Q1.

The International Space Station orbits the Earth at a height of 250 miles.

What is the height of the International Space Station in **kilometres?**

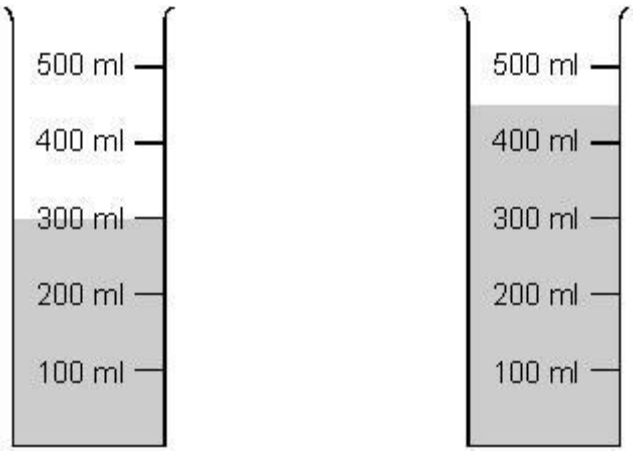
Use 8 kilometres equals 5 miles.

km

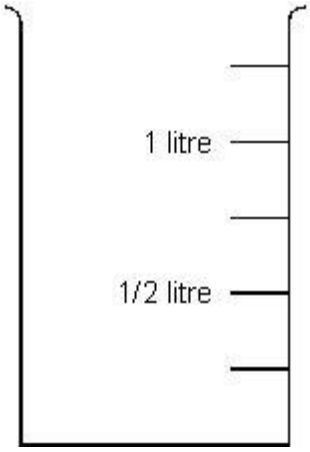
1 mark

Q2.

All the water in these two containers is to be poured into the empty container below.



Draw where the water level will be in the container.

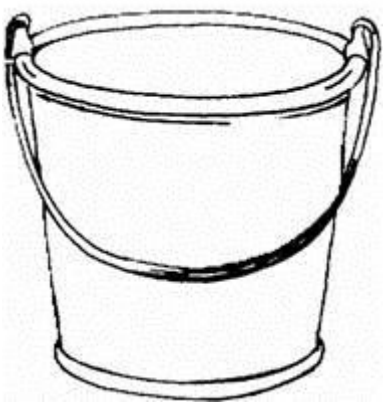


1 mark

Q3.

This jug holds $\frac{1}{2}$ litre.

This bucket holds 5 litres



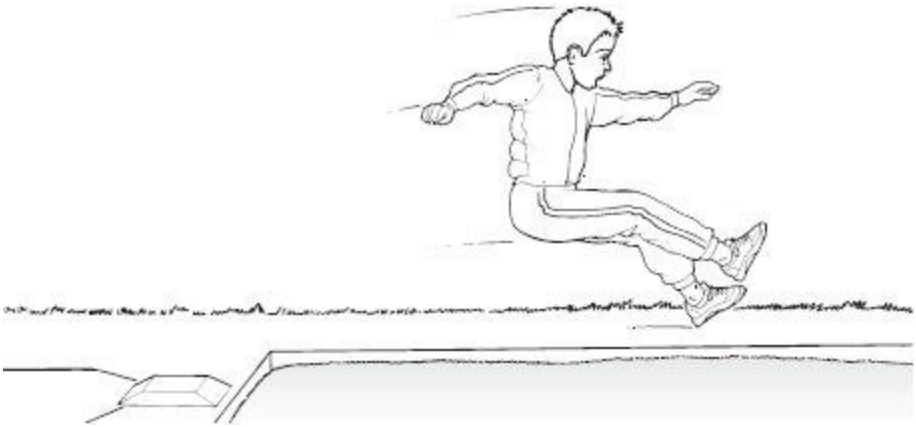
How many **full** jugs of water are needed to fill the bucket?

1 mark

Q4.

Max jumped **2.25 metres** on his **second** try at the long jump.

This was **75 centimetres** longer than on his **first** try.



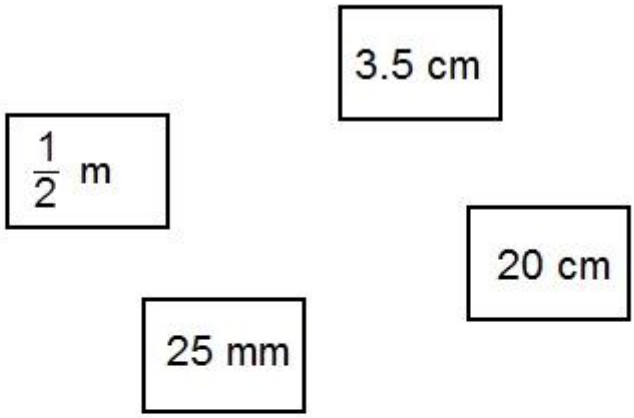
How far **in metres** did he jump on his **first** try?

m

1 mark

Q5.

Write these lengths in order, starting with the shortest.



shortest

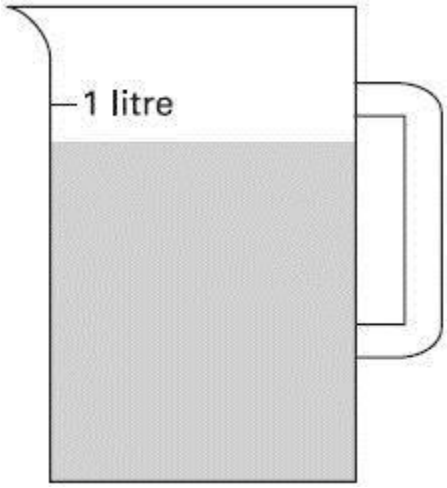
1 mark

Q6.

Sophie poured some water out of a **litre** jug.

Look how much is left in the jug.

Estimate how many millilitres of water are left.



ml

1 mark

Q7.

Kate has a piece of ribbon **one metre** long.

She cuts off 30 centimetres.

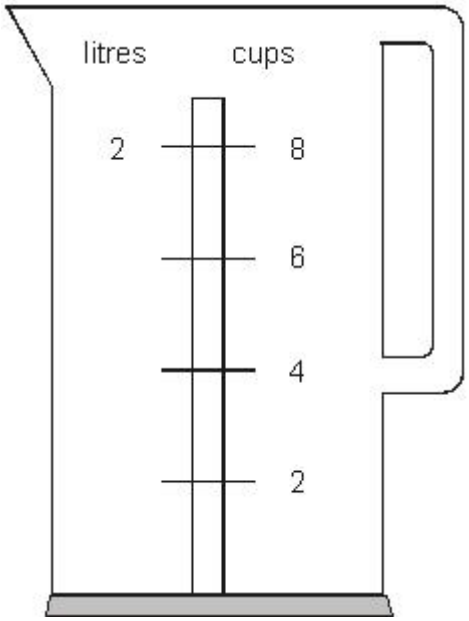
How many centimetres of ribbon are left?

cm

1 mark

Q8.

Nisha's kettle holds 2 litres of water.



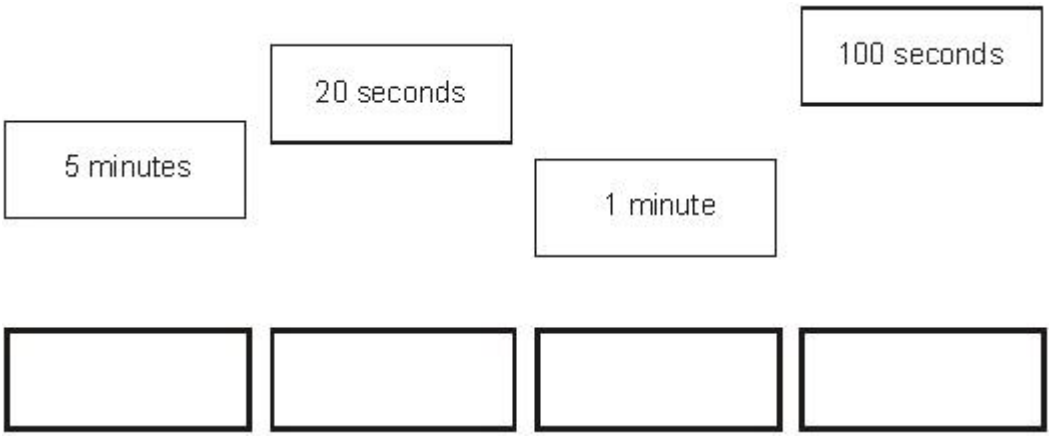
How many millilitres are equal to 1 cup?

ml

1 mark

Q9.

Put these times in order, starting with the shortest.



1 mark

Q10.

Here are four masses.

2 kilograms	1 tonne	800 grams	$\frac{1}{2}$ kilogram

Write the masses in order, starting with the lightest.

lightest			

1 mark

Q11.

Chen is cooking some pasta.

The recipe says he needs 350 grams of pasta for 4 people.

How many **kilograms** of pasta does he need for **12 people**?

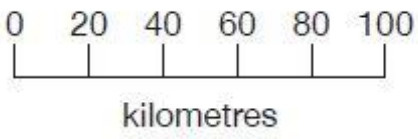
Show your method

kg

2 marks

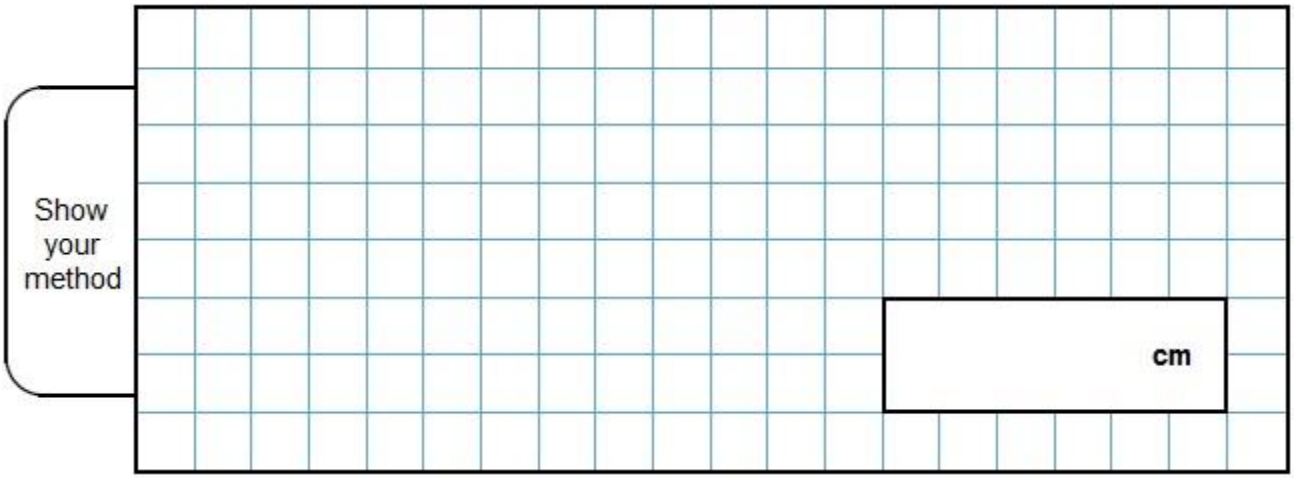
Q12.

On a map, 1 cm represents 20 km.



The distance between two cities is **250 km**.

On the map, what is the distance between the two cities?



2 marks

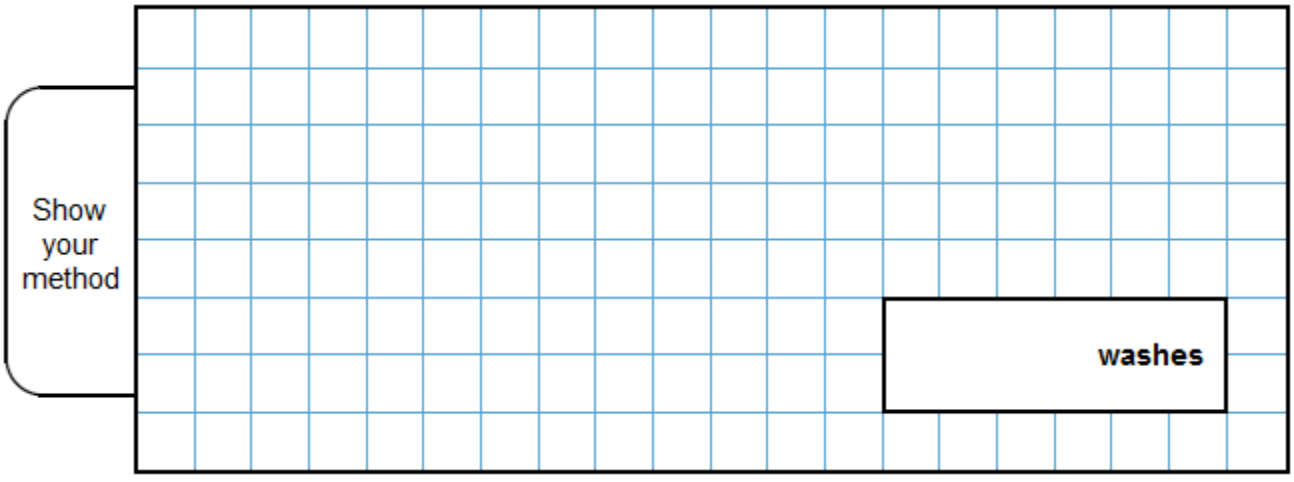
Q13.

A box contains 2.6 kg of washing powder.

Jack uses 65 grams of powder for each wash.

He uses all the powder.

How many washes did Jack do?



2 marks

Q14.

Write the missing numbers.

60 months = ☐ years

72 hours = ☐ days

84 days = ☐ weeks

2 marks

Q15.

The length of a day on Earth is 24 hours.

The length of a day on Mercury is $58\frac{2}{3}$ times the length of a day on Earth.

What is the length of a day on Mercury, in **hours**?

Show your method

hours

2 marks

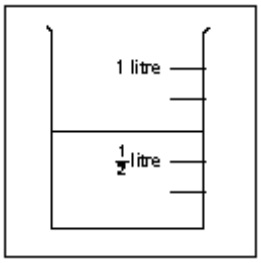
Mark schemes

Q1.

400

[1]

Q2.



[1]

Q3.

10 (jugs)

[1]

Q4.

1.50 **OR** 1.5

Accept $1\frac{1}{2}$ *m*

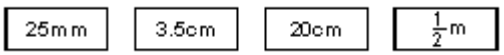
Accept 150 cm

***Do not** accept 150 m*

[1]

Q5.

Lengths written in correct order as shown:



Accept use of equivalent units, eg
2.5 cm

Accept answers with missing or incorrect units.

[1]

Q6.

Answer in the range 800 to 950 inclusive.

Accept estimates in the range 0.80 l to 0.95 l.

[1]

Q7.

70

[1]

Q8.

250

Do not *accept* $\frac{1}{4}$ *litre.*

[1]

Q9.

Times written in correct order as shown:

20 sec	1 min	100 sec	5 min

Do not *accept times written in reverse order.*

Accept answers with missing or incorrect units.

[1]

Q10.

Masses in order, as shown:

$\frac{1}{2}$ kg	800 g	2 kg	1 tonne

Accept answers with missing or incorrect units.

[1]

Q11.

Award **TWO** marks for the correct answer of 1.05 kg.

If the answer is incorrect, award **ONE** mark for evidence of appropriate working, eg:

- 12 ÷ 4 = 3

  350 × 3 = 1050

  1050 ÷ 1000 = wrong answer

Do not *accept 1050 g*

Accept for ***ONE*** *mark 10.5 or 105 as evidence of appropriate working.*

Working must be carried through to reach an answer for the award of ***ONE*** *mark.*

Up to 2m

[2]

Q12.

Award **TWO** marks for the correct answer of 12.5

If the answer is incorrect, award **ONE** mark for evidence of an appropriate method, e.g.

- 250 ÷ 20

OR

- 20 km is 1 cm
  100 km is 5 cm
  50 km is 2.5 cm
  5 cm + 5 cm + 2.5 cm

*Answer need not be obtained for the award of **ONE** mark.*

***Do not** accept incorrect proportions in any step without evidence of the calculation performed.*

Up to 2m

[2]

Q13.

Award **TWO** marks for the correct answer of 40

If the answer is incorrect, award **ONE** mark for evidence of appropriate method, e.g.

- 2.6 × 1,000 = 2,600
  2,600 ÷ 65 =
- 2.6 ÷ 0.065 =

*Answer need not be obtained for the award of **ONE** mark.*

***Do not** accept an incorrect conversion or no conversion of units, e.g.*

- *260 ÷ 65 =*
- *2.6 kg ÷ 65 g*

Up to 2m

[2]

Q14.

Award **TWO** marks for three boxes completed correctly as shown:

60 months = [5] years

72 hours = [3] days

84 days = [12] weeks

If the answer is incorrect, award **ONE** mark for two boxes completed correctly.

Up to 2m

[2]

Q15.

Award **TWO** marks for the correct answer of 1,408

OR

for an answer in the range of 1,406 to 1,409 inclusive.

If the answer is incorrect, award **ONE** mark for:

- sight of 1,392

OR

- evidence of an appropriate method, e.g.
  - $24 \times 58\frac{2}{3}$ = answer

    Within an appropriate method, if a decimal equivalent for $\frac{2}{3}$ is given, it must be rounded or truncated to at least 2 decimal places.

  - 24 × 58 = 1,394 *(error)*
    $\frac{2}{3}$ of 24 = 16
    1,394 + 16 = answer
  - $24 \times \frac{176}{3}$ = answer
  - 24 × 58.67 = answer.

    *A final answer is required for the award of **ONE** mark.*

Up to 2m

[2]