

## Construction Site Congruent Triangles Investigation

### Standards:

- Students will be able to develop a logical conjecture
- Students will be able to devise and implement strategies to correctly measure line segments and angles
- Students will be able to identify and apply properties of triangles
- Students will be able to analyze congruent figures
- Students will contribute productively to group work

Complete the attached worksheet with your partner, answering and explaining all questions.

**Rubric for the congruent triangles investigation:**

	<b>Poor</b>	<b>Good</b>	<b>Excellent</b>
<b>Makes and supports a logical prediction</b>	Does not make or support a logical prediction (1 pt)		Makes and supports a logical prediction (2 pts)
<b>Labels all information on diagrams</b>	Not all information labeled on each diagram (1 pt)		All information is labeled on each diagram (2 pts)
<b>Constructs all triangles accurately based on given information and with correct measurements</b>	There are many errors in triangle construction and many measurement errors (1 – 3 pts)	There are a few errors in triangle construction or a few measurement errors (4 – 7 pts)	All triangles are constructed accurately based on the given information, and all measurements are correct (8 – 10 pts)
<b>Makes quality observations about the different methods</b>	Most observations are not present or not related to the methods (1 pt)	Observations are made for about half of the methods (2 pts)	Records quality observations on the validity of all the methods (4 pts)
<b>Makes and supports a valid conjecture regarding congruence</b>	Conjecture is not valid or support is not present (1 pt)	A valid conjecture is made, but it is not completely supported (3 pts)	Makes and completely supports a valid conjecture based on observations (5 pts)
<b>Contributes productively to partner work</b>	Does not contribute to partner work (1 pt)	Contributes to partner work, but does significantly less work than partner (3 pts)	Contributes productively to partner work (5 pts)

Total score: \_\_\_\_\_ / 28