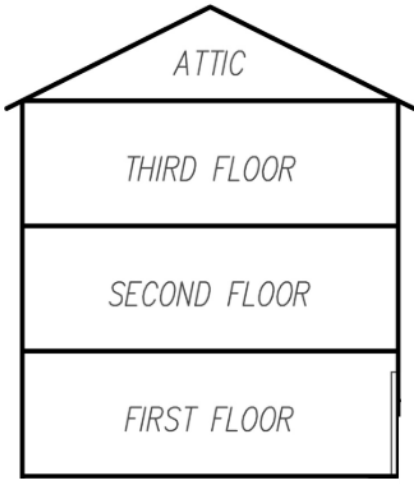
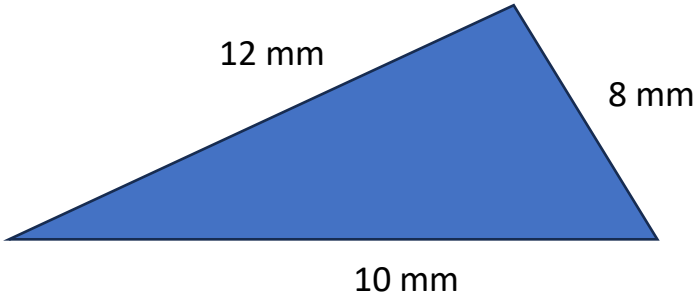
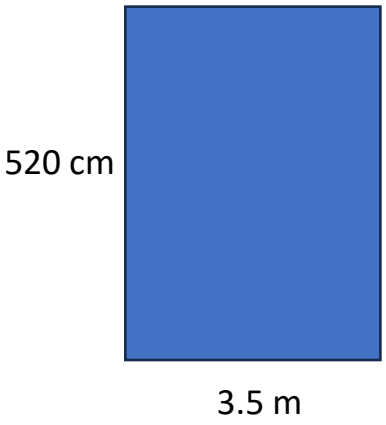
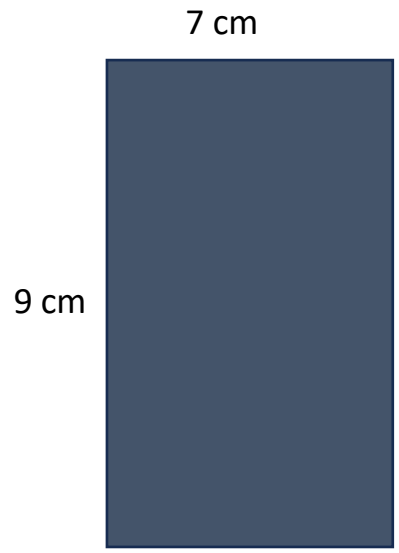
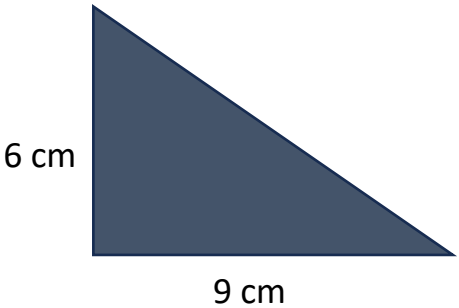
Phase 7 Measurement Assessment

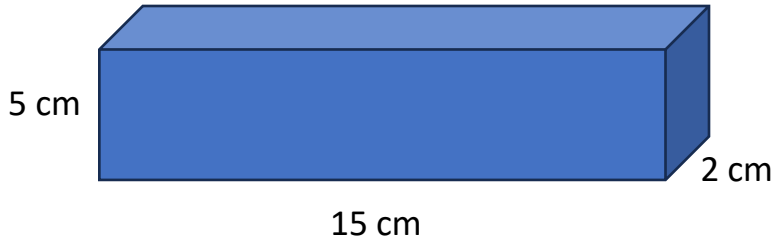
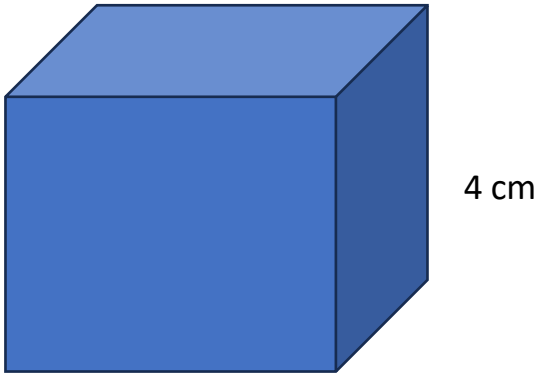
Phase 7 Progression Overview	Assessment Note	Marks
• I can convert between related units to efficiently solve problems.	Included throughout the assessment.	
• **I can use the comparative size of familiar objects to make reasonable estimations of length, mass, area and capacity.**	Question 1	
• **I can estimate to the nearest appropriate unit, then measures accurately: length, height and distance in millimetres (mm), centimetres (cm), metres (m) and kilometres (km); mass in grams (g) and kilograms (kg); and capacity in millilitres (ml) and litres (l). (Note: measuring accurately including using decimals and fractional parts.)**	Have you observed your learners doing this?	
• **I can calculate the perimeter of simple straight sided 2D shapes in millimetres (mm), centimetres (cm) and metres (m).**	Question 2	
• **I can calculate the area of squares, rectangles and right-angled triangles in square millimetres (mm2) square centimetres (cm2) and square metres (m2).**	Question 3	
• **I can calculate the volume of cubes and cuboids in cubic centimetres (cm3) and cubic metres (m3).**	Question 4	
• **I can convert between common units of measurement using decimal notation, for example, 550 cm = 5·5 m; 3·009 kg = 3009 g.**	Question 5	
• **I can choose the most appropriate measuring device for a given task and carries out the required calculation, recording results in the correct unit.**	Question 6	
• **I can read a variety of scales accurately.**	Question 7	
• **I can draw squares and rectangles accurately with a given perimeter or area.**	Question 8	
• **I can demonstrate understanding of the conservation of measurement, for example, draw three different rectangles each with an area of 24 cm^2**	Question 9	

	Question	Mark
1	Answer the following questions.	
(a)	 The above diagram shows a plan for a house. If the height of one floor in the house is 2.4m, using the diagram above estimate the height of the house. Explain your thinking.	**1**
(b)	 If this glass holds 250ml, estimate how much liquid the whole glass will hold. Explain your thinking.	**1**

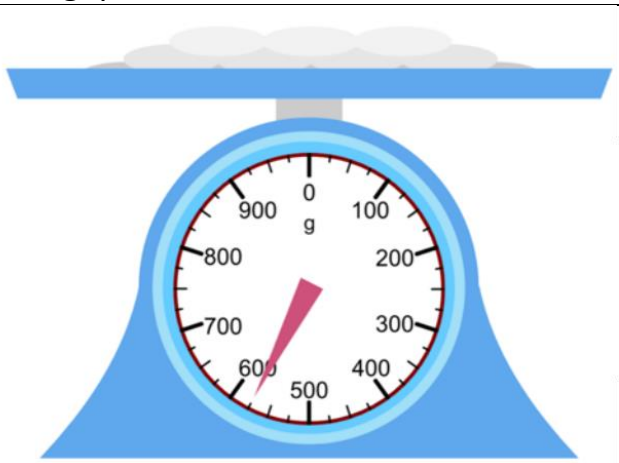
2	Answer the following questions.	
(a)	Calculate the perimeter of the rectangle shown below. Show your thinking. 10 cm 6 cm 	**1**
(b)	Calculate the perimeter of the square shown below. Show your thinking.  6.5 m	**1**

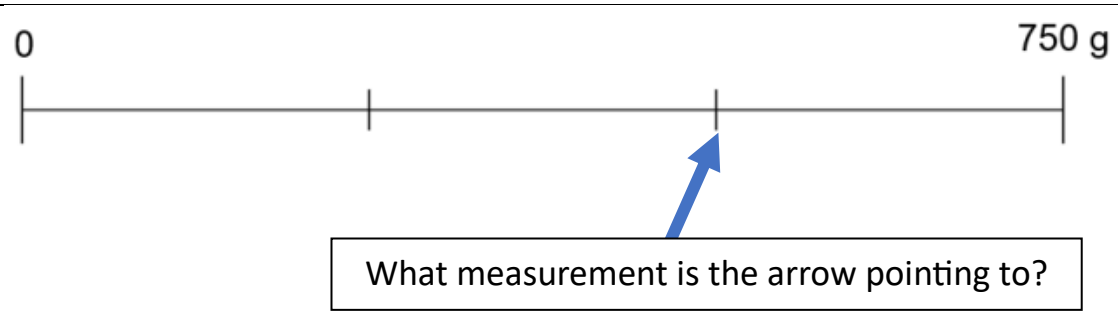
(c)	Calculate the perimeter of the triangle shown below. Show your thinking.  	**1**
(e)	Calculate the perimeter of the following garden choosing the most appropriate unit of measurement. Show your thinking.  	

3	Answer the following questions.	
(a)	 Calculate the area of rectangle shown below. Show your thinking.	**1**
(b)	 Calculate the area of this square. Show your thinking.	**1**
(c)	 Calculate the area of this right angled triangle. Show your thinking.	**1**

4	Answer the following questions.	
(a)	 Calculate the volume of the cube above. Show your thinking.	**1**
(b)	Jack thinks the cube will hold 60 ml of water. Given that 1 ml = 1 cm3, is Jack correct? Show your thinking. 	

5	Answer the following questions.	
(a)	What is 1·879 m in centimetres?	**1**
(b)	What is 4m 34 cm in metres?	**1**
(c)	What is 25g in kg?	
(d)	What is 5·9 litres in ml?	**1**
6	Complete the following statement	
(a)	What would you use to measure the length and breadth of your jotter? Using this measurement tool, what are the dimensions of your jotter?	**1**
(b)	What would you use to measure the length and breadth of your classroom? Using this measurement tool, calculate the perimeter of your classroom. Show your thinking.	**1**

7	Answer the following questions.	
(a)	 Flour is being weighed for a recipe, according to the scales above what is the weight of the flour? Explain your thinking.	**1**
(a)	 Cake is being weighed in 56g slices for a school party. Jane thinks the scales show 560g and Paul thinks the scales show 56g. Who do you agree with and why?	**1**

(c)		**1**
8		
(a)	If we know that the perimeter of a square is 36 cm, what is the length of each side? Show your thinking.	**1**
(b)	If we know that the perimeter of a rectangle square is 26 cm, what could the length of each side be? Show your thinking.	**1**

(c)	If we know that the area of a square is 64 cm^2, what would the length of one side be?	**1**
9	Given the area of a rectangle is 24 cm^2, draw three different rectangles each with an area of 24 cm^2	**1**