## Foundation $\checkmark$

## Density Mass Volume

## Question 1

State the equation expressing density in terms of mass and volume.

## Question 2

A metal rod has a density of $7.8 \mathrm{~g} / \mathrm{cm}^{3}$ and a volume of $2300 \mathrm{~cm}^{3}$. Calculate the mass of the rod.

## Question 3

A ball has a mass of 420 g and a volume of $5000 \mathrm{~cm}^{3}$. Calculate the density of the ball,

## Question 4

A statue has a mass of 220 kg and a density of $1500 \mathrm{~kg} / \mathrm{m}^{3}$. Find the volume of the statue.

Question 5
A brick has a volume of $1024 \mathrm{~cm}^{3}$ and a density of $1.7 \mathrm{~g} / \mathrm{cm}^{3}$. Find the mass of the brick.

Question 6
A plank of wood has a mass of 45 kg and a density of $1.4 \mathrm{~g} / \mathrm{cm}^{3}$. Find the volume of the wooden plank.

Question 7
A block of cement has a volume of $3.2 \mathrm{~m}^{3}$ and a mass of 4608 kg . Calculate the density of the cement.

## Question 8

A solution has a volume of $400 \mathrm{~cm}^{3}$ and a density of $1.12 \mathrm{~g} / \mathrm{cm}^{3}$. Calculate the mass of the solution.

Question 9
The cube below has a mass of 860 g .


5cm
Calculate the density.

Question 10
The density of surface sea water is $1020 \mathrm{~kg} / \mathrm{m}^{3}$. Calculate the volume of 5 kg of this sea water.

