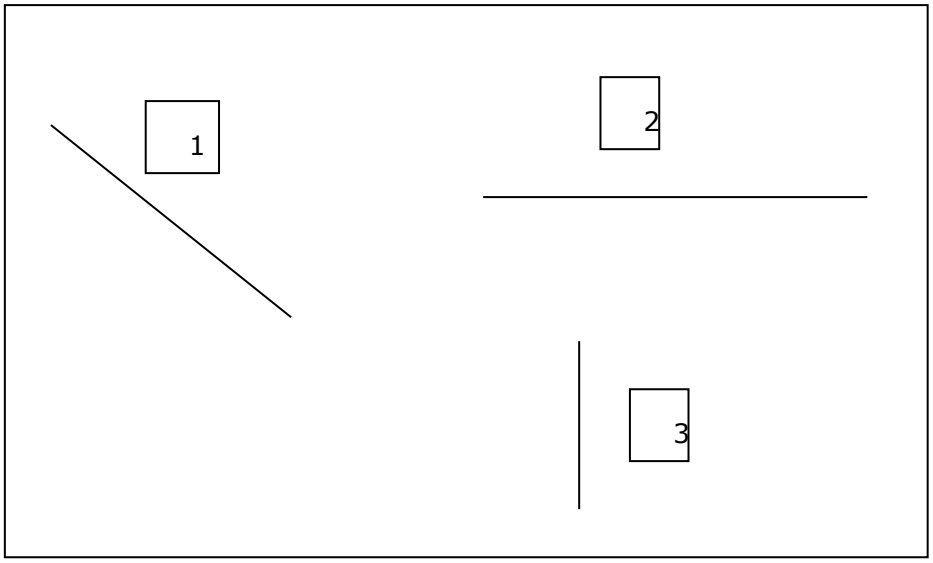
Unit Standard 9008

Activity 1 (SO1, AC1-7)

This is an individual activity

1. Estimate (guess) and then measure the lengths of the following line segments. Give your answers in cm and mm.

Estimate	Measured
1.	1.
2.	2.
3.	3.



2. 1. In each case give the greater/greatest measurement:

a) 250 g; 0.2 kg
b) 0.01 kg; 12 000 mg; 10 g

3. Give some examples of fluids that you can buy in packages that are marked in

a) ml
b) l

4. Answer the following questions:

How many seconds are there in 2 minutes?	
How many minutes are there in 3 h 45 min?	
How many seconds are there in 610,2 minutes?	
Write the following according to the international time system:2.16 p.m	
12.05 p.m	
3.12 a.m.	

5. Below the ruler shown in the learner guide is a line. According to this ruler how long is the line?

6. What is the mass indicated on the spring balance in the learner guide?

7. What is the temperature indicated by the sketch of the thermometer?

8. What is the time on the clock shown in the learner guide?

9. What is the volume of the fluid in the sketch of the measuring cylinder shown in the learner guide?

10. Complete each of the following:

150cm = _____m
360mm = _____m
62ml = _____litres
3.6 tonnes = _____kg

11. Complete the table below:

Quantity	**Unit**	**Abbreviation**
Mass		
	Meter	
		s
Temperature		
		A
Light		
Chemical standard unit		

12. Normal body temperature is 98.6°F. What is this in °C? And what is the temperature in Fahrenheit back from °C?

13. What is a thermometer used for?

14. What is the normal body temperature of a human being in Celsius?

15. What is the point at which water freezes in Celsius?

16. What is the point at which water boils in Celsius?

17. It is winter and the temperature is 12°C. Calculate the temperature in Fahrenheit

18. The temperature in New York is 98°F. Calculate the temperature in Celsius.

19. You correspond with someone in England, and s/he has written you about a village that is 135 miles from where s/he lives. Calculate the distance in km.

20. You read about a person overseas who has cultivated a giant pumpkin, weighing 395 pounds. Calculate the weight in kg.

21. A farmer near you has harvested a watermelon that weighs 95kg. You want to let your friend in the UK know about this. Calculate the weight in pounds. Round the answer to the nearest pound

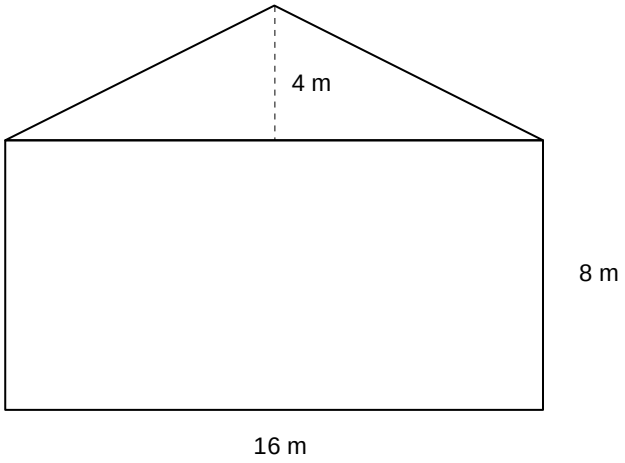
22. You travel 45 km to work every day. Convert this into miles.

Activity 2 (SO2, AC1-5)

1. Take 1 piece of A4 paper. Calculate the area. Calculate the circumference. What shape is the paper?

2. Fold the paper in half, so that it resembles A5 size paper. What shape is the paper now? Calculate the area. Calculate the circumference.

3. Which shapes have been combined to make this drawing?

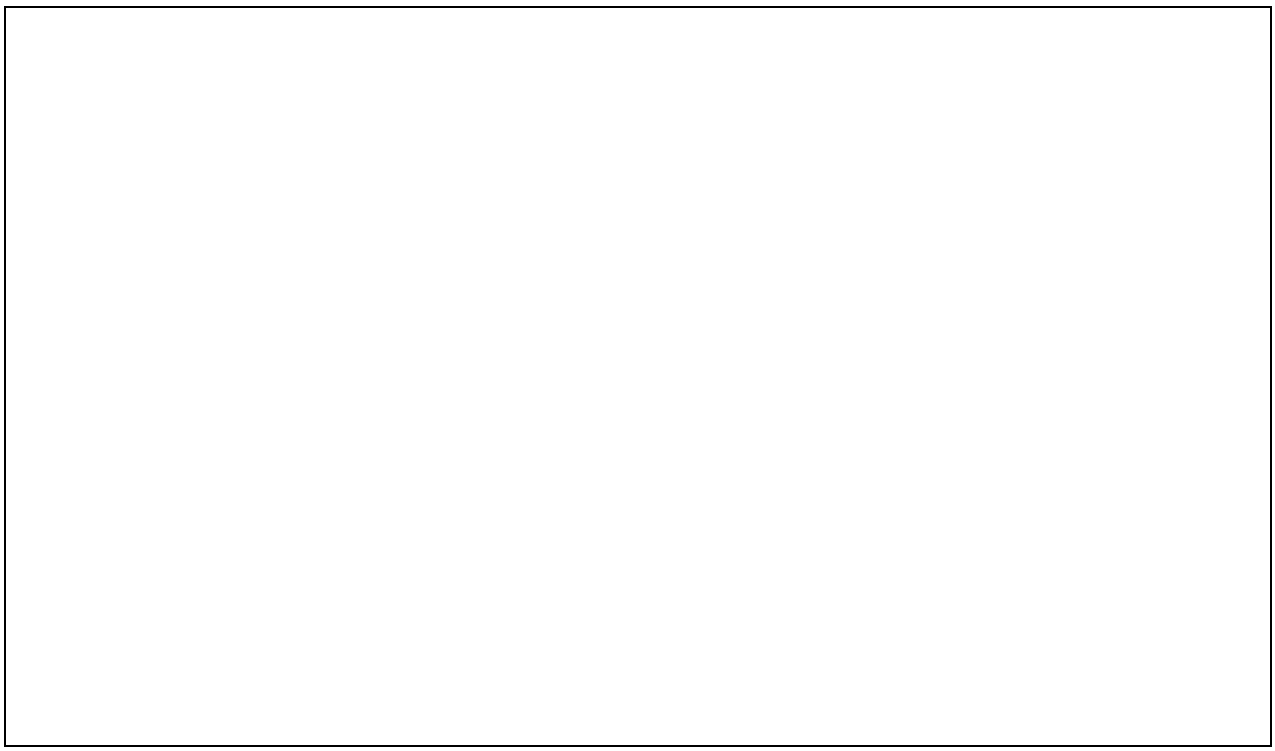


4. Draw a square where all the sides are 6cm long. Calculate the area. Calculate the circumference.

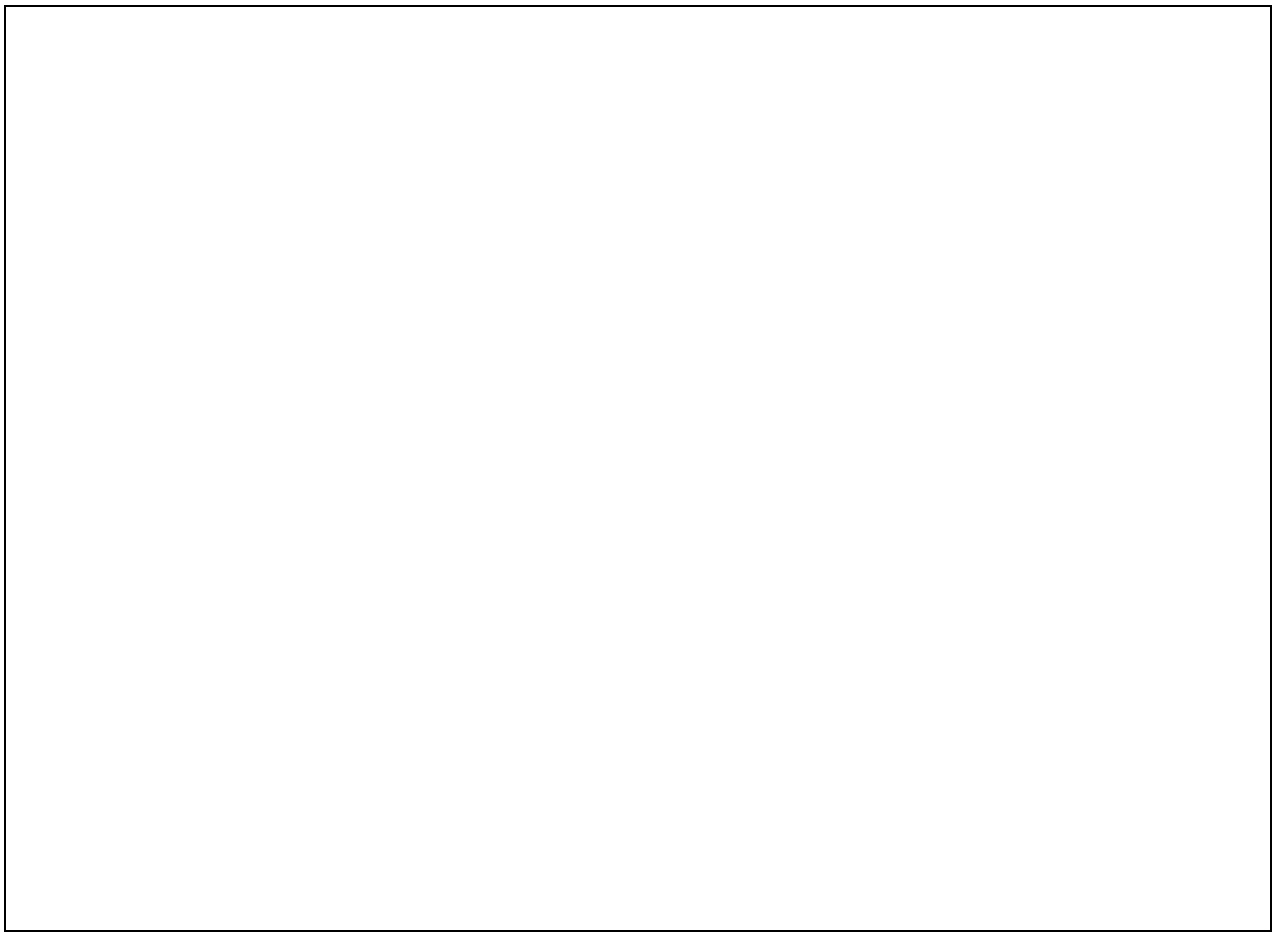
5. Draw a parallelogram where two of the sides are 6cm long and two sides are 30mm long.

6. Transform the parallelogram into a trapezium

7. Using your knowledge of geometric shapes, draw the following: A house with a door and windows. Decorate the windows with triangle tessellations. Decorate the walls with rectangle tessellations.



8. A lorry and a mirror image of the lorry.



9. A rough sketch of the training room. Translate (shift or move) the door to the right.

10. Draw the following rectangle and tessellations at a 90º rotation to the right.