1 A water tank is empty.
Anil needs to fill the tank with 2400 litres of water.

Company **A** supplies water at a rate of 8 litres in 1 minute 40 seconds.
Company **B** supplies water at a rate of 2.2 gallons per minute.

1 gallon = 4.54 litres

Company **A** would take more time to fill the tank than Company **B** would take to fill the tank.

How much more time?
Give your answer in minutes correct to the nearest minute.

..... minutes

(Total for Question 1 is 4 marks)

2 Change 40 centimetres into millimetres.

..... millimetres

(Total for Question 2 is 1 mark)

3 Callum says,

"300 cm^2 is the same as 3 m^2 because there are 100 cm in 1 m so you divide by 100"

Callum's method is wrong.

(b) Explain why.

.....

.....

.....

(1)

(Total for Question 3 is 1 mark)

4 In Spain, Sam pays 27 euros for 18 litres of petrol.
In Wales, Leo pays £40.80 for 8 gallons of the same type of petrol.

1 euro = £0.85
4.5 litres = 1 gallon

Sam thinks that petrol is cheaper in Spain than in Wales.

Is Sam correct?
You must show how you get your answer.

(Total for Question 4 is 4 marks)

5 Change 30 metres per second to kilometres per hour.

..... kilometres per hour

(Total for Question 5 is 2 marks)

6 (a) Change 8000 cm^3 to m^3

..... m^3

(1)

(b) Change a speed of 180 km per hour to metres per second.

..... metres per second

(3)

(Total for Question 6 is 4 marks)

7 Ethan buys a box of 24 cans of lemonade for £7 There are 330 m*l* of lemonade in each can.

(b) Work out the cost of 100 m*l* of lemonade.

Give your answer correct to the nearest penny.

.....p

(3)

(Total for Question 7 is 3 marks)

8 Change 4000 grams into kilograms.

..... kilograms

(Total for Question 8 is 1 mark)

9 120 boxes cost £6
270 bags cost £10

A bag is cheaper than a box.

How much cheaper?
Give your answer in pence correct to 1 decimal place.

.....p

(Total for Question 9 is 4 marks)

10 Lava flows from a volcano at a constant rate of $11.9\,m^3/s$

How many days does it take for $67\,205\,600\,m^3$ of lava to flow from the volcano?
Give your answer correct to the nearest day.

..... days

(Total for Question 10 is 3 marks)