context of geometry. This requires them to apply their background knowledge in algebra and put it to use in solving for an interior angle for example. Also, this is evaluating level as well because their are many methods for solving for x usually and students will have to determine what is the appropriate way to complete the problem.