## Unit 7 Lesson 1: Lines, Angles, and Curves

### 1 Notice and Wonder: Lines and Angles (Warm up)

#### Student Task Statement

What do you notice? What do you wonder?







### 2 The Defining Moment

#### Student Task Statement

1. The images show some line segments that are **chords** and some segments that are not chords.
* chords
* 
* not chords
* 
* Write a definition of a chord.
1. The images show some highlighted objects that are **arcs**, and some highlighted objects that are not arcs.
* arcs
* 
* not arcs
* 
* Write a definition of an arc.
1. The images show some angles that are **central angles**, and some that are not.
* central angles
* 
* not central angles
* 
* Write a definition of a central angle.

### 3 Arcs, Chords, and Central Angles

#### Images for Launch



#### Student Task Statement

The image shows a circle with 2 congruent chords.



1. Draw the central angles associated with the highlighted arcs from $D$ to $E$ and $B$ to $C$.
2. How do the measures of the 2 central angles appear to compare? Prove that this observation is true.
3. What does this tell you about the measures of the highlighted arcs from $D$ to $E$ and $B$ to $C$? Explain your reasoning.

#### Activity Synthesis



#### Images for Activity Synthesis





© CC BY 2019 by Illustrative Mathematics®