

Year 8 – Maths – Summer 2

Unit 15/16 – accuracy/circles

No.	Question	Answer	Example	
15.1	What are significant figures?	All digits of a number that express a degree of accuracy, starting with the first non-zero digit	358.06 rounded to 2.s.f. is 360 0.0971 rounded to 2.s.f is 0.097	
16.1	What is the radius?	The distance from the centre to the circumference of the circle		
16.2	What is the diameter?	A straight line going through the centre connecting 2 points on the circumference.		
16.3	What is the arc?	Part of the circumference		
16.4	What is a sector?	A 'pie slice' part of a circle formed by 2 radii		
16.5	What is a segment?	Part of a circle contained by the circumference and a chord		
16.6	What is a tangent?	A straight line that touches the circumference only once		
16.7	What is a chord?	A straight line that touches 2 points on the circumference		
16.8	What is the circumference of a circle?	The distance round the outside of a circle		
16.9	What is the area of a circle?	The amount of space inside the circle		
16.10	What is the formula for the circumference?	$\pi \times D$		A circle has diameter 3cm, what is the circumference? $\pi \times 3 = 9.42\text{cm}$
16.11	What is the formula for the area?	$\pi \times r^2$		A circle has radius 4cm, what is the area? $\pi \times 4^2 = 50.27\text{cm}^2$
16.12	What is a semi-circle?	Half a circle		

Unit 17 – 3D shapes

No.	Question	Answer	Example
17.1	What are 3D shapes?		
17.2	What is a prism?	A solid 3D shape with the same 2D shape running all the way through it	
17.3	What is an edge?	The lines when 2 faces meet on a 3D shape	
17.4	What is a face?	An individual 2D surface of a 3D shape	
17.5	What is a vertex?	A corner of a 3D shape (where 3 edges meet)	
17.6	What is the plan view?	The 2D view of a 3D shape from above	
17.7	What is the front elevation?	The 2D view of a 3D shape from the front	
17.8	What is the side elevation?	The 2D view of a 3D shape from the side	
17.9	What is the net?	A pattern you can fold to make a 3D solid shape	

Unit 18 – volume

No.	Question	Answer
18.1	How do you find the volume of a cuboid?	Length x width x height
18.2	How do you find the volume of cylinder?	Area of the cross section x depth <i>The formula is $\pi r^2 \times \text{height}$</i>
18.3	How do you find the volume of a prism?	Area of the cross section x depth
18.4	How do you convert from m^2 to cm^2 ?	Multiply by 100^2
18.5	How do you convert from cm^2 to m^2 ?	Divide by 100^2
18.6	How do you convert from cm^2 to mm^2 ?	Multiply by 10^2
18.7	How do you convert from mm^2 to cm^2 ?	Divide by 10^2
18.9	How do you convert from km^2 to m^2 ?	Multiply by 1000^2