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Date _____

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CHAPTER - 3 MATTER

EXERCISE - 11

- 1) The smallest particle from which matter is made up is atom.
- 2) Molecules are the smallest unit of matter. They exhibit all the properties of that kind of matter and is capable of independent existence.

8. a) The molecules of liquids 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 ~~for~~ gaps in solid molecules is less and molecular force of attraction very strong.

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

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

OR

Due to inter-mixing of scent molecules and air molecules, scent fumes spread into the room.

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

e) The molecules of liquid are loosely packed and intermolecular force of attraction is small but number of molecules in it remains the same ~~then~~ 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 ~~water~~ the glass remains unchanged because the sugar particles are adjusted between the water molecules as intermolecular gaps are more in liquids.

g) This is because gases can diffuse or flow in all directions.

h) 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.

g) a) Cohesive force: The force of attraction between particles of the same substance is called cohesive force.

b) Diffusion: The phenomenon of intermixing of particles of one kind with another kind is called diffusion.

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