

## Answers

- ① gases can be liquefied by applying pressure and lowering temperature.
- ② Sublimation is the transition of a substance directly from the solid to the gas state, without passing through the liquid state. EX - Dry ice
- ③ Due to the large intermolecular force, the intermolecular attraction are very less and thus liquid and gasses can flow. on the other hand, solids have very less intermolecular ~~to~~ spaces.
- ④ Air expands while heated and contracts when it is cooled. when air is blown into the bottle through the sides, by keeping the bottle inverted

the air pressure inside the bottle will increase and will push the egg and excess air out of the mouth of the bottle.

⑤ Due to inter-mixing of scent molecules and air molecules, scent fumes spread into the room.

⑥ We can walk through the air because the molecules in the air are loosely packed with one another. So when we move, the loosely packed molecules give way to the tightly-packed molecules.

⑦ The molecules of the liquid are loosely packed and the intermolecular force of molecules in it remains the same. Hence liquids have a definite volume but no definite shape.

⑧ 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 and more in liquids.

9 This is because gases can diffuse or flow in all direction.

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