

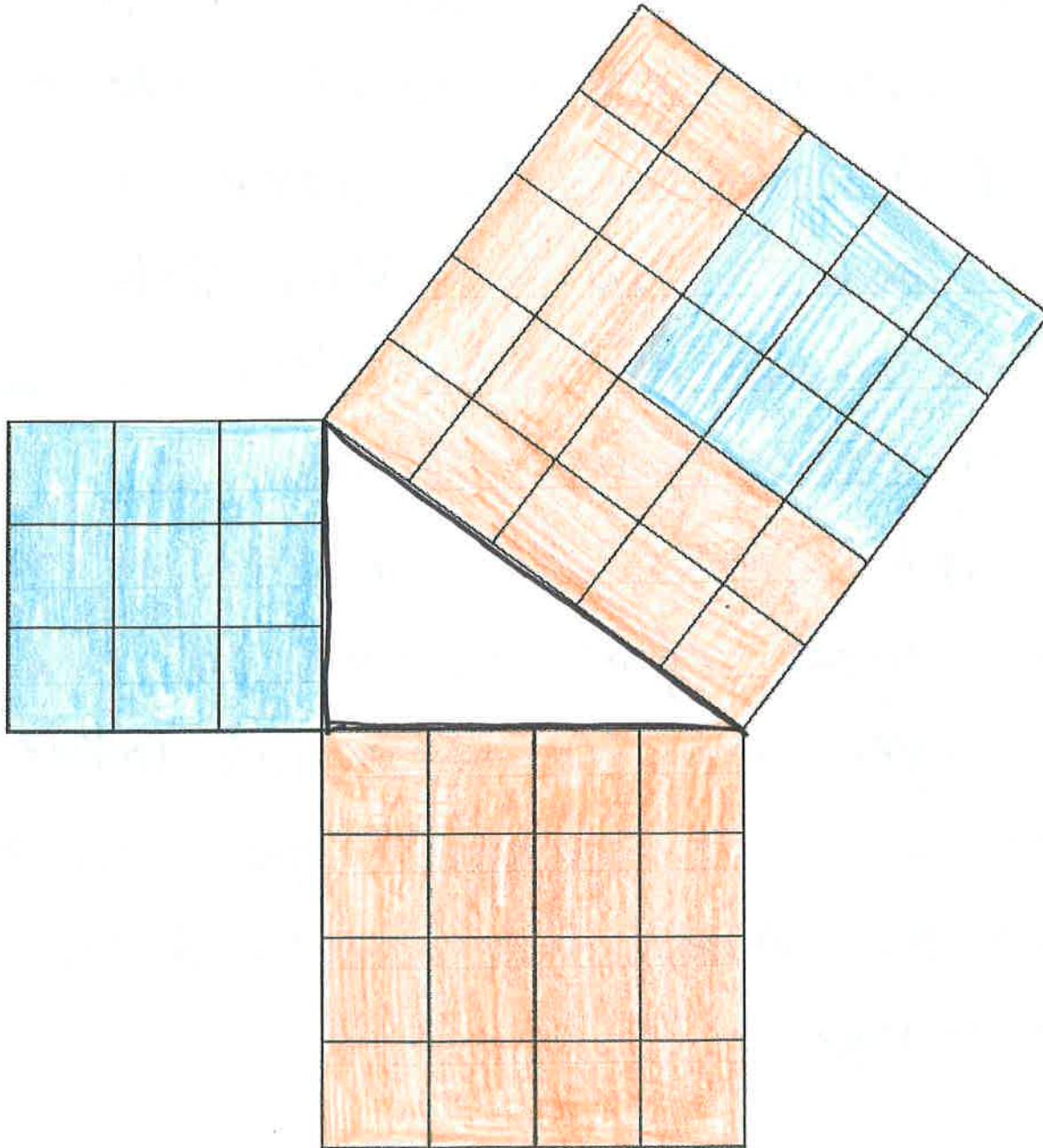
Name: Key

Period: \_\_\_\_\_

## Pythagorean Theorem – Model

Directions:

1. Color the 3 x 3 square any color.
2. Color the 4 x 4 square a **DIFFERENT** color.
3. Color the 5 x 5 square with the previous two colors, only coloring the same number of small boxes with each color as used for the 3 x 3 and 4 x 4 squares.



On the back, explain what you notice about the colored spaces, and any other observations you may have.

Name: \_\_\_\_\_

Period: \_\_\_\_\_

## Pythagorean Theorem – Model / Observations

Sample answer:

The number of ~~total~~ squares shaded on the  $3 \times 3$  square (9) plus the number of squares shaded on the  $4 \times 4$  square (16) equals the total number of squares shaded on the  $5 \times 5$  square (25).

Since the number of squares represents the area of each square, the area of the small square plus the area of the medium square equals the area of the large square. Also, the squares are formed around a right triangle so there must be a relationship between these squares and the right triangle.