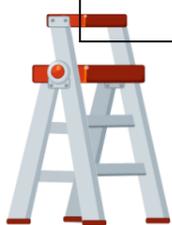
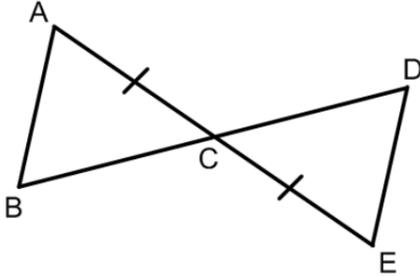
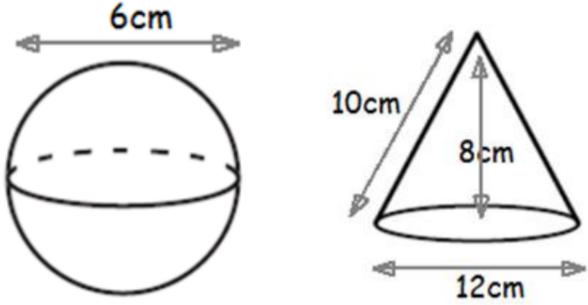
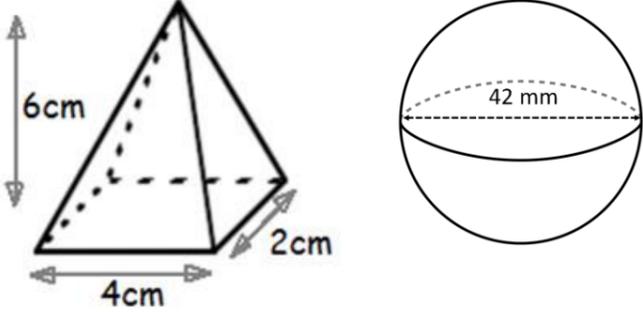
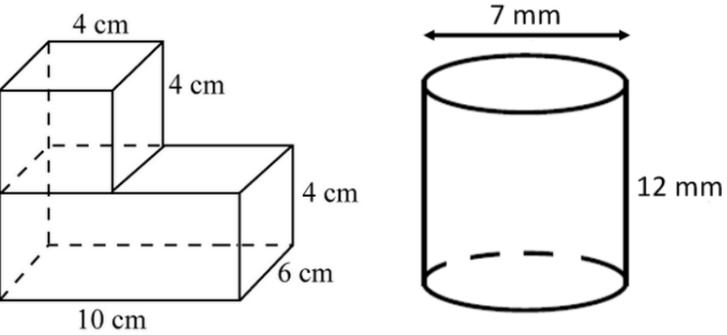
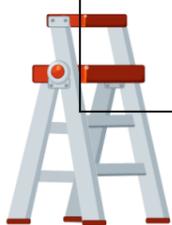
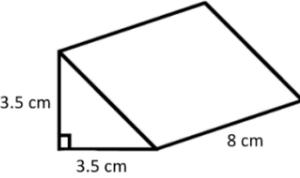
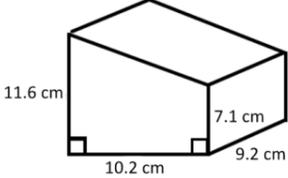
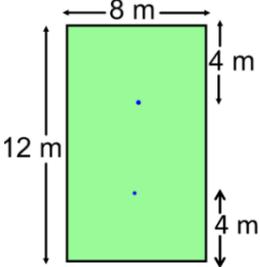
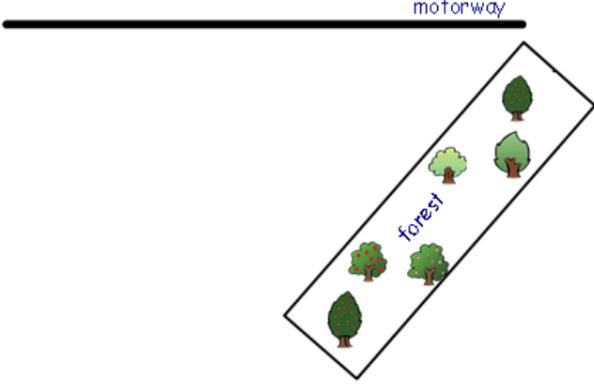


Percentage	I can ...	Prove it!
	<p>H12.2 I can use the cosine rule to find missing sides and angles in any triangle</p>	<p>Find the missing lengths marked x, give your answer to 1dp:</p> <p>1). </p> <p>2). </p>
	<p>H12.1 I can use the sine rule to find missing sides and angles in any triangle</p>	<p>Find all the missing sides in the diagrams below, leaving your answer to 1dp.</p> <p>1). </p> <p>2). </p>
	<p>H12.3 I can find the area of a triangle using the formula $\text{Area} = \frac{1}{2} ab \sin C$</p>	<p>Find the area of each of these triangles, leaving your answer to an appropriate degree of accuracy.</p> <p>1). </p> <p>2). </p>
	<p>H10.1 I can calculate upper and lower bounds</p>	<p>In the diagram below, the angles have been given correct to the nearest degree. Find the maximum possible size of angle a.</p>
	<p>H11.1 I can use scale factor to find missing lengths, areas and volumes.</p>	<p>The volumes of two mathematically similar Garden Gnomes are 125 cm^3 and 64 cm^3.</p> <p>a) Find the ratio of their heights. b) Find the ratio of their surface areas.</p> <p>c) If the smaller Gnome's beard is 2cm long, how long is the larger Gnome's beard?</p>



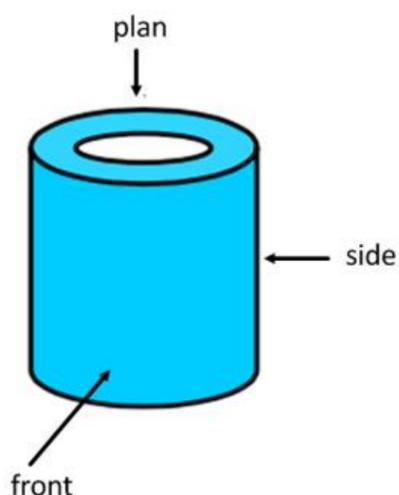
Percentage	I can ...	Prove it!
 <p>70%</p>	<p>C11.2 I can prove pairs of triangles are congruent using SSS, ASA, AAS and RHS</p>	<p>Given that AB is parallel to ED and that AC = CE, prove that triangles ABC and CDE are congruent.</p> 
 <p>68%</p>	<p>C10.4 I can calculate surface area of pyramids, spheres and cones</p>	<p>Find the surface area of the shapes below:</p> 
 <p>64%</p>	<p>C10.3 I can calculate volume of pyramids, spheres and cones</p>	<p>Find the volume of each of the shapes below:</p>  <p>Find the height of a pyramid with volume 30m^3 and base area 10m^2.</p>
 <p>54%</p>	<p>C10.2 I can calculate surface area of 3D prism</p>	<p>Find the surface area of each of the solids below:</p> 



Percentage	I can ...	Prove it!
	<p>C10.1 I can calculate volume of 3D prisms</p>	<p>Find the volume of the prisms below, give your answer correct to 1 decimal place:</p> <div style="display: flex; justify-content: space-around; align-items: center;">   </div>
	<p>C10.5 I can convert between area and volume units</p>	<p>Fill in the gaps below:</p> <p> $1 \text{ m}^3 =$ _____ cm^3 $1 \text{ cm} =$ _____ mm $1 \text{ cm}^3 =$ _____ mm^3 $30\,000 \text{ cm}^3 =$ _____ m^3 $150\,000 \text{ mm}^2 =$ _____ cm^2 $35\,000\,000 \text{ mm}^2 =$ _____ m^2 </p> <p>In your book write a summary of how you convert between mm/cm/m, mm²/cm²/m² and mm³/cm³/m³</p>
	<p>C11.1 I can identify the loci of points and use these to solve real-world problems</p>	<p>Cristian uses sprinklers to water his garden. Each sprinkler waters the grass within a radius of 3 metres. Make a scale drawing of Cristian's garden using a scale of 1m: 1cm and identify the areas of the lawn that will be watered by the sprinklers.</p> <div style="display: flex; align-items: center;">  </div> <p>Brian lives 1 km from the motorway and 2 km from the edge of the forest. Find the position of Brian's house. Using the scale 1cm : 1km</p> <div style="display: flex; align-items: center;">  </div>



Percentage	I can ...	Prove it!
	<p>C9.2 I can construct and interpret plans and elevations of 3D solids</p>	<p>Name the 3D shapes from the plans and elevations shown below:</p> <p style="text-align: center;">★</p> <p>Draw the side elevation, plan and front elevation for a square based pyramid.</p>
	<p>C9.1 I can recognise the vocabulary associated with 3D solids</p>	<p>a) Name the 3D solids below. b) List the amount of faces, vertices and edges they have.</p>



Key Words:

- Face
- Vertex
- Edge
- Prism
- Volume
- Surface Area
- Congruence
- Upper Bound
- Lower Bound
- Accuracy
- Loci
- Sine Rule
- Cosine Rule

<p>Cone</p> $v = \frac{1}{3}\pi r^2 h$ <p>surface area = $\pi r l + \pi r^2$</p>	<p>Pyramid</p> $v = \frac{1}{3} \times \text{area of base} \times h$	<p>Sphere</p> $v = \frac{4}{3}\pi r^3$ <p>surface area = $4\pi r^2$</p>
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