Unit: Angle and Angle Relationships
Unit Essential Question: What makes a relationship?
Lesson Standards: 2.0, 16.0

Focus Question: How do relationships change based on an angle?

Learning Target: 2C, 2D

Assessment: Exit Slip

INTO (5 – 10 min)

Homework Protocol: N/A in this lesson

Hook with TPS: http://www.youtube.com/watch?v=1ltYQfFuzrg Fave-Five: How does this commercial look at relationships? Who is the focus of the relationship? Do the relationships differ?

Activity Before Concept: Each student is given an angle measurement that needs to be calculated (practicing content from previous lesson on angles and angle bisectors). Students need to find their congruent pair. Later, students will use their cards to find their possible complement, supplement, linear pair, and vertical angle.

THROUGH (75 min)

A complete THROUGH will include:
- Interactive Mini Lecture: Includes modeling content, connecting to prior knowledge, explicitly teaching vocabulary, and using quick checks for understanding.
- Guided and interactive practice using MAST strategies
- Independent practice using MAST strategies
- Differentiation (includes re-teaching or extension based on assessment results)

Activity 1: Mini Lecture and guided practice (15 minutes)

First part of deductive structured notes and guided practice will be on content vocabulary and algebra used for complementary angles.

TPS: will be used to access prior knowledge connected to setting up the algebraic equation given angles are complementary.

Formative assessment: TPS; 1-2-3 assessment

Activity 2: Active Practice (15 minutes)

Using mini-white boards, students answer the questions that are put on the board by teacher. As students’ confidence increases, provide a problem that uses supplementary angles. Inform students that this was not taught yet and so it’s okay to make a mistake. Importance is on thinking, trying and learning.

Formative assessment: mini white board responses

Activity 3: Mini Lecture and guided practice (30 minutes)

This part of deductive structured notes is on using algebra with the concept of supplementary angles and linear pair.
**TPS:** what is similar/different about writing the equation when two angles are supplementary and when they are complementary? What do you think will be the same/different when we consider vertical angles?

Continue notes on writing the proof for congruent complements theorem and congruent supplements theorem.

Finish notes on vertical angles, including the proof, and practice using mini white boards.

**Formative assessment:** mini white board responses; TPS; 1-2-3 assessment

**Activity 4:** Independent Practice (15 minutes)

Students answer a set of questions at their desk and help their classmates with questions. Answers are provided for students to check their work.

**Formative assessment:** 1-2-3 assessment

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**BEYOND (10 - 15 min)**

**Individual Closure:** Continue the ABC from the start of the class – students now have to find their complement, supplement, etc. and can communicate with their classmates on any final questions they may have.

**Assessment:** Exit Slip: students solve for missing variables using one of the above angle relationships and fill in the blanks for one of the proofs.

**Continued Learning:** No homework will be assigned.