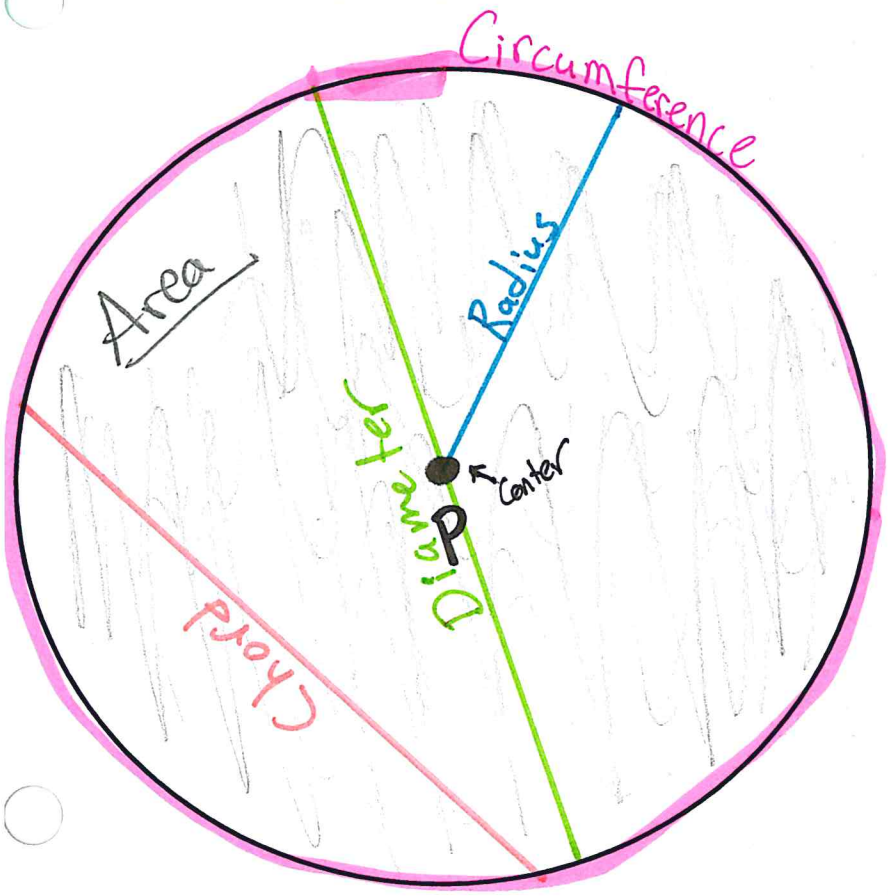
Parts of a Circle

Using a ruler, pencil and highlighter, draw an example of the following parts of a circle and write the definition for each term.



Radius: From center to edge of circle. $r = \frac{d}{2}$

Diameter: From edge to edge, through the center. $d = 2 \cdot r$

Center: The middle dot. Name of the circle. ⊙P

Chord: From edge to edge, not through the center.

Circumference: Distance around the outside of the circle. $C = 2\pi r$ / $C = \pi d$

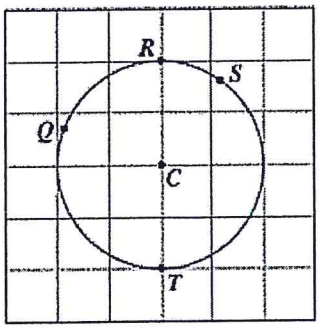
Area: Space inside of a circle. $A = \pi r^2$

Reflection:

1.) How is a circle different from other shapes?

Named w/ 1 dot, no sides / corners.

2.) Use the letters on the figure to the right to name:



a.) The circle: ⊙C

b.) A line segment that is a radius: $\overline{CS}, \overline{CR}, \overline{CQ}, \overline{CT}$

c.) A line segment that is a chord: $\overline{QS}, \overline{QT}, \overline{QR}, \overline{RS}, \overline{ST}$

d.) A line segment that is a diameter: $\overline{RT}$

3.) Compare diameter and chord. How are they the same? How are the different?

Both go edge to edge, but diameter is the only one that crosses the center point.

① Find the circumference of a circle with a radius of 6. Round to the nearest hundredth. $C = 2\pi r$ / $C = \pi d$

$C = 2\pi(6)$

$C = 12\pi$

$\boxed{C \approx 37.7}$

② Find the area of a circle with a diameter of 14. Leave your answers in terms of pi. $A = \pi r^2$

$d = 14$

$\frac{}{2}$

$r = 7$

$A = \pi(7)^2$

$A = \pi \cdot 49$

$\boxed{A = 49\pi}$