**Mass, Density and Volume GREEN**

**1.** In each of the following questions find the density. State the units of your answer.

a) Mass = 45 g, volume = 5 cm³

b) Mass = 18.9 g, volume = 9 cm³

**2.** In each of the following questions find the mass. State the units of your answer.

a) Density = 5 g/cm³, volume = 4 cm³

b) Density = 190 kg/m³, volume = 3 m³

**3.** In each of the following questions find the volume. State the units of your answer.

a) Density = 1.4 g/cm³, mass = 5.6 g

b) Density = 800 kg/m³, mass = 4800 kg

**4.** Lead has a density of 11.5 g/cm³.

A rectangular block of lead measures 7 cm × 5 cm × 2 cm.

a) Find the volume of the block of lead.

b) Find the mass of the block of lead

**5.** A plywood plank measures 1 cm × 8 cm × 90 cm and weighs 396 g.

a) Find the volume of the plywood plank.

b) Find the density of the plywood.

**6.** The petrol in a petrol can weighs 2000 g. The density of petrol is 0.8 g/cm³. What is the volume of the petrol in the can in

a) cm³

b) litres

**7.** A marble slab is 1 m long and has a rectangular cross-section of area 15cm².

a) What is the volume of the marble slab?

b) The density of marble is 2.7 g/cm³. What is the mass of the marble slab?

8. Olympics medals have a diameter of 60 mm and a thickness of 3 mm. Gold has a density of 19 g/cm³. Work out

a) The volume of a gold medal

b) The mass of a gold medal.

**Mass, Density and Volume AMBER**

**1.** In each of the following questions find the density. State the units of your answer.

Density = Mass ÷ Volume

a) Mass = 45 g, volume = 5 cm³

b) Mass = 18.9 g, volume = 9 cm³

**2.** In each of the following questions find the mass. State the units of your answer.

Mass = Density x Volume

a) Density = 5 g/cm³, volume = 4 cm³

b) Density = 190 kg/m³, volume = 3 m³

**3.** In each of the following questions find the volume. State the units of your answer.

Volume = Mass ÷ Density

a) Density = 1.4 g/cm³, mass = 5.6 g

b) Density = 800 kg/m³, mass = 4800 kg

**4.** Lead has a density of 11.5 g/cm³.

A rectangular block of lead measures 7 cm × 5 cm × 2 cm.

a) Find the volume of the block of lead.

Volume of cuboid = length x width x height

b) Find the mass of the block of lead

**5.** A plywood plank measures 1 cm × 8 cm × 90 cm and weighs 396 g.

a) Find the volume of the plywood plank.

b) Find the density of the plywood.

**6.** The petrol in a petrol can weighs 2000 g. The density of petrol is 0.8 g/cm³. What is the volume of the petrol in the can in

a) cm³

1000 cm³ = 1 litre 

b) litres

**7.** A marble slab is 1 m long and has a rectangular cross-section of area 15cm².

Volume of prism =

area of cross-section x length

a) What is the volume of the marble slab?

b) The density of marble is 2.7 g/cm³. What is the mass of the marble slab?

8. Olympics medals have a diameter of 60 mm and a thickness of 3 mm. Gold has a density of 19 g/cm³. Work out

Volume of prism =

area of cross-section x length

a) The volume of a gold medal

Area of circle = π x r²

b) The mass of a gold medal.

**Mass, Density and Volume RED**

**1.** In each of the following questions find the density. State the units of your answer.

Density = Mass ÷ Volume

a) Mass = 45 g, volume = 5 cm³

45 ÷ 5 =

b) Mass = 18.9 g, volume = 9 cm³

**2.** In each of the following questions find the mass. State the units of your answer.

Mass = Density x Volume

a) Density = 5 g/cm³, volume = 4 cm³

5 x 4 =

b) Density = 190 kg/m³, volume = 3 m³

**3.** In each of the following questions find the volume. State the units of your answer.

Volume = Mass ÷ Density

a) Density = 1.4 g/cm³, mass = 5.6 g

5.6 ÷ 1.4 =

b) Density = 800 kg/m³, mass = 4800 kg

**4.** Lead has a density of 11.5 g/cm³.

A rectangular block of lead measures 7 cm × 5 cm × 2 cm.

a) Find the volume of the block of lead.

Volume of cuboid = length x width x height

7 x 5 x 2 =

b) Find the mass of the block of lead

x 11.5 =

**5.** A plywood plank measures 1 cm × 8 cm × 90 cm and weighs 396 g.

a) Find the volume of the plywood plank.

b) Find the density of the plywood.

**6.** The petrol in a petrol can weighs 2000 g. The density of petrol is 0.8 g/cm³. What is the volume of the petrol in the can in

a) cm³

1000 cm³ = 1 litre 

b) litres

**7.** A marble slab is 1 m long and has a rectangular cross-section of area 15cm².

Volume of prism =

area of cross-section x length

a) What is the volume of the marble slab?

b) The density of marble is 2.7 g/cm³. What is the mass of the marble slab?

8. Olympics medals have a diameter of 60 mm and a thickness of 3 mm. Gold has a density of 19 g/cm³. Work out

Volume of prism =

area of cross-section x length

a) The volume of a gold medal

Area of circle = π x r²

b) The mass of a gold medal.