






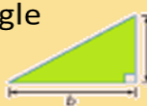
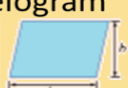
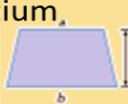

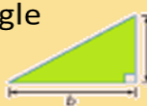
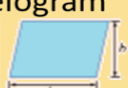
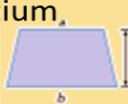

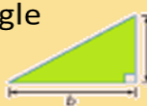
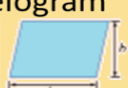
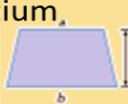















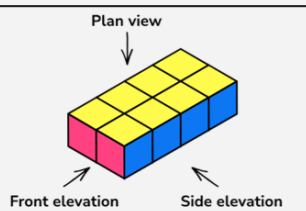
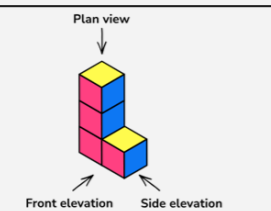
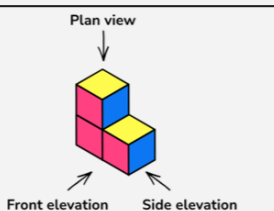
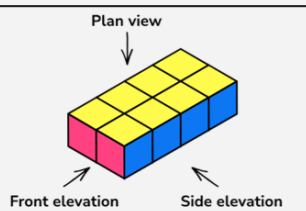
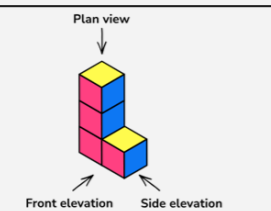
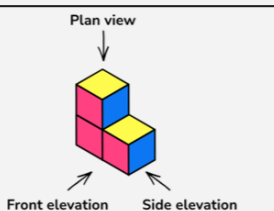
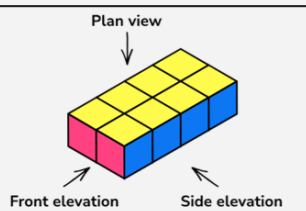
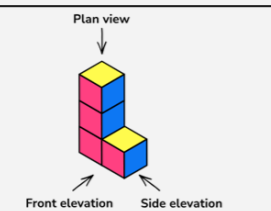
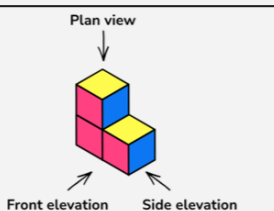

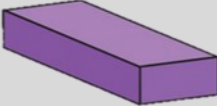







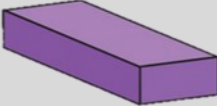







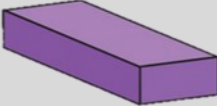









Three-Dimensional Shapes		Constructions and Congruency		Key Formula																	
2-D Shapes	A flat shape with two dimensions such as length and width	Construct	Draw accurately using a ruler and compasses	Surface Area																	
Polygon	2D shapes made by three or more straight, connected sides.	Sketch	A rough drawing	<table><tr><td>Sphere</td><td></td><td>$SA= 4\pi r^2$</td></tr><tr><td>Cone</td><td></td><td>$SA = \pi r l + \pi r^2$</td></tr></table>		Sphere		$SA= 4\pi r^2$	Cone		$SA = \pi r l + \pi r^2$										
Sphere		$SA= 4\pi r^2$																			
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3-D Shapes	A shape with three dimensions: length width and height	Acute Angle	An angle less than 90°	Area																	
Face	A flat surface of a 3-D shape	Obtuse Angle	An angle more than 90° but less than 180°																		
Vertex	A point where two line segments meet; a corner of a shape	Scale	The ratio of the length in a drawing or a model to the actual object	<table><tr><td>Rectangle</td><td></td><td>Area = $l \times w$</td></tr><tr><td>Triangle</td><td></td><td>Area = $\frac{b \times h}{2}$ (Perpendicular Height)</td></tr><tr><td>Parallelogram</td><td></td><td>Area= $b \times h$ (Perpendicular Height)</td></tr><tr><td>Trapezium</td><td></td><td>Area = $\frac{a+b}{2} \times h$ (Perpendicular Height)</td></tr></table>		Rectangle		Area = $l \times w$	Triangle		Area = $\frac{b \times h}{2}$ (Perpendicular Height)	Parallelogram		Area= $b \times h$ (Perpendicular Height)	Trapezium		Area = $\frac{a+b}{2} \times h$ (Perpendicular Height)				
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Edge	A line segment joining two vertices of a 3-D shape. It is where two faces meet	Locus	A set of points that follow a rule and form a line	Volume																	
Prism	A solid shape with polygons at its end and flat surfaces	Equidistant	At the same distance from another point or line																		
Net	A 2-D shape that can be folded to make a 3-D shape	Bisector	A line that divides something into two equal parts	<table><tr><td>Cuboid</td><td></td><td>Volume = $b \times l \times h$</td></tr><tr><td>Prism</td><td></td><td>Volume = $CSA \times d$ (CSA- Cross Section Area)</td></tr><tr><td>Cylinder</td><td></td><td>Volume = $\pi r^2 \times h$</td></tr><tr><td>Sphere</td><td></td><td>Volume = $\frac{4}{3}\pi r^3$</td></tr><tr><td>Cone</td><td></td><td>Volume = $\pi r^2 \frac{h}{3}$</td></tr></table>		Cuboid		Volume = $b \times l \times h$	Prism		Volume = $CSA \times d$ (CSA- Cross Section Area)	Cylinder		Volume = $\pi r^2 \times h$	Sphere		Volume = $\frac{4}{3}\pi r^3$	Cone		Volume = $\pi r^2 \frac{h}{3}$	
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Plan View	The view of an object from directly above	Congruent	Exactly the same size and shape, but possibly a different orientation																		
Front/Side Elevation	The view of an object from the front or the side	Orientation	The position of an object based on the direction it is facing																		
<table><tr><td></td><td></td><td></td></tr><tr><td>Front elevation</td><td>Side elevation</td><td>Plan view</td></tr></table>					Front elevation	Side elevation	Plan view	Hypotenuse	The side opposite a right angle in a right-angled triangle												
																					
Front elevation	Side elevation	Plan view																			
		Area, Surface Area and Volume																			
		Perimeter	The distance around the outside of a 2-D shape																		
		Area	The amount of space inside a 2-D shape																		
		Compound Shape	Also known as a composite shape. This is a shape made up of two or more other shapes																		
		Surface Area	The sum of the areas of all the faces																		
		Capacity	How much space a 3-D shape holds																		
		Volume	The amount of space taken up by a 3-D shape																		
		Cross-section	The shape that runs along the length of a prism																		
		Litre	1 litre = 1000cm^3																		
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<div><div><div>Trinity TV</div><div>For more help, visit Trinity TV and watch the following videos:</div><div>Trinity TV > Year 9 > Maths</div></div></div>																					