|  |
| --- |
| Name(s): Mrs. Veuleman, Avery Scherer, Amy Baker, Monique Phillips, Katherine Harty, Sarah Baumgartner, Ms. Benavides, Ms. Moore |
| Date: 2/23/2016 |
| Grade/Subject: 7th grade—Complementary and Supplementary Angles |
| TEKS:(11) Expressions, equations, and relationships. The student applies mathematical process standards to solve one-variable equations and inequalities. The student is expected to:(C) write and solve equations using geometry concepts, including the sum of the angles in a triangle, and angle relationships. |
| Materials: 1. Protractor (class set)
2. Student activity worksheet for recording station measurements

 2) Station Cards (2 sets of four stations) 3) Graphic Organizer for notes (1 per student) |
| **Engage:** (5 minutes)1. Students will watch the following video on Complementary and Supplementary angles: <https://m.youtube.com/watch?v=GO20ZgUzlc0>
2. Students will answer the question: how can you remember the difference between complementary and supplementary angles?
 |
| **Explore:** (15-20 minutes)1. The teacher will use the interactive protractor in the SMARTBOARD gallery to model how to use the protractor to measure angles. Teacher will ask the students:
	* Which set of numbers do I use (outside or inside)?
	* How do I measure an angle that doesn’t have a ray that is parallel to the bottom of the page?
2. The students will be given a Station activity worksheet.
3. At each station, the students will measure four angles. Angles A and B will be complementary. Angles C and D will be supplementary.
4. The students will have 3 minutes per station, with one minute to transition between stations.
 |
| **Explain (10-15 minutes):** 1. Students will be asked: What did they discover when they measured the angles at each station?
2. Students will fill in examples for the 5 types of angle relationships in their graphic organizer as they watch a Powerpoint on Complementary and Supplementary angles.
3. [PowerPoint](https://drive.google.com/file/d/0B-YnqbqK5YMSTDR1NHB1eVZzUGM/view?usp=sharing)
4. Students will practice writing and solving equations on angle relationships.
 |
| **Elaborate:** (10 minutes)—1. Touring DC by Angles
2. Students will use the map of D.C. to answer the four ‘Where am I?’ questions.
 |
| **Evaluate**: (10 minutes)1. Students will answer two STAAR formatted questions on solving equations about angle relationships that will be displayed on the Powerpoint presentation.
2. Students will respond to questions by showing fingers (one for A, two for B, three for C, four for D).
 |

