

1) Explain how gases can be liquefied?

Gases can be liquefied by applying pressure and lowering temperature. When a high pressure is applied to gas, it gets compressed into a small volume, and when we lower its temperature, it gets liquefied.

2) What is sublimation?

A chemical process where a solid turns into ~~liquid~~ a gas without going through liquid stage.

3) Give reasons -

a. Liquid and gases flow but solids do not?

The molecules of gases and liquids are present far apart from each other. They have more gaps as the intermolecular ~~space~~ force are high giving them a definite shape and make it rigid.

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So, solid do not flow.

b) Why is an egg kicked out of a bottle when air is blown inside the bottle?

Air expands while heated and contracts ~~is~~ when it is cooled. When air is blown into the ~~bottle~~ 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.

c) The odour of scent spreads in through air.

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

d) We can walk through air.

We can walk through air because the molecules in the air are loosely packed with one another. So when we

move, the air molecules give way to  
● tightly packed molecules lie our body.

e) Liquids have definite volume ~~by~~  
but no definite shape.

The inter-molecular force of attraction between the molecules in a liquid is less when compared to the solids and liquid molecules are loosely packed. In a liquid, the particles are in close contact and so they have a 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 remain unchanged because the sugar particles are ~~edges~~ adjusted between the water molecules.

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.