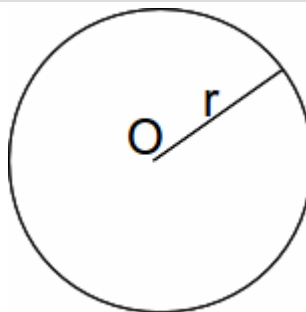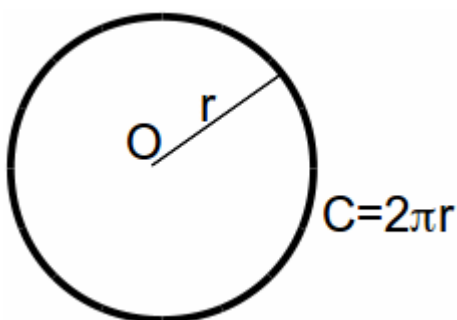# Parts of a Circle

Labels for the different parts of a circle are given below
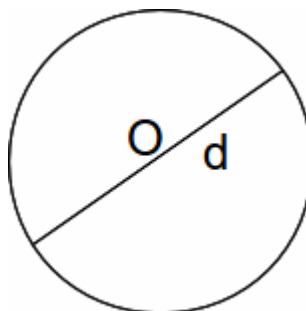
Radius – the radius of a circle is the distance from the centre labelled O to the circumference. The radius is labelled r.
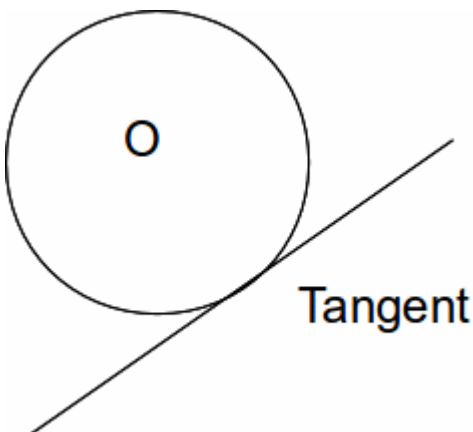
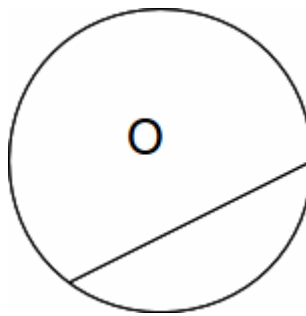The circumference of a circle is the perimeter, and is labelled C. $C = 2\pi r$.

Diameter – diameter of a circle is the length of a straight line between opposite ends drawn through the centre. The diameter is labelled d and is equal to $2r$.
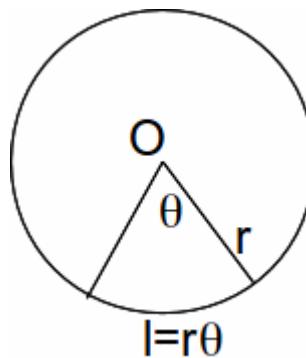
Tangent – A straight line drawn outside the circle which just touches it.

Chord - a line (not through the centre) drawn between any two points on the circumference.
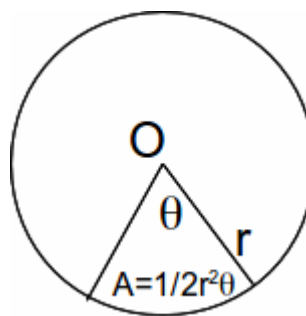
Arc – a part of the circumference. The length of an arc is $l=r\theta$ where r is the radius and θ is the angle in radians.

Sector - the part of a a circle between two radii and an arc. We can divide a circle into major and minor sectors. The area of a sector is $A=\frac{1}{2}r^2\theta$ where θ is the angle in radians.

Segment - the part of a a circle between chord and an arc. We can divide a circle into major and minor segments.

The area of the minor segment on the right is

$A=\frac{1}{2}r^2(\theta-\sin\theta)$ where θ is in radians.