

Hw
13/7/21

Exercise-II

Q1) Name the smallest particle from which matter is made up of.

A1) Atom is the smallest particle from which matter is made up of.

Q2) Give reasons:

a) Liquids and gases flow but solids do not.

A1) Liquids and gases flow but solids do not because solid has the high intermolecular force of attraction and the molecules in solids are closely packed. ~~Liquids and gases have low intermolecular force of attraction in comparison to solids.~~

b) A gas fills up the space available to it.

A1) ~~Gas~~ The ~~inter-~~ molecules in the gas are very loose and can move far apart from each other, so gas fills up the space available to it.

c) The odour of scent spreads in a room.

A1) The molecules in gases move far apart, thus ~~because~~ the inter-molecular force of

attraction is very low. So, the odour of scent spreads in a room.

d) As when we walk, we do left right through our hands. There we ~~are~~ push the air and walk.

e) As ~~liquid~~ The molecules in a liquid are loosely packed in comparison of solids. So, the liquids have definite volume but no definite shape.

f) As ~~in between the molecules~~ When we take a teaspoon of sugar and add to half of a glass of water and stir, the water level in the glass remains unchanged. ~~because~~ As, we know that molecules in liquid is loosely packed in comparison to solids, the sugar ~~is~~ get mixed in between the molecules of water.

g) As When an empty gas jar is inverted over a gas jar containing a coloured gas, the gas also spreads into the empty jar because gas can diffuse and can flow in all directions.

Ans This happens because the molecule moves in a random motion.

① Define:

a) Cohesive force - The force of attraction between like particles or molecules.

b) Diffusion - The phenomenon of intermixing of particles of one kind with another kind is called diffusion.

~~Diffusion~~

2) Brownian movement - The zig-zag motion of particles suspended in a medium is called Brownian movement.