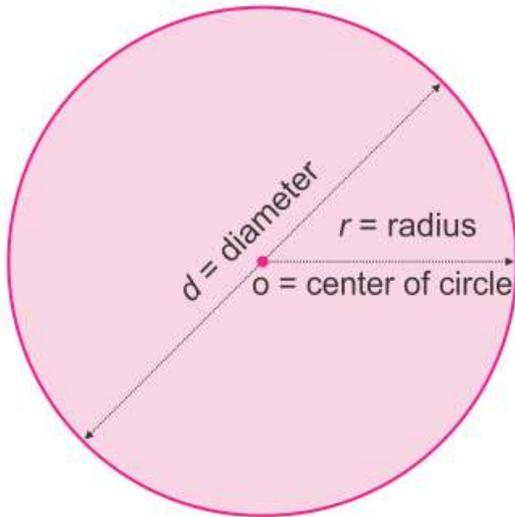


# The Circle

## Circle

**Circle** - A closed plane figure whose round edge consists of points whose distance from a fixed centre point remains constant.



$$\text{Circumference} = 2\pi r = \pi d$$

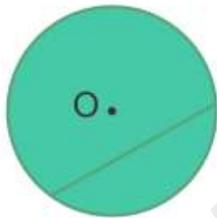
(Perimeter) (d = 2r)

$$\text{Area} = \pi r^2 = \pi \left(\frac{d}{2}\right)^2$$

where  $\pi$  = a constant which is ratio of a circle's circumference to its diameter.

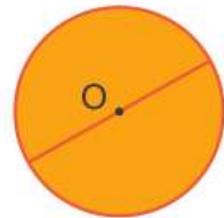
$\pi$  is approximated as 3.14 or  $\frac{22}{7}$

## Parts of a Circle

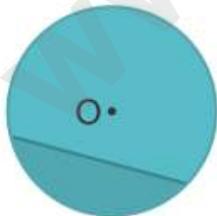


**Chord** – A line segment joining any two points on the circle.

**Diameter** - Chord passing through the centre of the circle. It is the largest chord.



**Segment** – A chord divides the circle into two parts. Each part is a segment.



**Concentric circles** – Circles having the same centre but different radii.

