

Swarnit Nath 6B

Chemistry homework - 30/9/2020

1. Explain how gases can be liquified.

Ans: When a gas is cooled, their particles movement become slow. The gaps decreases and the force of attraction increases.

2. What is sublimation? Give examples.

Ans: The conversion of a solid state to its vapour without undergoing any liquid state is called sublimation. Ex - Camphor, Iodine, dry ice

3. Give reasons

a) Liquids and gases flow but solids do not flow. Liquids have less intermolecular force

and gases also have very low intermolecular force of attraction and their molecules are very loosely packed. But solids have very strong intermolecular force of attraction and their molecules are very tightly packed.

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

Ans = When air is blown inside the bottle it creates very high pressure and thus the egg is kicked out of the bottle.

(c) The odour of scent spreads in a room.

Ans = The odour of scent spreads in a room because of diffusion the molecules of gas are spread in a large room.

(d) we can walk through air.

Ans = We can walk through air because there are some gaps between the air molecules.

(e) Liquids have definite volume but no definite shape

Ans = The liquids does not have strong intermolecular force of attraction and there are some gaps between them. Liquids have definite volume because the intermolecular force of attraction is not too much weak compared to gas.

(f) When a teaspoon of sugar is added to a half glass of water and stirred, the water level in the glass remains unchanged.

Sugar

Ans: When a teaspoon of sugar is added to half glass of water and stirred, the sugar particles are filled between the water particles. So, the water level remains unchanged.

(g) When an empty gas jar is added containing a coloured gas is inverted over a gas jar the gas also spreads into the empty jar.

Ans: As the gas doesn't have a definite volume and shape, Gas can fill up all the space that they get, and they have neither a fixed shape nor a fixed volume. They have no free surfaces.

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

Ans: If we put a drop of red ink to small amount of water, the particles of the red ink get diffuse with particles of water.