Square Circles

Number of Students: 2

Objectives:

- Identify various units of measure based on their appropriateness for each shape and size.
- Draw conclusions about the relationship of side/perimeter in squares and diameter/circumference in circles based on collected data.
- Through physical representations, develop the idea of a constant that relates a circle's diameter and circumference, namely pi.

Materials:

- What Changes, What Stays the Same?
- String (mark inches or cm with a pencil)
- Rulers
- Calculators
- Pennies
- Paper clips
- Lined paper
- String

Step 1: Measure the side length and perimeter of each square on the activity sheet using the ruler. Record the measurements in either inches or centimeters on the activity sheet. Do this once for each square, then measure the diameter and circumference of the circles on the activity sheet. Discuss with your partner how to measure the circumference with a ruler.

Step 2: Do step 1 again, but this time use either the pennies, paper clips, lined paper or string to take the measurements.

Step 3: Read "Perimeter vs. Circumference" and answer the question.

Step 4: Turn your completed paper into your teacher to be used in a future activity.