

HW

Q1) How gases can be liquefied?

Ans) Gases can be liquefied by applying high pressure and reducing the temperature, gases can be liquefied. When pressure on a gas is increased its molecules closer together. It reduce, which removes enough energy to make it change from the gaseous to the liquid state.

Q2) 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. In solids molecules are less and molecular force of attraction is very strong.

Q3) When we invert the bottle, blow air into the bottle through the side opening it creates high pressure inside the bottles and the egg is kicked out of the bottle.

- iii) Scent fumes (molecules) being gases fill the spaces between air molecules of air fill the spaces between scent molecules due to diffusion, fumes spread into a room.
- iv) The molecules of air are far apart i.e. large gaps and we can walk through air easily.
- v) The molecules of liquid are loosely packed and intermolecular force of attraction is small but no. of molecules in it remain the same. Hence liquids have definite volume, but no definite shape.
- vi) 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 intermolecular gaps are more in liquid.
- vii) This is because, Gases can diffuse or flow in all directions.
- viii) When we put a drop of red ink in a glass of water, its particles diffuse with particles of water slowly but continuously and water turns red.

at a given pressure is called melting point.

5) What is sublimation? Give two examples.

ans) The change of solid on heating to vapours directly and vice-versa without passing through the liquid state is called sublimation. Ex - Camphore, Dry ice, Iodine.