1

Recording mass using decimal notation

Record metric units for mass using decimals

Challenge 1

Write each mass in kilograms and grams.

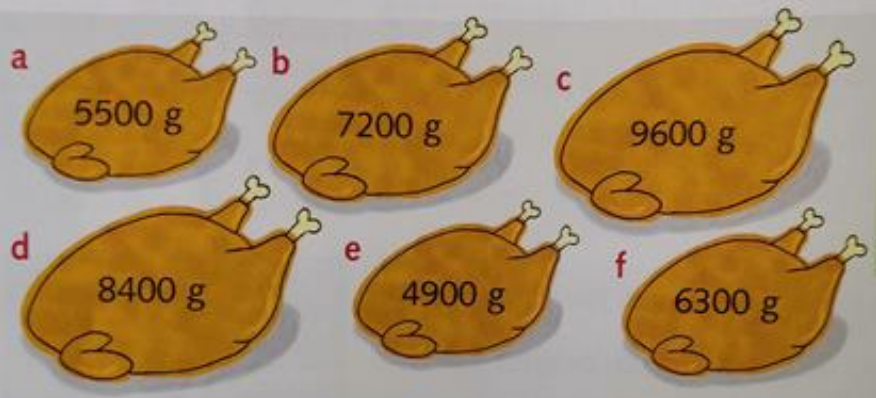
a 2500 g b 3100 g c 5700 g d 2900 g

Example

4600 g = 4 kg 600 g

Challenge 2

1 Write the mass of each chicken in four different ways.



Example

2000 g + 300g $2\frac{3}{10}$ kg

2300 g

2 kg 300 g 2·3 kg

2 Write each mass in grams.

a 6·4 kg b 8·5 kg c 5·7 kg

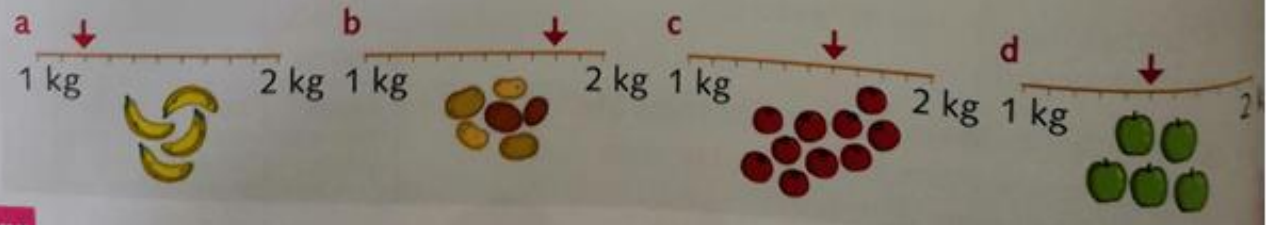
d 13·1 kg e 22·9 kg f 17·6 kg

Example

7·2 kg = 7000 g + 200 g

= 7200 g

3 Write the weights shown on these scales.



Challenge 3

Look at the scales in Challenge 2, Question 3. Find the approximate mass in grams of

a 1 banana b 1 potato c 1 tomato d 1 apple

2

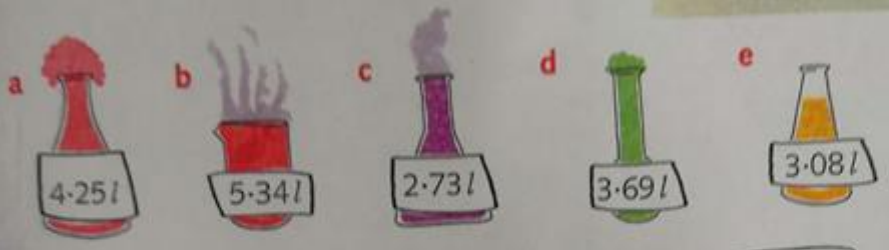
nce lab litres

ultiplication to convert from larger to smaller units

Example

$3{\cdot}75\,l = 3000\,\text{ml} + 750\,\text{ml}$
$= 3750\,\text{ml}$

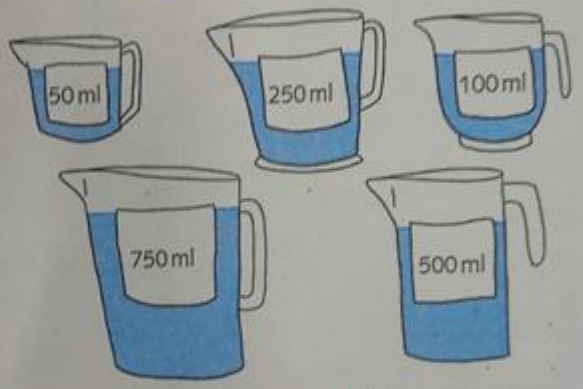
Vrite the capacity of each flask in millilitres.



Professor Mack has five measuring jugs and an empty container.

He has mislaid his other measuring jugs but he can use these jugs more than once.

Explain how he can pour 1 litre of water into an empty container using:



a 2 measures **b** 3 measures **c** 4 measures **d** 5 measures

The table shows the amount of water, tea and milk a science student had each day.

Use the information in the pictures to work out how many millilitres of liquid he drank each day.

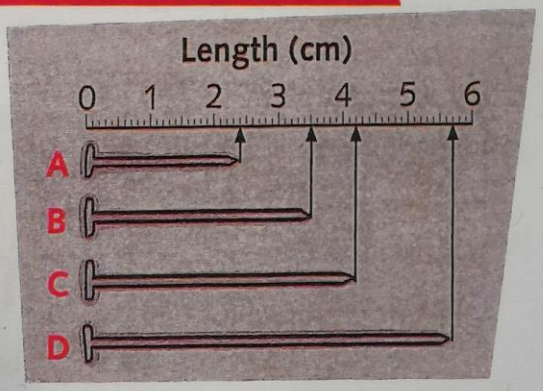
Day	Bottles of water	Mugs of tea	Small cartons of milk
Monday	3	2	1
Tuesday	2	3	2
Wednesday	1	4	3
Thursday	3	3	4
Friday	2	1	5

3

Fixing the fence in metres

Estimate and compare length and round numbers using measuring tapes

Challenge 1 Write the length shown by each nail:



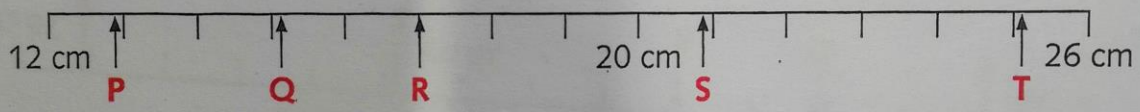
a in millimetres

b to the nearest centimetre

Challenge 2

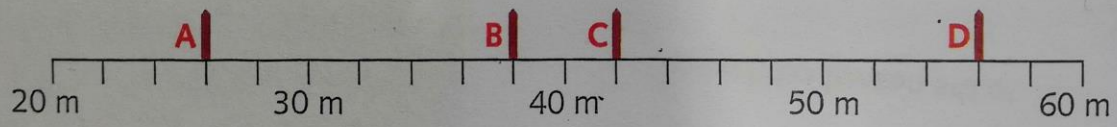
1 Round the length shown by each arrow:

a to the nearest centimetre **b** to the nearest 10 centimetres



2 Estimate then work out in metres the distance between:

a posts A and C **b** posts B and D **c** posts A and D



3 The table shows the length of one roll of Farmer Fraser's wire mesh. Copy and complete the table for his rolls of wire mesh with these lengths:

Length of roll of wire mesh	Rounded to nearest:	
	10 cm	metre
A 472 cm	470 cm	5 m
B		

B 274 cm **C** 742 cm **D** 427 cm **E** 724 cm **F** 247 cm

Challenge 3 Farmer Fraser needs exactly 12 m of wire mesh to complete his fence. He wants to finish the job without wasting too much of his stock of wire mesh. Which three rolls from his stock of wire mesh should he use? Give a reason for your answer.