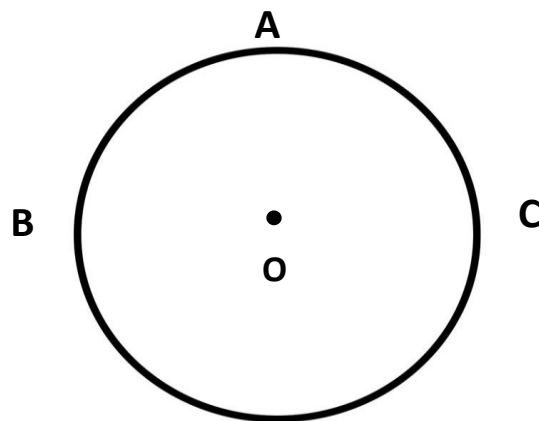


Revision Worksheet – 2

Date – 17/08/2020

Circle

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

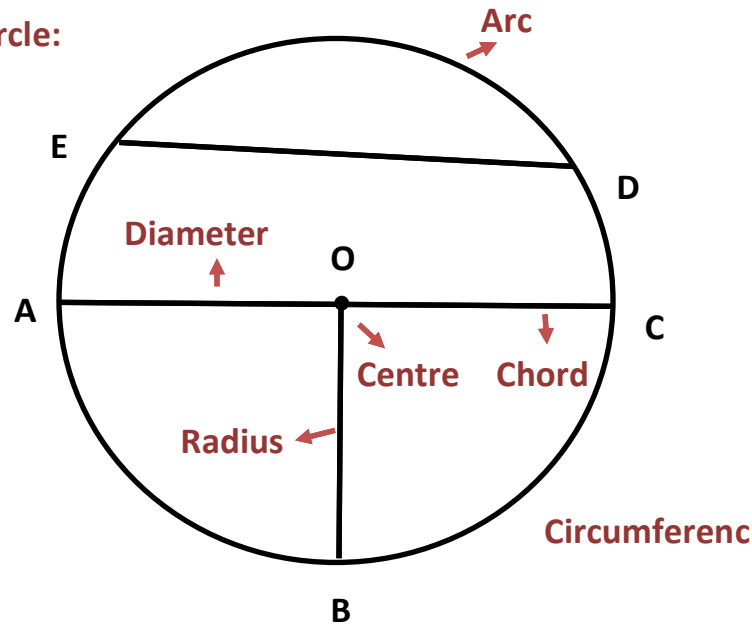


Here, ABC is the circle. O is the centre of the circle.

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:

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

Creative Question:

1. Draw a circle –
 - a) Whose diameter is 4 cm.
 - b) Write 3 characteristics of the circle.

2. The greatest chord of a circle is 5 cm.
 - a) Draw the circle.
 - b) Write 3 characteristics of the circle.

3. Draw a circle –
 - a) Whose radius is 3 cm.
 - b) Write 2 characteristics of the circle.

4. Draw a circle. Measure Diameter, Radius and Chord except diameter.

5. Draw a circle –
 - a) Whose diameter is 7cm.
 - b) Write 3 characteristics of the circle.

6. Draw a circle –
 - a) Whose radius is 2.7 cm.
 - b) Write 2 characteristics of the circle.

Short Question:

1. What is called the chord that passes through the centre of a circle?
2. How many times is diameter of radius?
3. What is the largest chord of a circle?
4. If diameter of a circle is 4 cm, what is the radius?
5. If AB and AD are two radius of a circle then how are they?
6. What is the relationship between radius and diameter of a circle?
7. The radius of a circle is 2.5 cm. What is the diameter?
8. The radius of a circle is 3 cm. What is the diameter?
9. Arc is the part of what?
10. What is circumference?