

Geometry – Unit 5 Activity
Investigating the Triangle Inequality Theorem

G.CO.C.10, G.SRT.B.4, G.SRT.

Name: _____!

Date: _____ Pd: _____

Materials Needed:

- a) Drinking straws; cut to various lengths. (1 inch, 2 inch, 3 inch, ... 8 inch)
- b) Cord to lace them on.

Using the straws and cord, determine 3 sets of measurements that will create triangles. Record the measurements in the table provided.

SHORT	MEDIUM	LONG

Determine and record the measurements of 3 sets that will not create triangles.

SHORT	MEDIUM	LONG

Find the “rule” that would determine whether three measurements will create a triangle.

Test the “rule” you created with the straws and cord. Use different combinations that the ones you previously recorded.

When given two lengths, there are numerous lengths that will work to create a triangle. Try to use your rule and recorded measurements to write a conjecture about the range of the possible lengths of the third side. (You may use the straws and cord to model your conjecture.)

