

Activity Two:

Area of a Square

Name: _____

Look again at Kenneth Nolan's *Step*. Think of it as five squares placed on top of each other. Using a centimeter ruler and the artwork print out, record the following answers in the table below.

1. Measure the length of the sides of each square.
2. Calculate the area of each square.
3. The area of the smallest square is what percent of the area of the largest square?
4. The area of the red square is what percent of the area of the largest square?
5. The area of the darkest square is what percent of the area of the largest square?
6. The area of the brown square is what percent of the area of the largest square?

	SQUARE	LENGTH OF SIDE	AREA	PERCENT
SAND (smallest square)				
RED				
GREEN				
BROWN				
TAN (largest square)				

7. Compare your results with others in your class and see if you can come to agreement.

Using the class data, find the mean and median of the areas.

Mean _____ Median _____

- 8 a. What is the ratio of the length of one side of the darkest square to the length of one side of the largest square?

- 8 b. What is the ratio of their areas? _____

- 8 c. Is the ratio of their lengths the same as or different from the ratio of their areas? Explain.

- 8 d. Do you get the same pattern in ratios when you compare lengths and areas of the other squares to the largest square? Explain.



Kenneth Noland, *Step*, 1965, acrylic on canvas, 31 ¼ x 31 inches.
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