

## Triangles

January 28, 2017

- 1. Suppose you have many sticks of different lengths. Can you make triangles with any three sticks you choose?
- 2. Cut out the "sticks" at the bottom of the page. Notice that there are five different lengths. Label them 1, 2, 3, 4, or 5, according to their length. Find which three sides make a triangle and which don't. Do as many as you can and record your results in the table below.

Length of side 1	Length of side 2	Length of side 3	Is it a triangle?

- 3. The length of one stick is 5cm and the length of another stick is 3cm.
  - a. Can you make a triangle with them and one more stick of 9cm?
  - b. Can you make a triangle with them and one more stick of 1cm?
- 4. Can you make a conjecture (guess) about when you can make a triangle with three lengths?