Cosmo School

Class-5

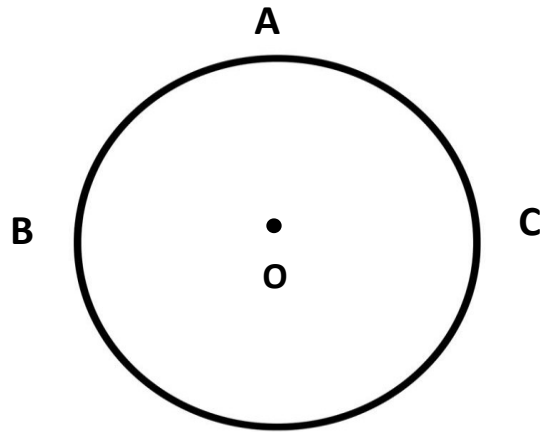### Subject- Mathematics, Chapter- Geometry

Circle

Lecture-1

Some example of circle:

Circle: Acircle is a closed curved line in which all the points on the curve are in the same distance from the centre.
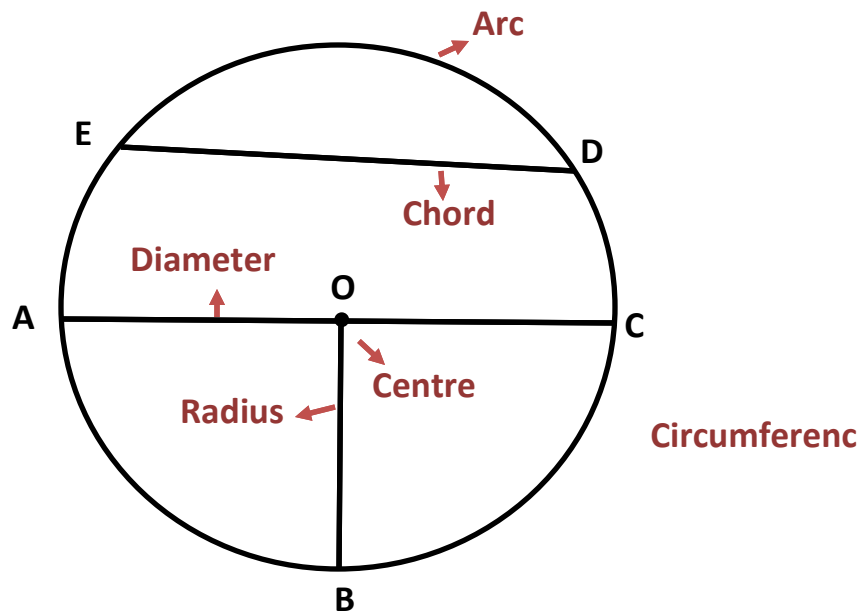

Here, ABC is the circle. O is the centre of the circle.

Characteristics:

1. It is a completely round figure.
2. Each and every point on a circle is equidistance from its centre.
3. Its diameter is 2 times of its radius.

Parts of a circle:

Here, O = Centre, OB = Radius, AC = Diameter, DE = Chord, ABCDE = Circumference , DE part of the circumference = Arc.

Some important definitions:

Circumference: A curved line that bound a circle is called circumference.

Radius: Radius is the distance from the centre to the circumference. Radius is half of diameter.

Arc: Arc is the part of the circumference.

Chord: Chord is a line segment that connects two endpoint of an arc.

Diameter: Diameter is a chord that passes through the centre. Diameter is the largest chord of circle. Diameter is 2 times of radius.

Relationship between the radius and the diameter:

$$\text{Diameter} = 2 \times \text{Radius} \ / \ \text{Radius} = \frac{1}{2} \times \text{Diameter}.$$

Exercise (Do yourself):

1. Draw a circle and difine it. Write 3 characteristics of the circle.
2. Draw a circle and show all the parts of it.
3. What is the relationship between the radius and the diameter of a circle?