

## EXERCISE-II

1. Name the smallest particle from which matter is made up of.

Ans → An atom is the smallest particle from which matter is made up of.

8. Give reasons:

a) Liquids and gases flow but solids do not.

Ans → The molecules of liquid and gases are far apart i.e. have more gaps, intermolecular attraction force is very less as compared to solids, hence liquids and gases can flow but solids do not as gaps in solid molecules is less and molecular force of attraction very strong.

b) A gas fills up the space available to it.

Ans → Intermolecular force of attraction is least and intermolecular spaces are very large, hence gases can fill up the space available to them.

c) The odour of scent spreads in a room.

Ans → Scent fumes being gases fill the spaces between air molecules and the molecules of air ~~molecules~~ fill the spaces between scent molecules due to diffusion, fumes spread into a room.

d) We can walk through air.

Ans → The molecules of air are far apart i.e. large gaps and we can walk through easily.

e) Liquids have a definite volume but no definite shape.

Ans → The molecules of liquid are loosely packed and intermolecular force of attraction is small but number of molecules in it remain the same. Hence liquids have definite volume but no definite shape.

f) When a teaspoon of sugar is added to half a glass of water and stirred, the water level in the glass remains unchanged.

Ans → When a teaspoon of sugar is added to half a glass of water and stirred, the water level in the glass remains unchanged because the sugar particles are adjusted between the water molecules as inter-molecular gaps are more in liquids.

g) When an empty gas jar is inverted over a gas jar containing a coloured gas, the gas also spreads into the empty jar.

Ans → This is because gases can diffuse or flow in all directions.

h) A red ink drop added to a small amount of water in a glass turns the water red in some time.

When

Ans → ~~Then~~ we put a drop of red ink in a glass of water, its particles diffuse with particles of water slowly but continuously and the water turns red.

9. Define:

a) Cohesive force

Ans → The attraction between like particles is called cohesive force.

b) Diffusion

Ans → The phenomenon of intermixing of particles of

one kind with another kind is called diffusion.

c) Brownian movement

Ans → The zig-zag motion of particles suspended in a medium is called Brownian movement.