## Year 5 Measurement

Q1.
Here is a drawing of a model car.


What is the length of the model?
Give your answer in centimetres, correct to one decimal place.


The height of the model is 2.8 centimetres.
The height of the real car is $\mathbf{5 0}$ times the height of the model.
What is the height of the real car?
Give your answer in metres.


2 mark

Q2.
Tom, Amy and Helen want to go on a boat trip.


There are three boats.

| Lark |  |
| :---: | :---: |
| 50 minute |  |
| trip |  |
| Tickets |  |
| £2.75 |  |
| each | Heron <br> 70 minute <br> trip <br> Tickets <br> £3.50 <br> each |$\quad$| Kestrel <br> minute <br> trip |
| :---: |
| Tickets |
| £4.20 |
| each |

How much does it cost altogether for three people to go on the Lark?

## £

1 mark

Tom and Amy go on the Heron.
They leave at 2:15pm.
At what time do they return?

Helen goes on the Kestrel and gets back at 4:15pm.
At what time did the boat leave?


Q3.
One toffee apple needs:

1 stick,
100 g of sugar,
1 apple.


Children buy just enough sticks, sugar and apples to make 100 toffee apples.
They sell all 100 toffee apples for $£ 1$ each.
The profit goes to charity.
Work out how much money goes to charity.


3 marks

Q4.
Here are two shapes made with centimetre squares.



Each shape has 5 squares.
Write ONE other thing which is the same about the two shapes.
$\qquad$
$\qquad$

Here are more shapes made with centimetre squares.
A

B
C


E

F

G

H

Which shape has a perimeter of 10 cm ?


1 mark

Q5.
Chen and Megan each have a parcel.
Chen's parcel weighs $1^{\frac{1}{2}} \mathrm{~kg}$.
Megan's parcel weighs 1.2 kg
How many more grams does Chen's parcel weigh than Megan's parcel?


Q6.
These are some prices in a flower shop.

tulips
$£ 1.20$ for a bunch

roses
40p each

daffodils
55p for a bunch

How many roses can you buy for exactly £2?

Amy buys one bunch of tulips and three bunches of daffodils.
How much does she pay altogether?


Q7.
Sarah, Amy and Liam stand on some weighing scales two at a time.


Here are the measurements:

| Sarah and Amy | $\mathbf{7 0} \mathbf{~ k g}$ |
| :--- | :--- |
| Sarah and Liam | $\mathbf{8 0} \mathbf{~ k g}$ |
| Liam and Amy | $\mathbf{8 0} \mathbf{~ k g}$ |

How much does Liam weigh?


Q8.
This shape is made of wooden centimetre cubes.


How many more centimetre cubes are needed to make it into a solid cuboid 3 cm tall, 5 cm long and 5 cm wide?


1 mark

Q9.

## 6 pencils cost £1.68



3 pencils and 1 rubber cost £1.09


What is the cost of 1 rubber?


Q10.
Emma makes a cuboid using 12 cubes.


Write the letter of the cuboid that has a different volume from Emma's cuboid.





Q11.
Mr Khan makes a blackcurrant drink for a party.
He pours blackcurrant squash into a jug.


How much water must he add to make $\mathbf{5 0 0}$ millilitres of drink?


Q12.
On the grid, draw a rectangle which has the same area as this shaded pentagon. Use a ruler.

|  |  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |  |  |  |  |

Q13.
The area of the small shaded square is $\mathbf{1}$ square centimetre.
What is the area of the larger shaded square?


On the grid below, draw a square with an area of $\mathbf{2} \mathbf{c m}^{2}$.


Q14.
This cuboid is made from centimetre cubes.


It is 4 centimetres by 3 centimetres by 2 centimetres.

What is the volume of the cuboid?

1 mark

Another cuboid is made from centimere cubes.
It has a volume of $\mathbf{3 0}$ cubic centimetres.

What could the length, height and width be?


Q15.
Some children ran in two races on sports day.
Here are their times.

|  | $\mathbf{1 0 0} \mathbf{m}$ race | $\mathbf{8 0 0} \mathbf{~ m}$ race |
| :--- | :---: | :---: |
| Elise | 15.9 seconds | 3 minutes 02 seconds |
| Jake | 19.7 seconds | 2 minutes 58 seconds |
| Teri | 16.8 seconds | 3 minutes 01 seconds |
| Neil | 17.1 seconds | 2 minutes 59 seconds |
| Barry | 18.4 seconds | 2 minutes 57 seconds |

Who finished the 100 m race in second place?


In the 800 m race, how many seconds did Barry finish ahead of Elise?


Q16.
Here is a flag.


What is the area of this flag?

$20 \%$ of the flag is blue.
What area of the flag is blue?


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Q17.
At a petrol station there is a scale for converting litres and gallons.


Approximately how many litres are there in $\mathbf{3}$ gallons?
Give your answer to the nearest litre.


1 mark

Approximately how many gallons are there in $\mathbf{7}$ litres?
Give your answer to $\mathbf{1}$ decimal place.
gallons

1 mark

Q18.
Here is a rectangle with a width of 15.7 centimetres.


## Not actual size

The perimeter of this rectangle is 85 centimetres.
Calculate the length of the rectangle.


Q19.
Triangle ABC is isosceles and has a perimeter of 20 centimetres.
Sides $\mathbf{A B}$ and $\mathbf{A C}$ are each twice as long as $\mathbf{B C}$.


Calculate the length of the side BC.
Do not use a ruler.


2 marks

Q20.


Not actual size
The perimeter of this rectangle is 50 centimetres.

Calculate the length of the rectangle.


Q21.
Nisha's kettle holds 2 litres of water.


How many millilitres are equal to 1 cup?


1 mark

Q22.


Cheddar cheese costs $£ 7.50$ for 1 kg .
Marie buys 200 grams of cheddar cheese.
How much does she pay?


1 mark

Cream cheese costs $£ 3.60$ for 1 kg .
Robbie buys a pot of cream cheese for 90p.


How many grams of cream cheese does he buy?


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Q23.
Here is an equilateral triangle inside a square.


## Not actual size

The perimeter of the triangle is 48 centimetres.
What is the perimeter of the square?


Q24.


Mr Green sells apples at 40 p per kilogram.


Mrs Ball sells apples at 24 p per pound.

Work out who sells the cheaper apples.
Show how you worked it out.


1 mark

## Q25.

On sports day children get points for how far they jump.

| Standing Long Jump |  |  |
| :--- | :--- | :--- |
| Over | 80 cm | 1 point |
| Over | 100 cm | 2 points |
| Over | 120 cm | 3 points |
| Over | 140 cm | 4 points |
| Over | 160 cm | 5 points |
| Over | 180 cm | 6 points |

Joe jumped 138 cm .
How many points does he get?


1 mark

Sam said, "I jumped 1.5 metres. I get 4 points".
Give a reason why Sam is correct.
$\qquad$
$\qquad$

Each child puts a cross on a line to show how far they jumped.
Sam puts her cross at 1.5 metres.
Lynn jumps 1.14 metres.
Put a cross on the line for Lynn's jump.


1 mark

