

Objective

By the end of this lesson, you will be able to calculate the area and circumference of circles confidently.

Materials and Prep

- Pencil and paper
- Ruler
- Calculator (optional)
- Prior knowledge of basic multiplication and division

Activities

- **Activity 1: Circle Drawing Challenge**
Draw circles of different sizes and measure their diameters. Calculate the circumference using the formula $C = \pi d$.
- **Activity 2: Pizza Party Problem**
Imagine you are cutting a pizza into slices. Calculate the area of each slice using the formula $A = \pi r^2$.
- **Activity 3: Outdoor Exploration**
Find circular objects around your house or outside. Measure their radii and calculate their areas and circumferences.

Talking Points

- **What is a circle?**
"A circle is a shape that is perfectly round, with all points equidistant from the center."
- **What is the radius of a circle?**
"The radius is the distance from the center of the circle to any point on the circle."
- **How do we calculate the circumference of a circle?**
"To find the circumference, we use the formula $C = \pi d$ or $C = 2\pi r$, where d is the diameter and r is the radius."
- **How do we calculate the area of a circle?**
"The area of a circle can be found using the formula $A = \pi r^2$, where r is the radius."
- **Why is π important in circle calculations?**
"The number π (pi) is a special number that helps us relate the circumference and diameter of a circle. It is approximately equal to 3.14159."