## Circle

A circle is a set of all those points in a plane whose distance from a fixed point remains constant.

## Parts of Circle:

**1. Radius:** The radius of the circle is the distance between the all the points of the circle to its centre.

**2. Centre:** The centre of a circle is a fixed point which is at a constant distance from all the points.

**3. Diameter:** A line segment passing through the centre of a circle, and having its end-points on the circle is called a diameter of the circle.

#### Diameter = 2 × Radius

**4. Chord:** A line segment with its end-points lying on a circle is called the chord of the circle.

**5. Interior of a circle:** The part of a plane inside the circle consisting of all the points is called the interior of a circle.

**6. Circumference:** The measure of the closed curve forming a circle is called its circumference.

Circumference =  $2\pi r$ 

# Circle

### Let us understand with some examples:

**Example 1:** In the given figure, name its radius, centre, diameter and chord.

Solution: Centre = O Radius = OC Diameter = AB Chord = DE



**Example 2:** The radius of a circle is 1.8 cm. Find its diameter.

**Solution:** Radius = 1.8 cm

Diameter = 2 × radius

= 2 × 1.8 cm

= 3.6 cm.