

Name _____ Class Period _____

Sir Cumference and the First Round Table

Introduction to Circles Activity

1. What is the name of the main character? _____

2. What is the name of the mother? _____

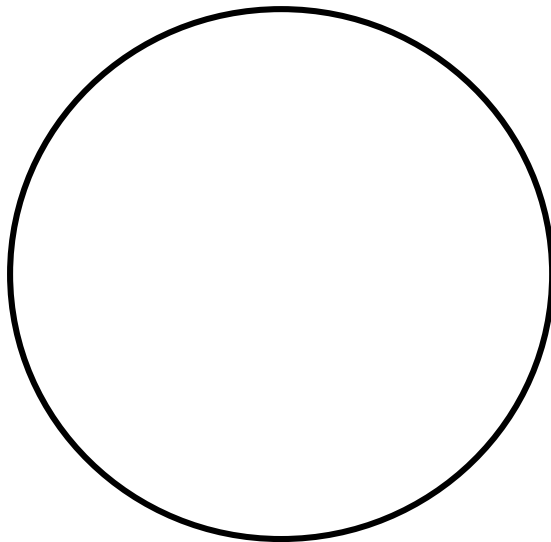
3. What is the name of the son? _____

4. What did they name the distance across the circle through the center and why?

5. What did they name the distance from the center to the outside of the circle and why?

6. What did they name the distance around the circle and why? _____

A circle is the set of all points in a plane that are the same distance from a point, called the center. The circumference, is the distance around a circle. The diameter is the distance across the circle, through its center. The radius is the distance from the center to any point on the circle. On the circle below, draw and label the center, a diameter, and a radius. Use whatever tools that are available.



Working with a partner, choose 3 objects to measure from the front table. Use a pipe cleaner to measure the distance (**in centimeters**) around each object (the circumference) as well as the distance across the circle through the center (the diameter). Record your measurements in the table below.

Object	Circumference (C)	Diameter (d)	$\frac{C}{d}$

Use a calculator to find the ratio of the circumference of each object to its diameter. Round your answer to the nearest hundredth. What do you notice about the different ratios you found in column 4 of the table? _____

Measure the diameter of two **different** circular objects. Use different objects other than the objects you used above. In the table below, predict what the circumference will be based on what you noticed about the ratios in the previous activity. Check your predictions by measuring. Record your values in the table below.

Object	Diameter (d)	Predicted Circumference (C)	Measured Circumference (C)

7. Look for a pattern in the measurements you recorded in both tables. Write a formula that relates the circumference (C) of a circle to its diameter (d).

8. The radius of a circle is one half of its diameter. Write a formula that relates the circumference of a circle to its radius (r). _____

9. HOW is the circumference of a circle related to its diameter? _____
