

DENSITY

Question 1

You are given three materials, **A**, **B** and **C**.

The mass and volume of the materials are given in the table below.

Material	Mass	Volume	Density
A	320 g	40 cm ³	g/cm ³
B	440 g	40 cm ³	g/cm ³
C	80 g	40 cm ³	g/cm ³

(a) Find the density of the materials **A**, **B** and **C**. [3]

(b) Which material is the least dense? _____ [1]

(c) Which material is the densest? _____ [1]

Question 2

A block of certain material is 3 cm long, 2 cm wide, 5 cm high. The mass of the block is 15 g.

(a) Find the volume of the block.

_____ cm³ [1]

(b) What is the density of the material?

_____ g/cm³ [1]

Exercises on Floating and Sinking

Question 3

You are given the following substance and its density. Identify whether the following will float or sink in water.

The density of water is given to be 1.0 g/cm^3

Substance	Density	Float or sink?
Cooking oil	0.95 g/cm^3	
Mercury	13.6 g/cm^3	

[2]

Question 4

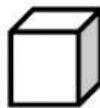
You are given the following objects and their respective density.



Cork
 0.24 g/cm^3



Glass
 2.50 g/cm^3



Ice
 0.92 g/cm^3

Water
 1.00 g/cm^3

Glycerine
 1.3 g/cm^3

Corn oil
 0.89 g/cm^3

In the large container below,

- Label the position of the liquids in the correct order, from denser to less dense. [3]
- Drag the cork, glass and ice to position them below in the correct order. [3]

