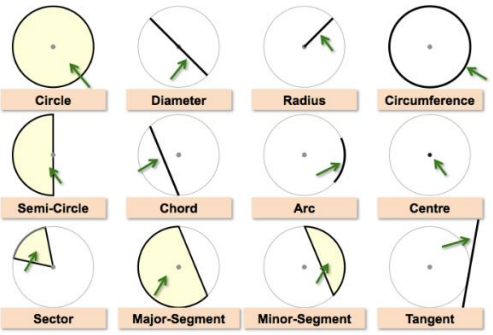
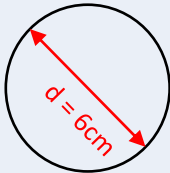
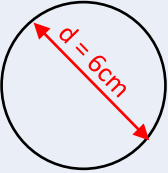
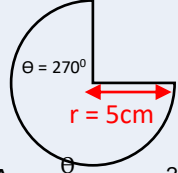
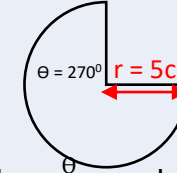
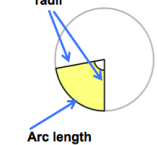


Circles

Keywords:	Diameter, Radius, Circumference, Chord, Arc, Sector, Segment, Tangent, Pi (π)					
Definition / Description:	<p> Diameter: the chord that passes through the centre of a circle Radius: a line that joins the centre of a circle to the circumference Circumference: The perimeter of a circle Chord: a line that joins two points on the circumference Arc: part of the circumference Sector: the section of a circle between two radii and an arc Segment: the section of a circle between a chord and an arc Tangent: a straight line that touches a circle without crossing it Pi (π): the ratio of a circumference to the diameter of a circle </p>					
Knowledge points:	Parts of a circle	Circumference $C = \pi d$	Area: $A = \pi r^2$	Area of sector: $A = \frac{\theta}{360} \times \pi r^2$ Where θ is the angle	Length of arc: $L = \frac{\theta}{360} \times \pi d$ Where θ is the angle	Perimeter of a sector
Knowledge point examples:		 $ \begin{aligned} C &= \pi d \\ &= \pi \times 6 \\ &= 18.8\text{cm} \\ &\text{(1dp)} \end{aligned} $	 $ \begin{aligned} A &= \pi r^2 \\ &= \pi \times 3^2 \\ &= 28.3\text{cm}^2 \\ &\text{(1dp)} \end{aligned} $	 $ \begin{aligned} A &= \frac{\theta}{360} \times \pi r^2 \\ &= \frac{270}{360} \times \pi \times 5^2 \\ &= 58.9\text{cm}^2 \\ &\text{(1dp)} \end{aligned} $	 $ \begin{aligned} L &= \frac{\theta}{360} \times \pi d \\ &= \frac{270}{360} \times \pi \times 10 \\ &= 23.6\text{cm(1dp)} \end{aligned} $	<p>When calculating the perimeter of a sector we first calculate the arc length and then add on 2 radii (radius is the plural word for radius). Usually measured in cm, m, mm.</p> 
Linked Knowledge Maps	Angles Circle Theorems Non-linear graphs – circle, reciprocal, exponential 3D shapes					