N236 Compound measures 2

Q1.

Change   4500 mm^3 into cm^3.

.... cm^3

(Total for question = 2 marks)

Q2.

Write 37 cm^3 in mm^3

.... mm^3

(Total for question = 1 mark)

Q3.

Change 2 m³ to cm³.

.... cm³

(Total for question = 2 marks)

Q4.

A rectangle has an area of 4 m².
Write this area in cm².

.... cm²

(Total for question = 2 marks)

Q5.

$$\text{pressure} = \frac{\text{force}}{\text{area}}$$

Find the pressure exerted by a force of 810 newtons on an area of 120 cm^2
Give your answer in newtons/m^2

.... newtons/m^2

(Total for question = 3 marks)

Q6.

$$\text{Pressure} = \frac{\text{force}}{\text{area}}$$

Find the pressure extered by a force of 900 newtons on an area of 60cm^2.
Give your answer in newtons/m^2.

.... newtons/m^2

(Total for question = 2 marks)

Q7.

Zahra mixes 150g of metal A and 150g of metal B to make 300g of an alloy.

Metal A has a density of 19.3g/cm^3.
Metal B has a density of 8.9g/cm^3.

Work out the density of the alloy.

.... g/cm^3

(Total for question = 4 marks)

Q8.

Jade makes an orange drink by mixing orange concentrate with water.

She mixes 15 cm^3 of orange concentrate with 250 cm^3 of water.

The density of orange concentrate is 1.20 g/cm^3.
The density of water is 1.00 g/cm^3.

Work out the density of Jade's orange drink.
Give your answer correct to 2 decimal places.

....g/cm^3

(Total for question = 3 marks)

Q9.

The densities of two different liquids A and B are in the ratio 19 : 22

The mass of 1 cm^3 of liquid B is 1.1 g.

5 cm^3 of liquid A is mixed with 15 cm^3 of liquid B to make 20 cm^3 of liquid C.

Work out the density of liquid C.

....g/cm^3

(Total for question is 4 marks)

Q10.

Liquid A and liquid B are mixed together in the ratio 2 : 13 by volume to make liquid C.

Liquid A has density 1.21 g/cm^3
Liquid B has density 1.02 g/cm^3

A cylindrical container is filled completely with liquid C.
The cylinder has radius 3 cm and height 25 cm.

Work out the mass of the liquid in the container.
Give your answer correct to 3 significant figures.
You must show all your working.

.... g

(Total for question = 4 marks)