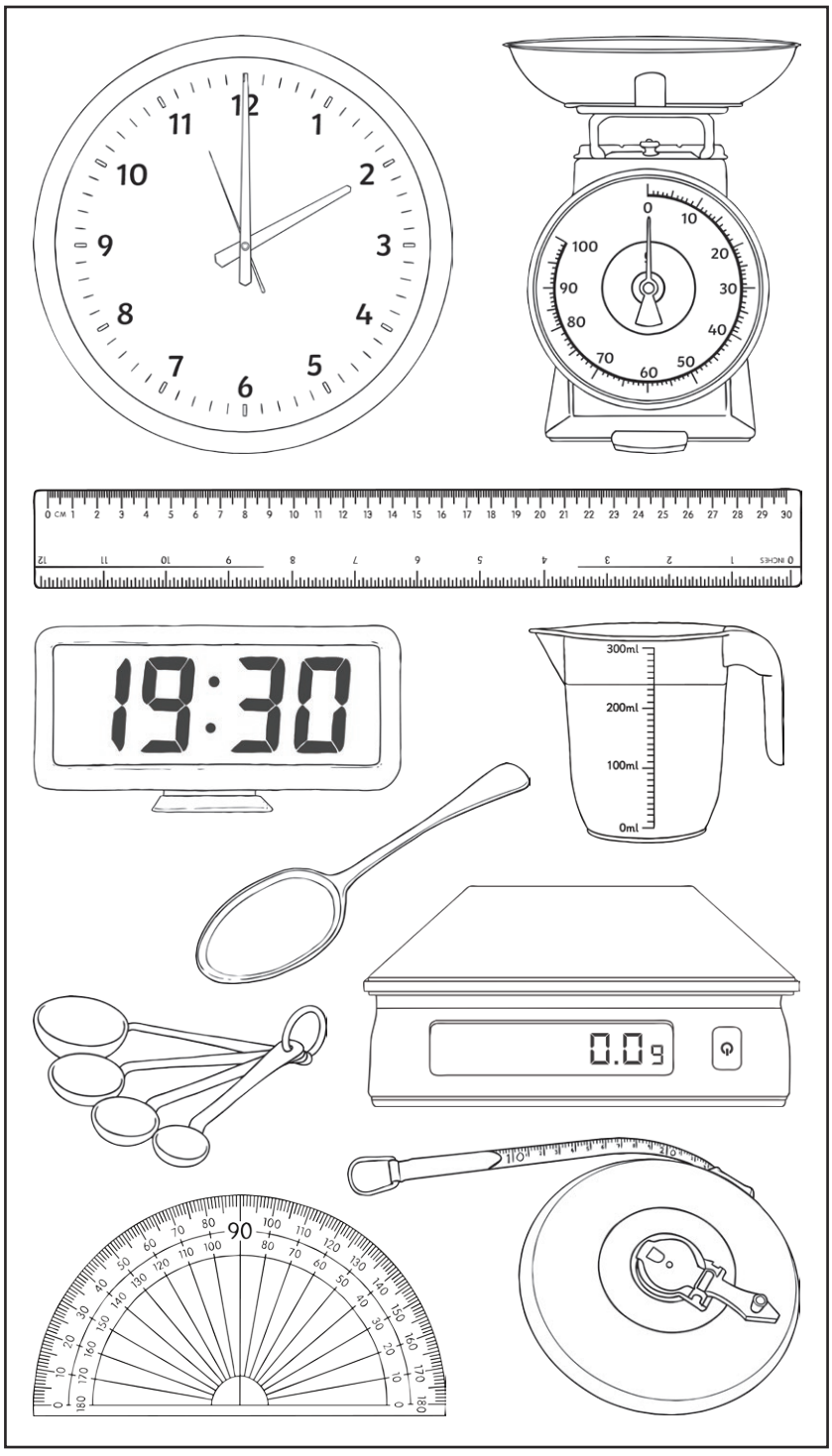
Year 5 Maths Home Learning Workbook

Measures



Year 5 Programme of Study: Measures

Statutory Requirements	Activity	Page	Notes
Convert between different units of metric measurement.	Converting Between Different Units of Measurement	2	
Understand and use approximate equivalences between metric units and common imperial units, such as pounds, inches and pints.	Metric vs. Imperial	3	
Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres.	Perimeter	4	
Calculate and compare the area of rectangles (including squares), including using standard units, square centimetres and square metres, and estimate the area of irregular shapes.	Area	6	
Estimate volume and capacity.	Volume and Capacity	7	
Solve problems involving converting between units of time.	Converting Between Units of Time	8	
Use all four operations to solve problems involving measure using decimal notation, including scaling.	Problem Solving	9	

Converting Between Different Units of Measurement

1. Fill in the empty boxes in the table below. The first row has been done for you.

Millilitres (ml)	Centilitres (cl)	Litres (l)
1500	150	1.5
	300	
2000		
		4.3
		0.7
400		
60		

2. Draw lines to match the equivalent measurements.

6m •	• 6000m
0.6mm •	• 600cm
6km •	• 60mm
6cm •	• 0.6km
600m •	• 0.06cm

3. Fill in the missing measurements.

400g = _____kg

_____g = 7kg

3500g = _____kg

_____g = 0.08kg

_____g = 5.5kg

90g = _____kg

_____g = 12.3kg

4. Order these weights from lightest to heaviest.

2.3kg 2000g 0.4kg 4kg 3400g 4003g

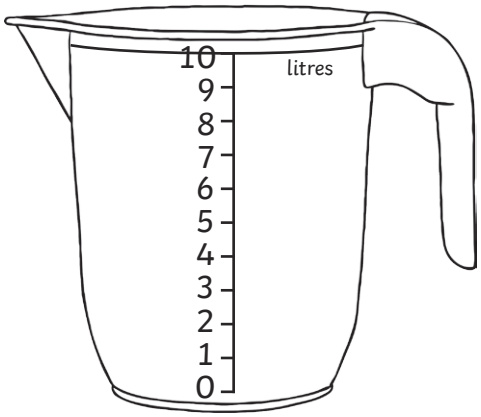
_____

Metric vs. Imperial

5. Write the measurements on the rulers in centimetres.
   2.5 centimetre = 1 inch

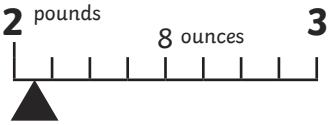
_____ _____ _____

6. Convert the measurements of each jug of liquid.
   1 litre = 1.75 pints



_____ litres _____ pints _____ pints

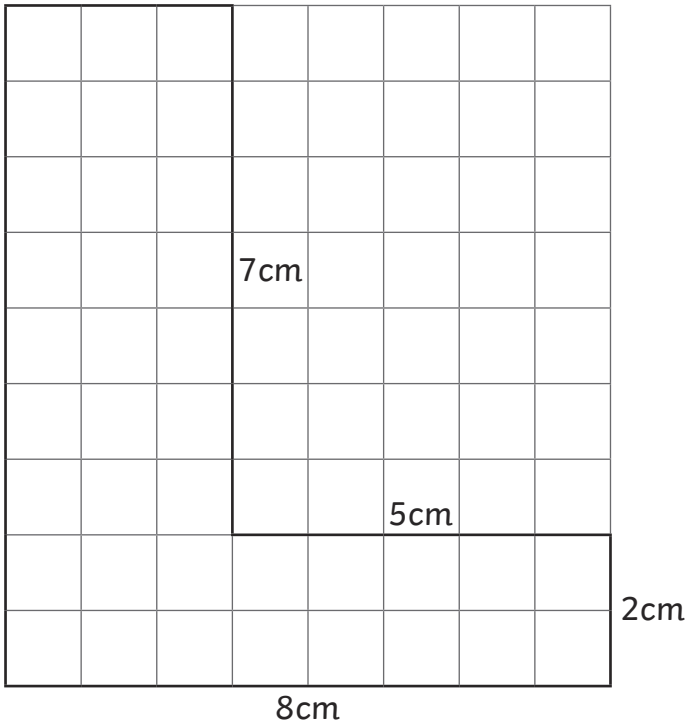
7. Convert the weights on each of the scales.
   0.45 kilogram = 1 pound (lb)
   28 grams = 1ounce (oz)



_____ kg _____ lb (pounds) _____ g

Perimeter

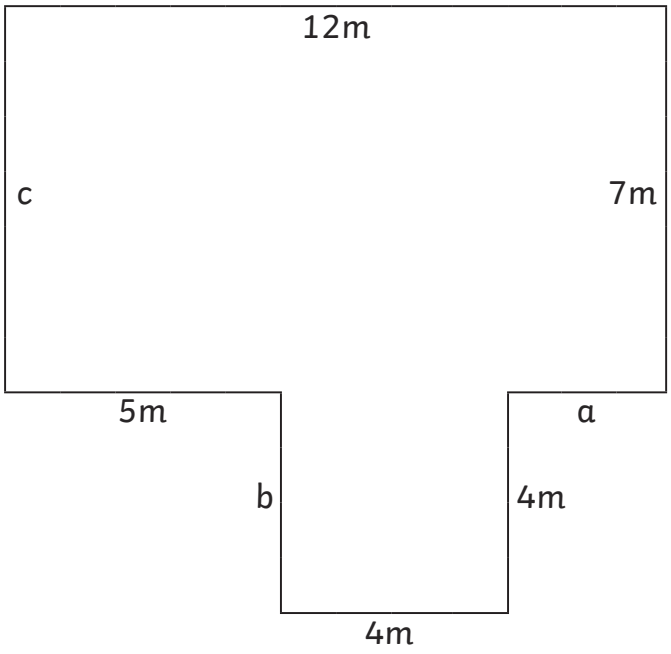
8. Calculate the perimeter of this rectilinear shape.



Perimeter = _____

9. Draw a composite, rectilinear shape which has a perimeter of 28cm.

10. The perimeter of this composite rectilinear shape is 46m. Calculate the value of sides a,b and c.



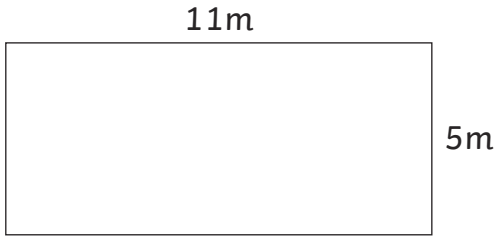
a = _____

b = _____

c = _____

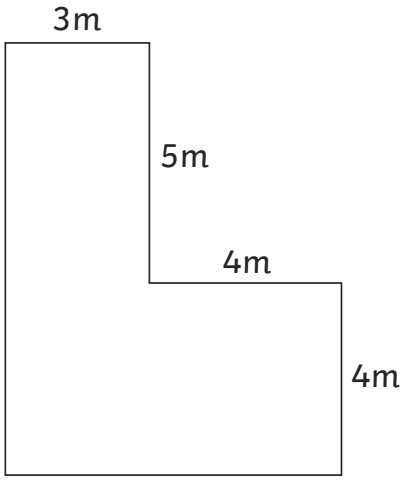
Area

11. Calculate the area of this shape.



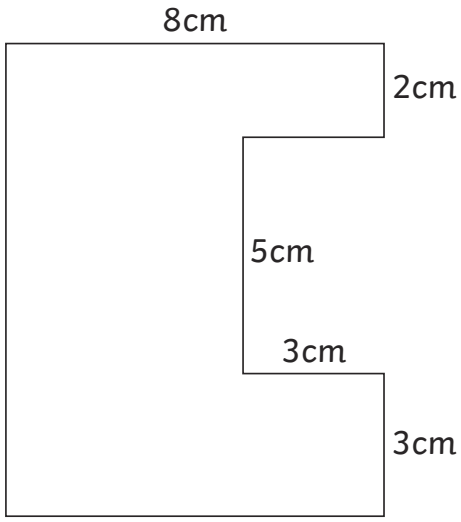
Area = _____

12. Calculate the area of this shape.



Area = _____

13. Calculate the area of this shape.



Area = _____

14. A square has an area of 36cm^2. What is the length of one side?

_____

Volume and Capacity

15. Draw lines to the most appropriate capacity for each of the following containers.

Bath tub •	• 250 litres
Large bottle of lemonade •	• 180 litres
Drinking glass •	• 1 litre
Paddling pool •	• 5ml
Teaspoon •	• 200ml

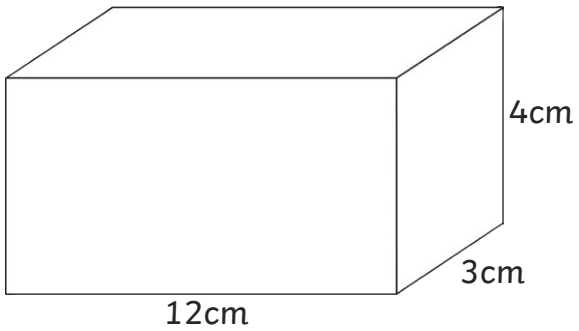
16. A jug holds 2 litres of squash. A cup holds 125ml of liquid. If Thomas fills 4 cups with squash, how much will be left in the jug?

_____ litres

17. A bath has a capacity of 80 litres. If $\frac{1}{4}$ of the bath is filled, how many millilitres of water will be in the bath?

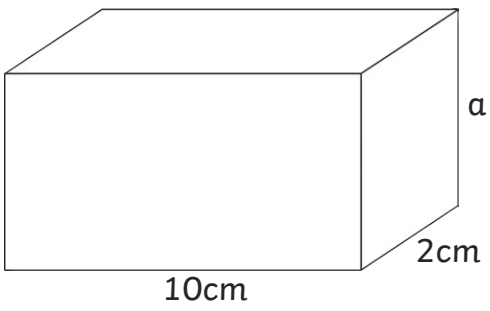
_____ millilitres

18. Calculate the volume of this cuboid.



Volume = _____ cm^3

19. The volume of this cuboid is $80cm^3$. What is the value of the missing side?



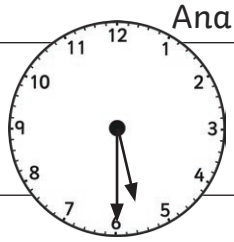
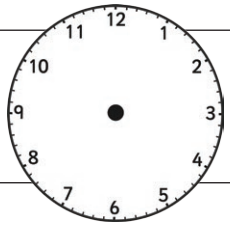
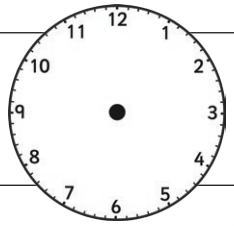
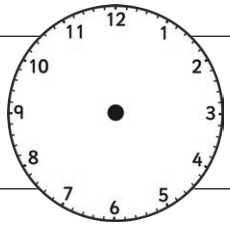
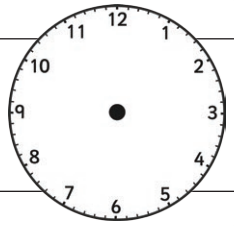
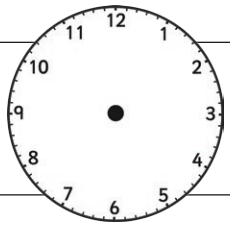
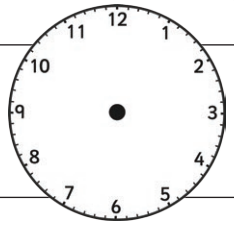
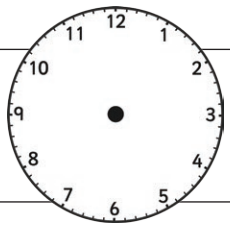
a = _____

Converting Between Units of Time

20. Draw lines to match the 12-hour and 24-hour clock times.

2.45 p.m. •	• 17:15
7.30 a.m. •	• 02:15
5.15 p.m. •	• 14:45
7.30 p.m. •	• 19:30
10.15 a.m. •	• 07:30
2.15 a.m •	• 10:15

21. Fill in the missing times. The first row has been done for you.

Time in Words	24-Hour Clock	12-Hour Clock	Analogue
half past 5 in the evening	17:30	5.30 p.m.	
nine o'clock in the morning	_____	_____	
_____ _____	_____	3.15 p.m.	
_____ _____	20:30	_____	
quarter to eight in the morning	_____	_____	
_____ _____	_____	5.20 a.m.	
_____ _____	10:40	_____	
midnight	_____	_____	

Problem Solving

22. Order the amounts from the least to most expensive.

80p	£1.20	£0.70	£1.50	250p

23. This recipe makes enough brownies for 6 people.

100g butter

200g dark chocolate

250g sugar

50g flour

60g cocoa

How much of each ingredient would you need to make enough brownies for 9 people?

_____ butter

_____ dark chocolate

_____ sugar

_____ flour

_____ cocoa