Results of Experiments 1 and 2

Print Double-Sided

Question 1.

Circle the correct answers to complete the following text about Experiments 1 and 2. For the last sentence, fill in the blank with the missing word.

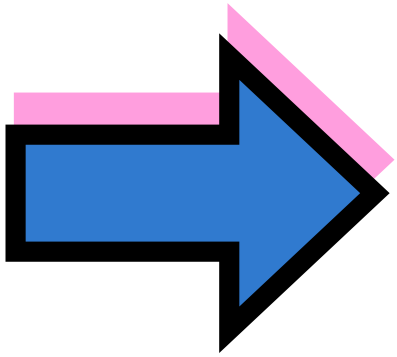
Experiment 1 showed that [*mass / volume*] determines the order in which liquids of [*equal mass / equal volume*] form layers.

Experiment 2 showed that [*mass / volume*] determines the order in which liquids of [*equal mass / equal volume*] form layers.

Considering the results of both experiments, it is true that [*only mass / only volume / both mass and volume*] will determine the order in which liquids form layers.

The property comprising both these properties of matter is called

_____ .



Density and Buoyancy

Density is a property of matter. It involves both the mass and volume of a substance. It is measured in grams per millilitre (g/mL).

Definition

Density is the amount of matter within a given space.

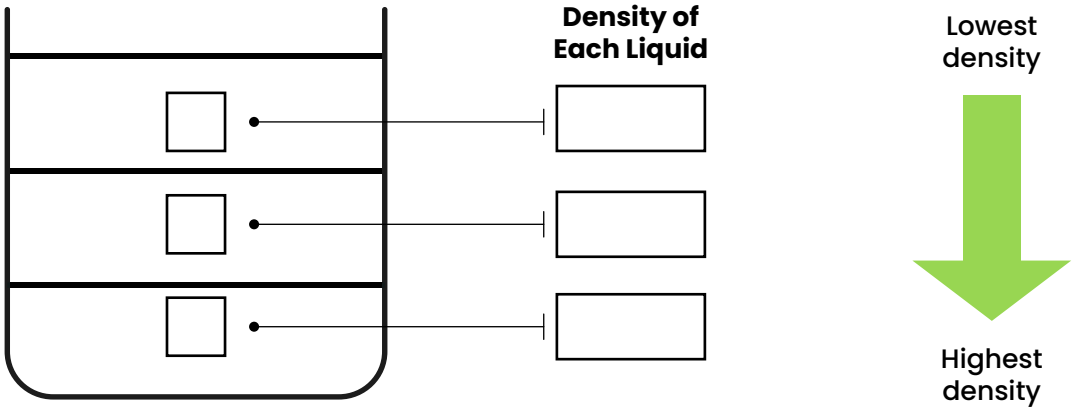
Since density indicates a substance's buoyancy, it explains how the three liquids in the experiment formed layers.

Definition

Buoyancy is the ability of a substance to float or sink.

Question 2.

Complete the following diagram by identifying each liquid and its density.



Question 3.

Liquid [*A* / *B* /*C*] has the **lowest** density.
It is therefore **on top** in the mixture.

The density of liquid [*A* / *B* /*C*] is **in between** the density of the other two liquids. It is therefore **in the middle** of the mixture.

Liquid [*A* / *B* /*C*] has the **highest** density.
It is therefore **at the bottom** of the mixture.