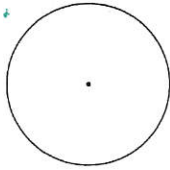


Name: Key Date: _____

One of your peers missed class where we learned about the geometry of circles. Create a page of notes below to help them understand what they missed.

A circle is the set of all points in a plane that are the same distance from a point called the center.

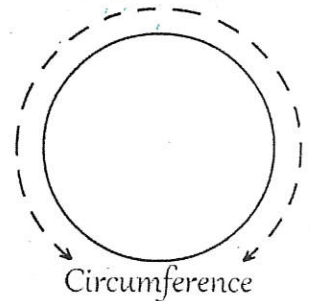


All circles have a radius and a diameter. The diameter is the distance straight through the center. The radius is the distance from the center to any point on the circle. It is half of the diameter.

Example: If the diameter = 4 cm, the radius = 2 cm

Example: If the radius = 9 inches, the diameter = 18 inches

For a polygon (a 2-D shape with straight lines), the distance around the figure is called the Perimeter. For a circle, the distance around the figure is called the Circumference of the circle. We use the letter 'C' to represent this. The ratio of the circumference to the diameter, circumference/diameter, is the same for every circle and is represented by the Greek letter, π , read as pi.



Another way to write the Circumference formula is $C = \pi * d$

(It is helpful to remember that pi is approximately equal to 3.14 or 22/7)

If you're asked to find how much area is covered by a circle (think grass seed covering a lawn, fertilizer on a field, paint on a wall) use the formula,

$$A = \pi * r^2$$

In the picture on the right, the shaded region inside the circle is the area.

Don't forget the units are squared for area!

