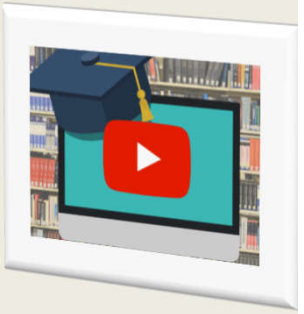
OGUN DIGICLASS

CLASS: PRIMARY SCHOOL

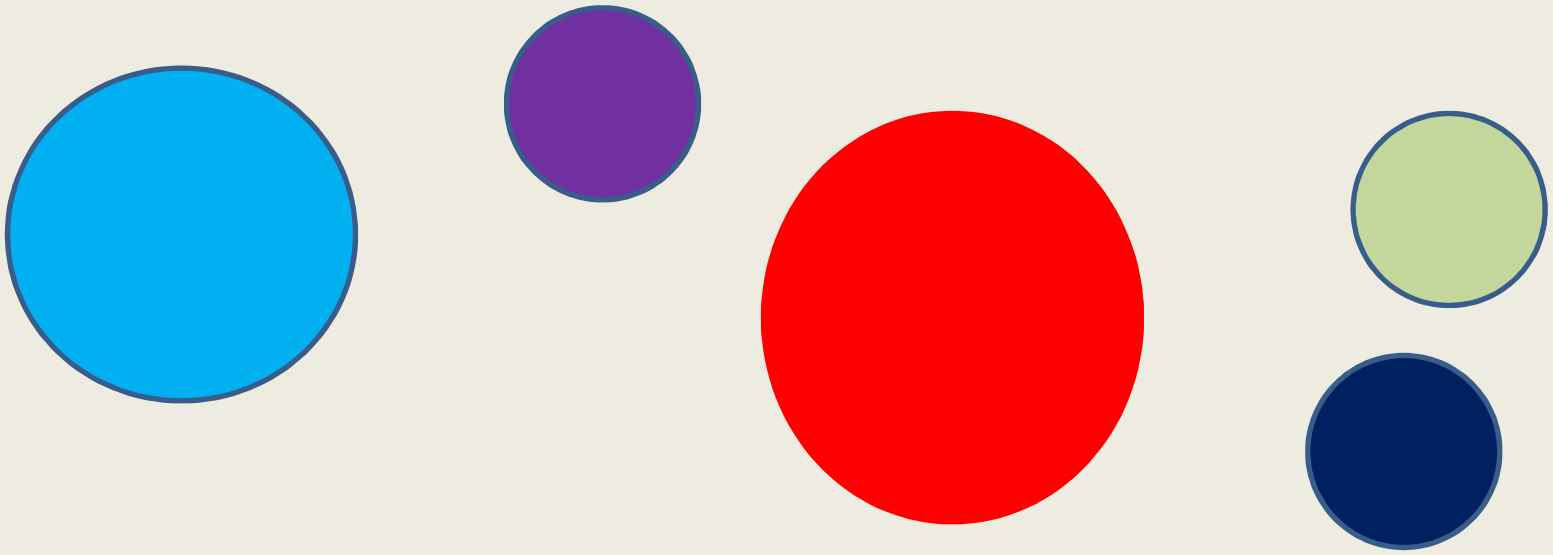


SUBJECT: MATHEMATICS

TOPIC: CIRCLE

SUB-TOPIC: Parts of a Circle

PARTS OF A CIRCLE

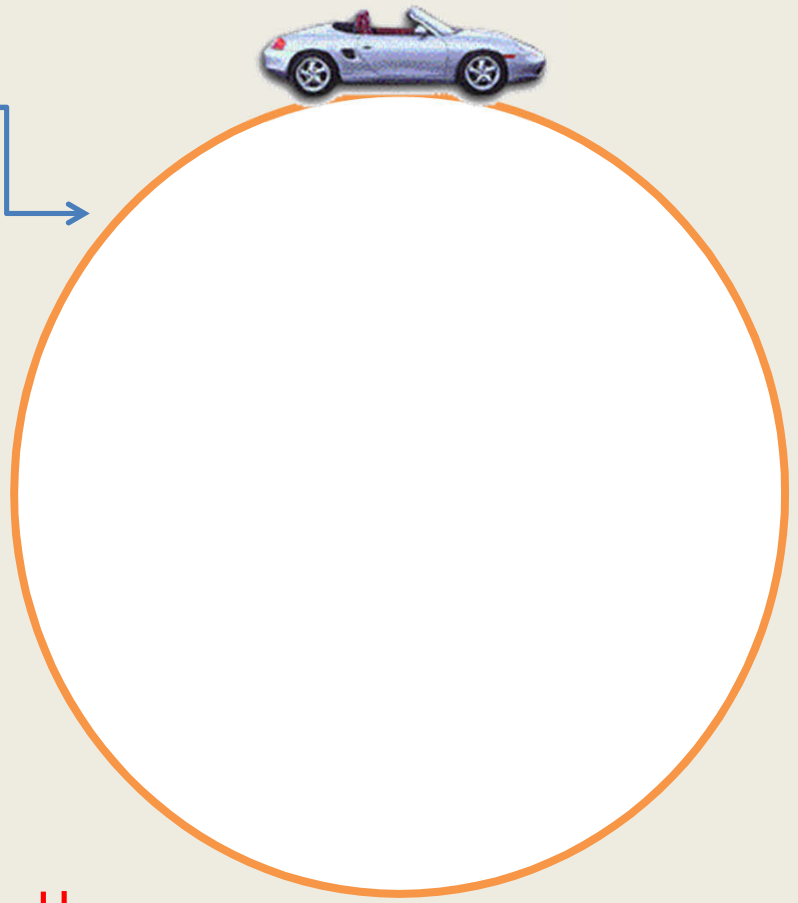


Learning Objectives

- To be able to mention the part of a circle.
- To be able to explain the part of a circle.

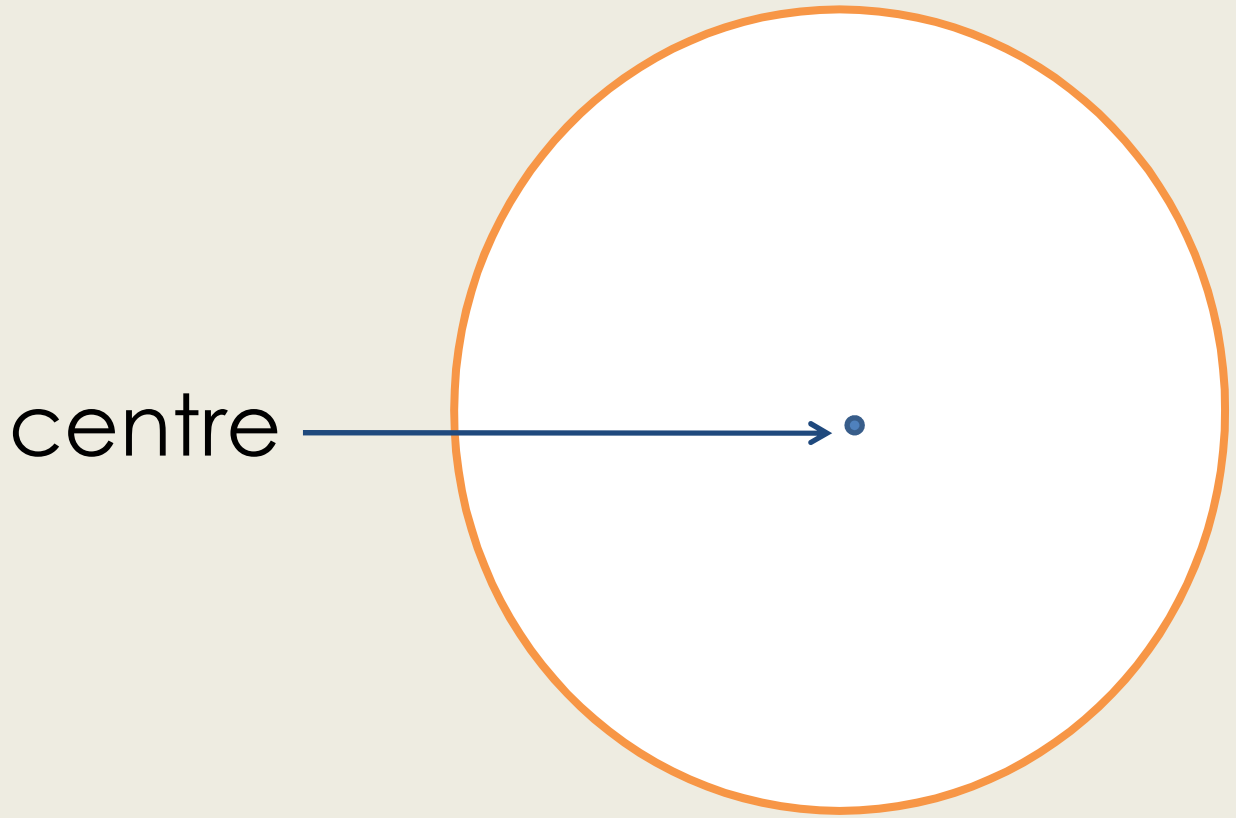
The outside of the circle is called

circumference

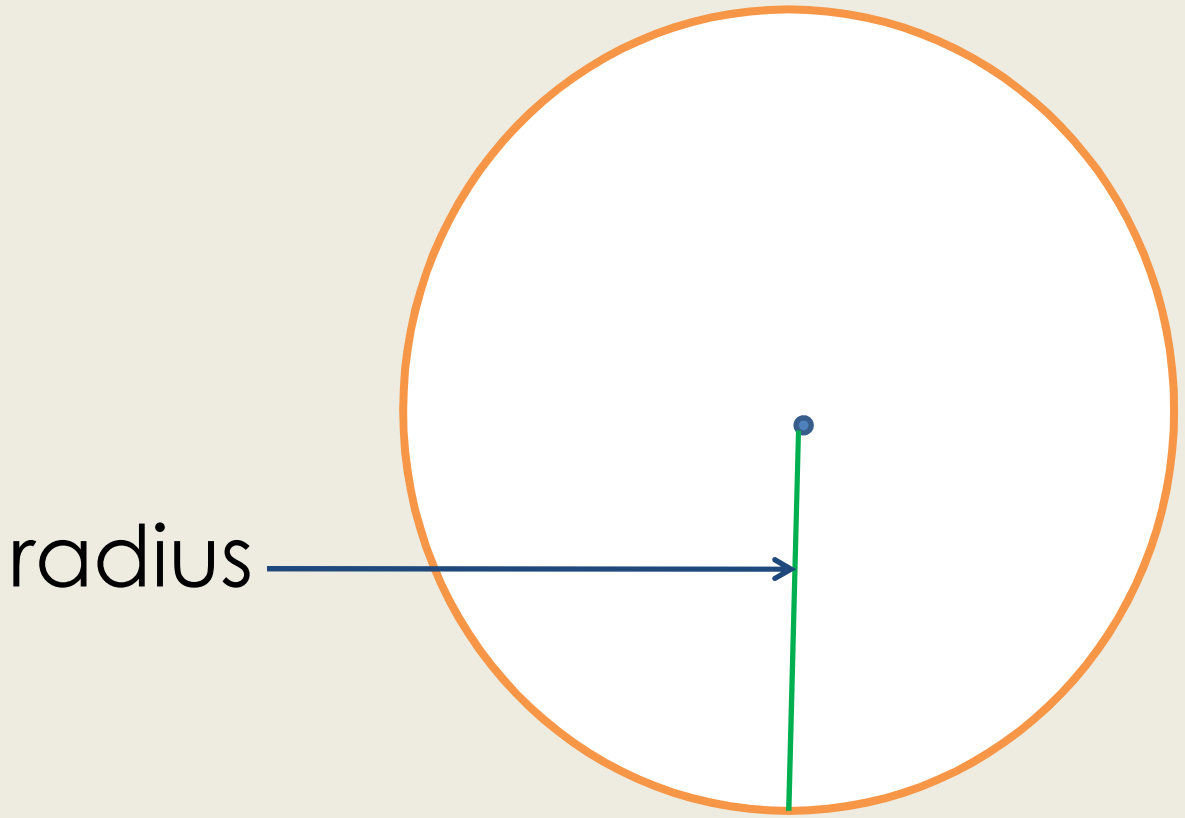


The circumference is the **distance** around the circle.

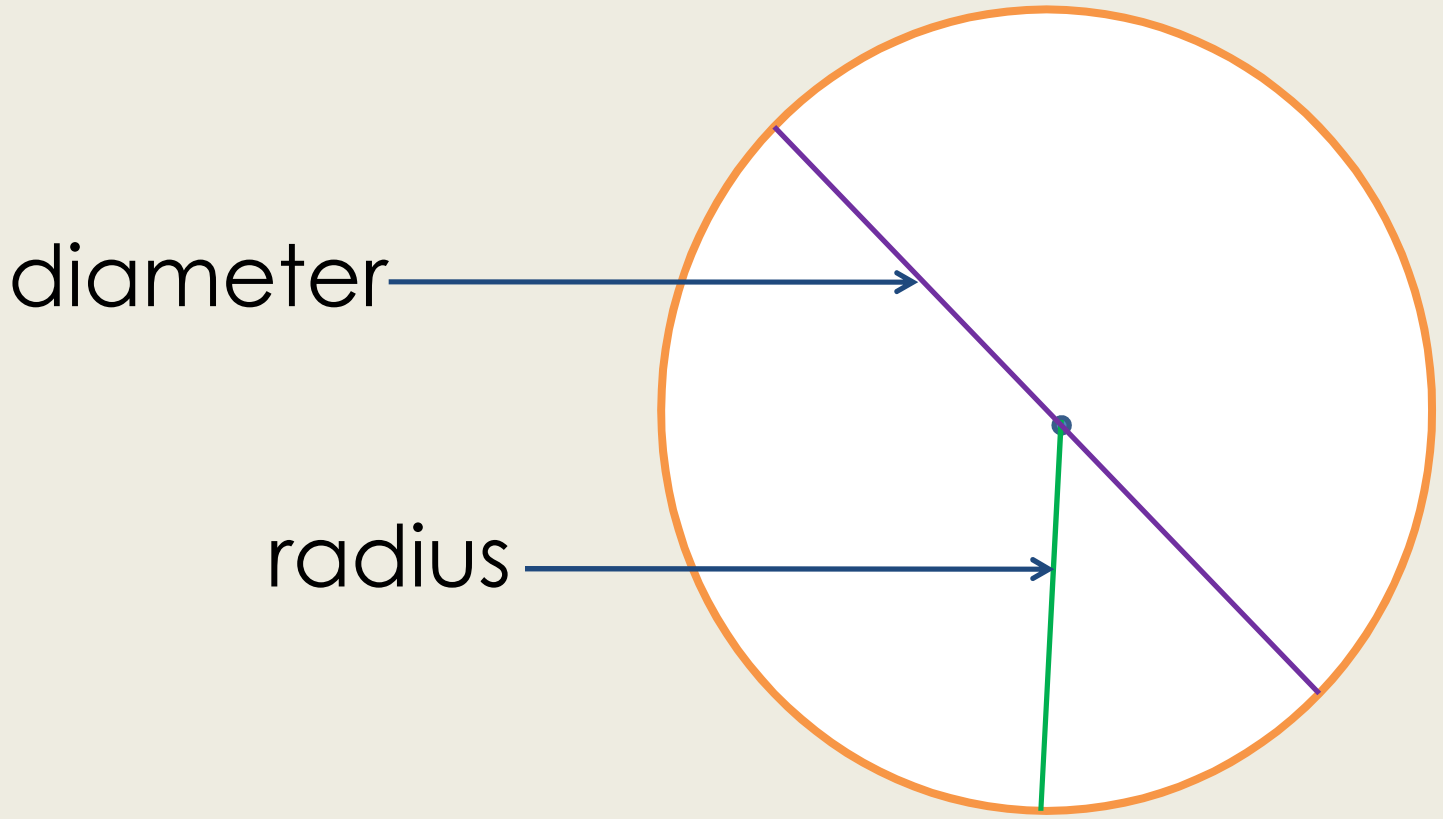
The midpoint of a circle is



The line drawn from the centre to the circumference is …



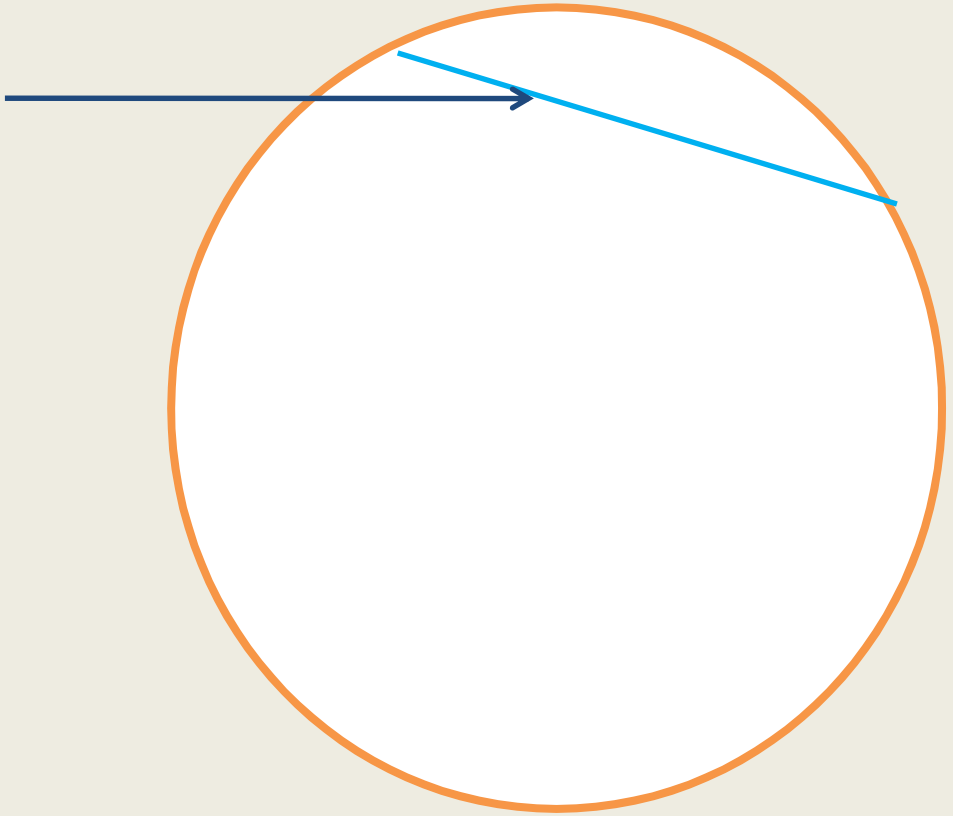
The line drawn from one circumference through the centre to another circumference is …



The diameter cuts the circle in half!

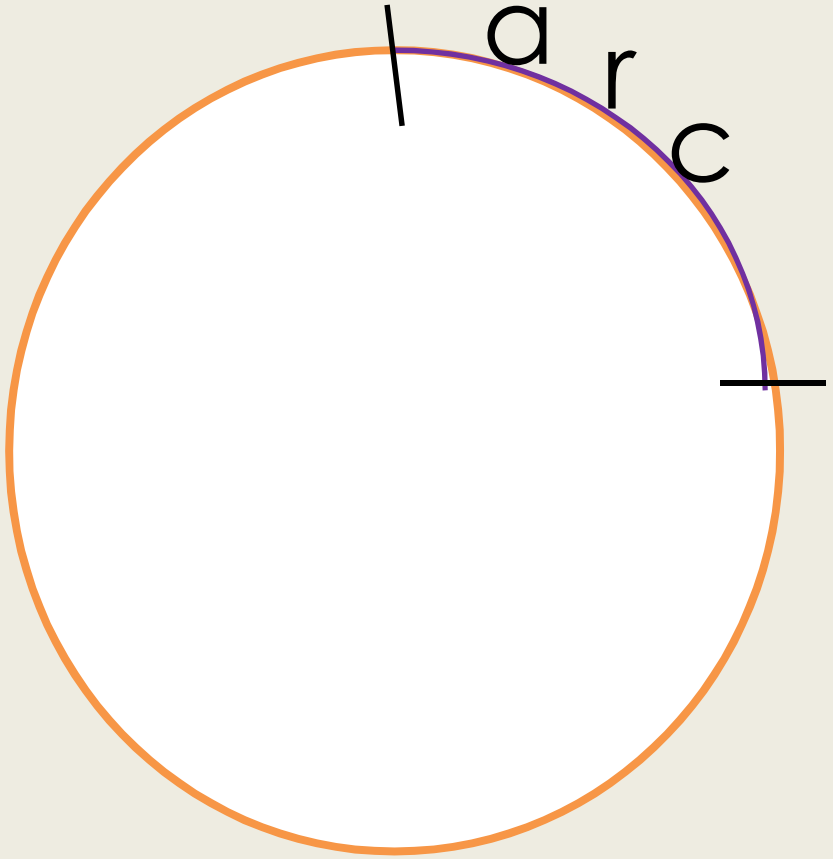
A line that connects one point on the edge of the circle with another point on the circle is called ....

chord

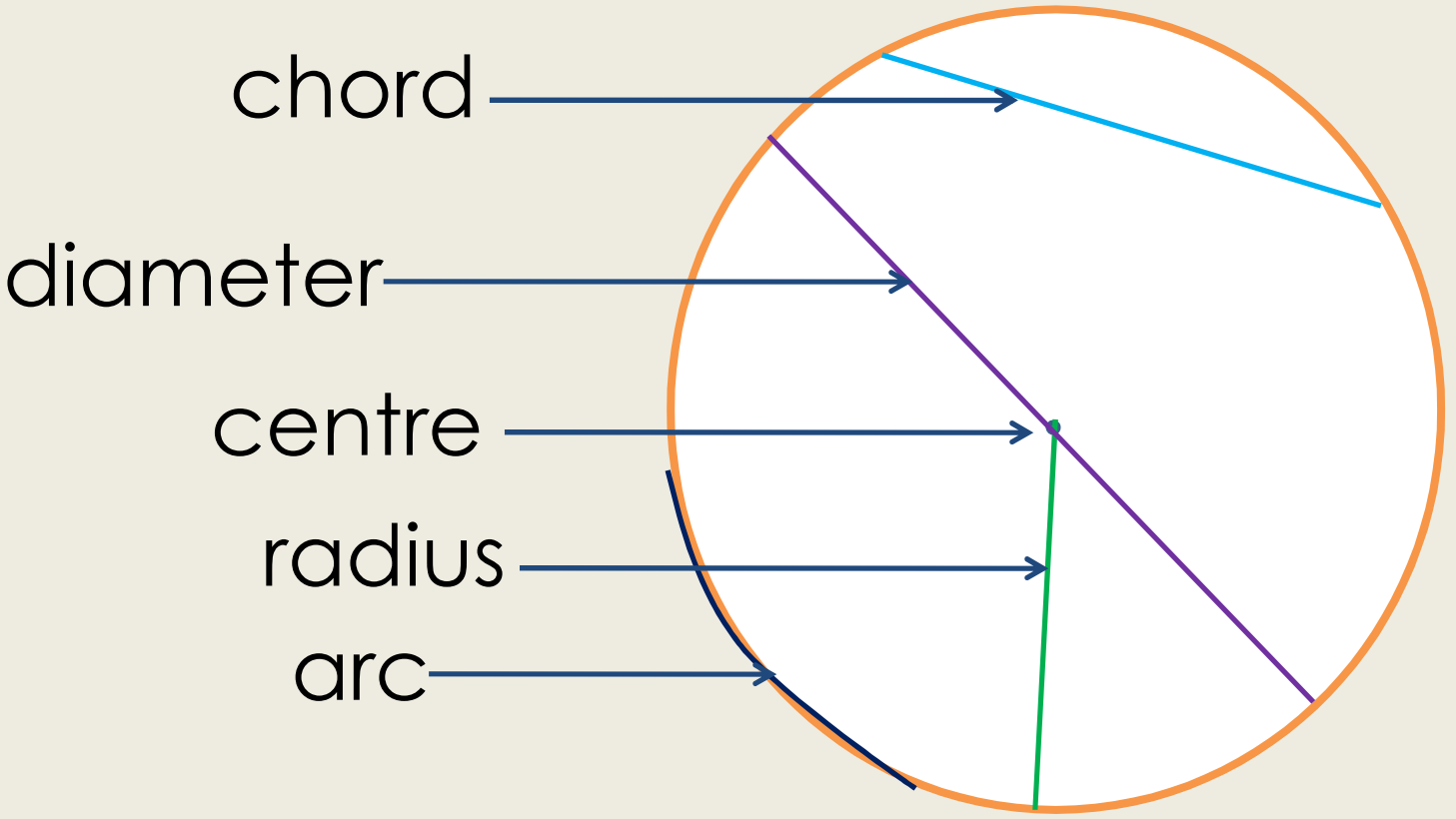


The chord that passes through the centre of the circle is the diameter.

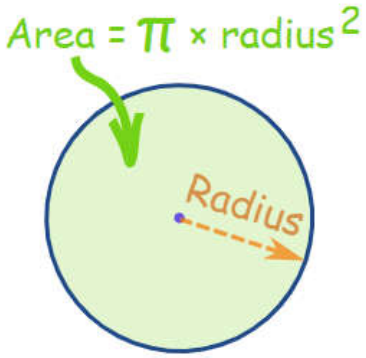
A **segment** ie. part of the circumference of the circle is called an ...



Parts of the Circle

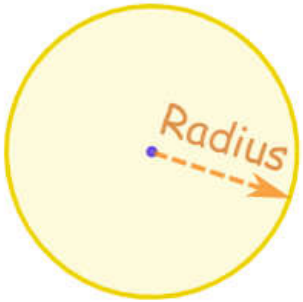


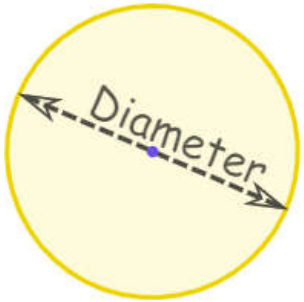
Area of Circle

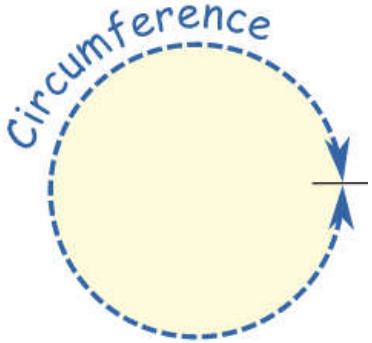


The area of a circle is π times the radius squared, which is written:

$$A = \pi r^2$$



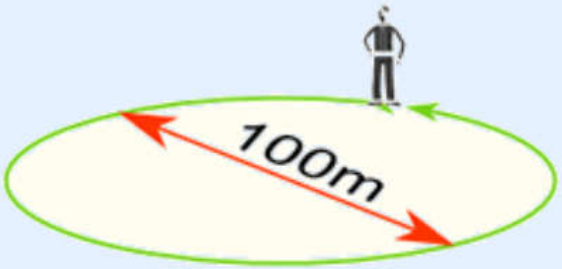




$$\frac{\text{Circumference}}{\text{Diameter}} = \pi = 3.142 \text{ or } 22/7$$

$$\text{Circumference} = \pi \times \text{Diameter}$$

Example: You walk around a circle which has a diameter of 100m, how far have you walked?



Distance walked = Circumference = $\pi \times 100\text{m}$

= **314m** (to the nearest m)

Also note that the Diameter is twice the Radius:

$$\text{Diameter} = 2 \times \text{Radius}$$

Find the circumference of the circle whose radius is ……

(a) 12 cm

(b) 7.2 cm

Example: What is the area of a circle with radius of 1.2 m ?

$$\begin{aligned} \text{Area} &= \pi r^2 \\ &= \pi \times 1.2^2 \\ &= 3.14159... \times (1.2 \times 1.2) \\ &= \mathbf{4.52} \text{ (to 2 decimals)} \end{aligned}$$

Assignment

- Find the radius of a circle with the following diameter 4cm, 10cm.
- Find the diameter of a circle with the following radius 1cm, 7cm.
- Measure the diameter and radius of the following circle.