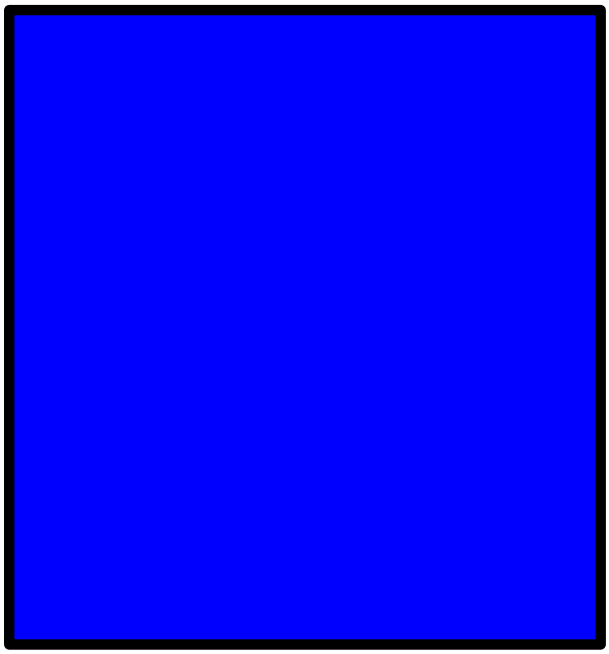

Station #2:
Please Pass the Pie

PURPOSE: The purpose of this activity is to understand the definition of Pi and to determine a mathematical formula for the circumference of a circle.

MATERIALS:
- Several round objects
- Measuring Tape/ruler
- String (for more accurate measuring)

Step 1: Measure the **circumference** of each of your objects by wrapping your measuring tape around, or using a piece of string and a ruler. Then measure the **diameter** of each object. Record your answers in the chart below, to the **nearest millimeter**.

Object	Circumference (C) in mm	Diameter (d) in mm	Ratio $(\frac{C}{d})$
		AVERAGE RATIO	

Step 2: Use the online calculator to calculate the **ratio** $\left(\frac{C}{d}\right)$for each object and record your answers in the chart above.

Step 3: Use the calculator to calculate the **average (mean)** of all your ratios above. Remember: Add all values and divide by the number of data points. Record your AVERAGE RATIO in the table above.

Step 4: Think about it…

Compare your average ratio with the averages of other students. Are your answers similar? What number does it remind you of?	

Pi is an irrational number. Explain in your own words what it means for a number to be irrational.	
Give another example of an irrational number.	
Why do you think people prefer to use the π symbol rather than a decimal approximation?	
How could you get a more accurate number for your ratio calculations?	
Understanding now what the ratio represents, could you write a formula for the circumference of a circle?	Circumference (C) =

Adapted from “Pass the Pi” by mathgeekmama.com