

## Tri-Triangles

### PreK

#### Materials:

- A picture of the three patterns (included in this document)
- paper, a pencil, and
- toothpicks for students to make the different patterns

#### Discussion on the rug:

Teacher holds up the pictures of the triangle patterns. “Here are different patterns. How many toothpicks would it take to make the first pattern?” Students may build and count. “How many toothpicks do you need to build the second pattern?” Students may build and count. Teacher asks the children to think about how the number of toothpicks changed from the first pattern to the second.

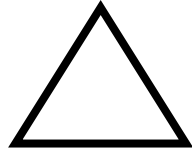
#### In small groups:

Each student has access to toothpicks, paper, a pencil, and the picture of the first three patterns. The teacher explains that they may either build or draw the pattern to help find the answers. The teacher asks the following questions, only going on to the next question if students have success.

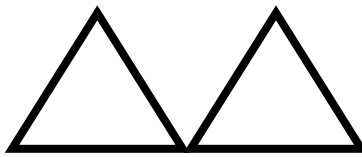
- How many toothpicks do you need to build the first pattern?
- How many toothpicks do you need to build the second pattern?
- How many toothpicks do you need to build the third pattern?
- How many toothpicks do you need to build the fourth pattern?
- How many toothpicks do you need to build the sixth pattern?

**At the end of the investigation**, have students either discuss or dictate a response to this summary question: “Tell me how you know.”

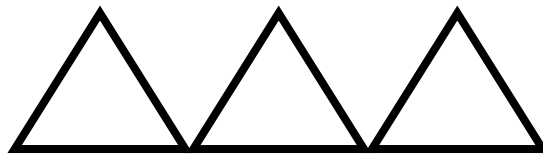




**First Pattern**



**Second Pattern**



**Third Pattern**

