

## Anatomy of a Circle

Cross-Curricular Focus: Mathematics



A circle is a round shape. We see circular objects around us every day. When you get into a car, you are riding on four circular tires. If you have any change in your pocket or purse, you have some circular coins. Wherever we find them, all circles have the same parts. Let's look at the anatomy of a circle.

Every circle has a **center**. The outside edge of the circle is made of points. All the points around the edge are the same distance from the circle's center. Like other points in geometry, the center is identified with a single letter. Whatever letter names the center of the circle names the entire circle as well. Since the center of the circle below is point T, this is Circle T.



If you draw a straight line from one point on the outside edge of a circle, and go through the center point to another point on the outside edge of the circle, you have drawn the circle's **diameter**. A **radius** of the circle is half the distance of the diameter. It connects the center point to one point on the outside edge of the circle.



The distance around the outside edge of a circle is called its **circumference**. It takes a little more than the measure of three diameters to go around a circle's circumference. That addition amount is where we get the number  $\pi$ .  $\pi$  is a decimal number that starts as 3.14 and continues on forever. It can also be shown as the symbol  $\pi$ . Mathematicians also use  $\pi$  to find the area of a circle.

Name \_\_\_\_\_

Answer the following questions based on the reading passage. Don't forget to go back to the passage whenever necessary to find or confirm your answers.

1) Name two everyday objects not mentioned in the passage that are circular.

\_\_\_\_\_

2) What is the relationship between a circle's diameter and its radius?

\_\_\_\_\_

3) What is meant by a circle's circumference?

\_\_\_\_\_

4) What is meant by a circle's diameter?

\_\_\_\_\_

5) Draw a circle and label the following parts:

Center P

Diameter

Radius

Circumference