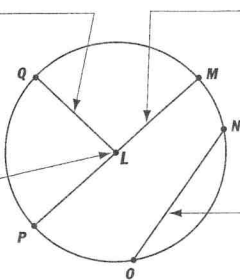


# Circles

A circle is named by its center. The circle below is circle  $L$ .  
 $M$ ,  $N$ ,  $O$ ,  $P$ , and  $Q$  are points on the circle.

$\overline{LQ}$  is a **radius**.  
 It connects the center to a point on the circle.  
 $\overline{LM}$  and  $\overline{LP}$  are also radii.

$\angle QLP$  is a **central angle**.  
 It is an angle formed by two radii.  $\angle QLM$  and  $\angle PLM$  are also central angles. The sum of all the central angles in a circle is  $360^\circ$ .



$\overline{MP}$  is a **diameter**.  
 It connects two points on the circle and passes through the center.

$\overline{NO}$  is a **chord**.  
 It connects two points on the circle.

The diameter of a circle is twice the length of a radius.

If the radius of a circle is 10 inches, its diameter is 20 inches.

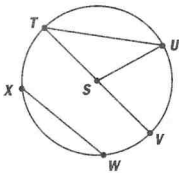
$$2 \times 10 \text{ in.} = 20 \text{ in.}$$

If the diameter of a circle is 10 inches, its radius is 5 inches.

$$10 \text{ in.} \div 2 = 5 \text{ in.}$$

Identify the parts of circle  $S$ .

- Diameter \_\_\_\_\_
- Radii \_\_\_\_\_
- Chords \_\_\_\_\_
- Central angles  
\_\_\_\_\_



Complete each statement about circle  $S$  above.

- The sum of the measures of  $\angle TSU$ ,  $\angle SUV$ , and  $\angle TSV$  is \_\_\_\_\_ degrees.
- If  $\overline{TV}$  is 18 inches, then  $\overline{ST}$  is \_\_\_\_\_.