EXERCISE – II

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

Ans- Atom is the Smallest particle from which matter is made up of.

8 Give reasons :

(a) Liquids and gases flow but solids do not. The molecules of liquids and gases are far apart. They have more gaps, inter-molecular attraction force is 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 is very strong.

(b) A gas fills up the space available to it. The 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.
Scent fumes (molecules) being gases fill the spaces between air molecules and the molecules of air fill the space between Scent molecules due to diffusion, fumes spread into a room.

(d) We can walk through air.
The molecules of air are far apart so we can walk through air easily.

(e) Liquids have a definite volume but no definite shape.
The molecules of liquid are loosely packed and intermolecular force of attraction is small but number of molecules in it remain the same. So the 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.
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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. This is because gases can diffuse in 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 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 : Diffusion

(a) ~~cohesive force~~ : The phenomenon of intermixing of particles of one kind with another kind is called diffusion.

(b) Cohesive force : The force of attraction between particles of the same substance is called Cohesive force.

(c) Brownian movement : The zig-zag motion of particles suspended in a medium is called Brownian movement.