

L-5 Solids, liquids and gases

I Technical words:

1. Element:

Matter made up of only one kind of atom.

2. Compound:

Matter made up of a combination of two or more different kinds of atoms.

3. Miscible:

Liquids that mix completely with each other.

4. Immiscible:

Liquids which do not mix with each other.

II Short answers

1. What are molecules?

Ans All matter can be split into tiny units that are not visible to the naked eye. These tiny units are called molecules.

2. What is a physical change? Give two examples.

Ans A physical change is a temporary change which can be reversed.

Example: Melting of ice, tearing of paper.

3. Give three characteristic features of a chemical change.

Ans A chemical change

* is permanent

* cannot be reversed

* result in the formation of new substance

III Long Answers

1. Why do solids have a fixed shape?

Ans i) In solids, the molecules are very close to each other.

ii) They attract each other with great force.

iii) So, a solid is hard, rigid and has a definite shape and volume.

2. Write two differences between liquids and gases.

Liquids

i) Molecules are loosely packed and the force of attraction is not as strong as solids.

ii) Liquids has a definite volume but not definite shape. It takes the shape of its container

Gases

i) Molecules are very loosely packed and force of attraction is negligible

ii) Gas has no fixed volume or shape.

IV HOTS

1. Bubbles appear when you open a bottle of soda but not when you open a bottle of mineral water. Why?

Ans i) A bottle of soda has carbon dioxide dissolved in it under great pressure.

ii) That is why, they 'fizz' and bubbles appear when the bottle cap is opened.

iii) Carbon dioxide is not dissolved in a bottle of water. Hence there is no 'fizz' or bubbles appear when the bottle cap is opened.

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