HW

1) Explain how gases can be liquefied?

Ans Gases can be liquefied by applying pressure and reducing the temperature. ~~Whe~~

When pressure on a gas is increased, its molecules come closer together and its temperature is reduced which removes enough energy to make it change from the gaseous to liquid state.

2) What is sublimation? Give examples.

Ans The process in which a solid ~~directly~~ directly changes into a ~~gas is called~~ gaseous state of matter without undergoing an intermediate liquid is called sublimation.
Ex- Dry Ice, Camphor, Napthalene Balls etc.

3) Give Reasons

a) Liquids and gases flow but solids do not.

Ans ~~Im~~ The molecules of liquids and gases are far apart ie. have more gaps, intermolecular force is very less as compared to ~~solids~~ solids, hence liquids and gases can flow but solids do not as gaps in solid

molecules is less and the intermolecular force of attraction is very strong.

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

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

c) The odour of scent spreads in a room.

Ans Scent fumes being gases fill the spaces between air molecules and the molecules of air fill the spaces between scent molecules due diffusion, fumes spread into a room.

d) We can walk through air.

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

e) Liquids have definite volume but no definite shape.

Ans The molecules of a liquid are loosely packed and intermolecular spaces are large but number of molecules remain same. So, 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.

Ans 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 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.

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

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

Ans When we put a drop of red ink in a glass of water, its particles diffuse with particles of water slowly but continously and the water turns red.