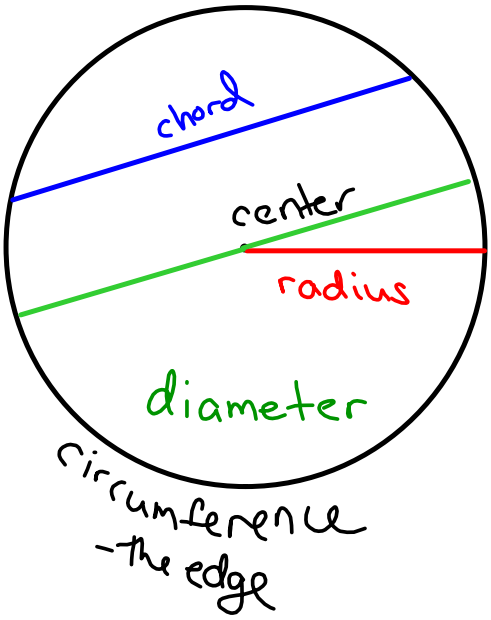
4-13-18

Aim: SWBAT develop and use the circumference formula.

HW: Finish Classwork

Do Now: **Turn in Take Home Test**

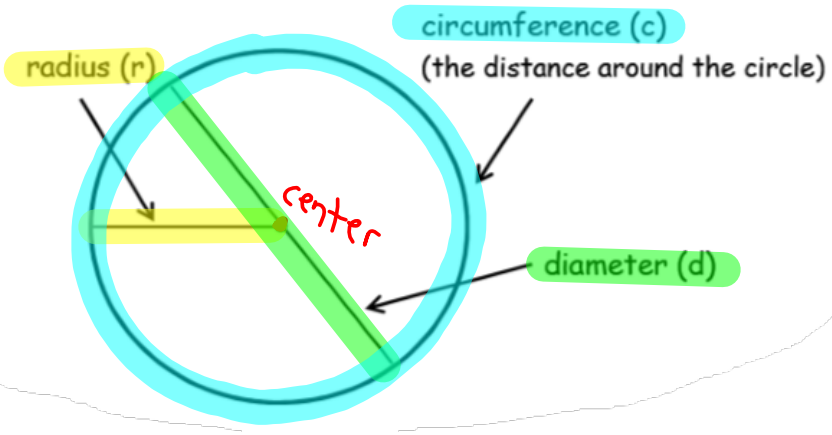

chord
center
radius
diameter
circumference
-the edge

DEFINITIONS (refer to the diagram below to "see" how the definitions apply to the circle)

Radius - The distance from the center of the circle to any point on the circle.

Diameter - A line segment that goes through the center of the circle and has both endpoints on the circle.

Circumference of a circle - The distance around a circle.



- The diameter is twice the length of the radius.

$r = 5$, $d = 10$

$r = 7.5$, $d = 15$

$r = 1000$, $d = 2000$

$r = x$, $d = 2x$

- The radius is half the diameter

$d = 12$, $r = 6$

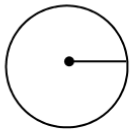
$d = 30$, $r = 15$

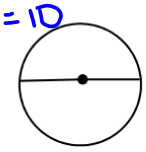
$d = x$, $r = 0.5x$, $\frac{1}{2}x$, $\frac{x}{2}$

Circumference of a Circle

Find the circumference of the circle using $C = 2\pi r$. Write your answer four different ways.

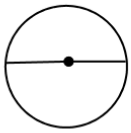
EXACT

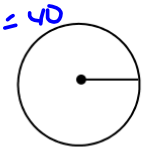
1. A circle with radius 5 cm. 	Answer in terms of π. $C = 2\pi r$ $C = 2 \cdot \pi \cdot 5$ $C = 10\pi$ cm	Answer using the π button. $C = 2\pi r$ $C = 2 \cdot \pi \cdot 5$ $C = 10\pi$ $C = 31.41592\ldots$ cm	Answer rounded to the nearest tenth. $C = 2\pi r$ $C = 2 \cdot \pi \cdot 5$ $C = 10\pi$ $C = 31.41592\ldots$ $C \approx 31.4$ cm	Answer using $\pi \approx 3.14$. $C = 2\pi r$ $C \approx (2)(3.14)(5)$ $C \approx 31.4$ cm

2. A circle with diameter 20 inches. $r = 10$ 	Answer in terms of π. $C = 2\pi r$ $C = 2 \cdot \pi \cdot 10$ $C = 20\pi$ in.	Answer using the π button.	Answer rounded to the nearest tenth.	Answer using π = 3.14.

Circumference of a Circle

Find the circumference of the circle using $C = \pi d$. Write your answer four different ways.

3. A circle with diameter 7 inches. 	Answer in terms of π. $C = \pi d$ $C = \pi \cdot 7$ $C = 7\pi$ in.	Answer using the π button.	Answer rounded to the nearest tenth.	Answer using π = 3.14.

4. A circle with radius 20 meters. $d = 40$ 	Answer in terms of π. $C = \pi d$ $C = \pi \cdot 40$ $C = 40\pi$ m	Answer using the π button.	Answer rounded to the nearest tenth.	Answer using π = 3.14.