# Creating and Finding Shapes

CCSS 2.G.1

Divide detectives into groups of four students. They will use **string circles** to create pentagons, hexagons and octagons.

First have the groups hold the string to create pentagons. They can create a few different pentagons . Next explain that a regular pentagon has equal length sides. Challenge them to create a regular pentagon. :

? How could they tell if the pentagon is a regular pentagon? *(Measure the sides to see if they are equal in length).*

? How many different pentagons is it possible to make with the string? *(an infinite number.)*

? How many different regular pentagons is it possible to make with the string? *(One.)*

Next, have the groups create hexagons. Have them create a few different hexagons with sides of different lengths. Then challenge them to create a regular hexagon.

? How many different hexagons is it possible to make with the string? *(An infinite number.)*

? How many different regular hexagons is it possible to make with the string? *(One.)*

Now have the groups create octagons. Have them create a few different octagons with sides of different lengths. Then challenge them to create a regular octagon.

? How many different octagons is it possible to make with the string? *(An infinite number.)*

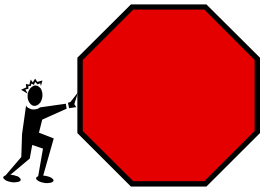
? How many different regular octagons is it possible to make with the sting? *(One.)*

Take the class outside to hunt for these shapes. Have them list ones they find on page 15 of their **Math Clue Books**. They can include ones in nature or ones that are human-made.

Have the detectives draw and label a pentagon, hexagon, and octagon on the **Shapes Tool** in their **tool kits**.

## MATERIALS:

*Tool Kits
*String circles
*Pencils
*Shapes Tool
*Tool kits
*Crayons
*Note cards
*Dowels
*String
*Math Clue Books





ZENO math powered