

HW  
14/07/23

## MATTER

Date 14/07/23  
Page 43

1) The smallest particle called atom.

8 a) Liquids and gases flow but solids do not.

Ans- Because solid have the highest intermolecular force of attraction but liquid and gas their is less intermolecular force of attraction than solid.

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

Ans- Because gas has the highest intermolecular space that is why it fills up the space available to it.

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

Ans- Because the particles of matter are not at rest, but they move randomly in all possible directions in a zig-zag path. Because gases diffuse very fast.

d) We can walk through air.

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

e) Liquids have a definite volume but no definite shape.

Ans - Because in liquids, the molecules are not very closely packed. They do not attract each other strongly. The intermolecular space are larger.

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 - Because particle of matter have space between them.

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

Ans- Because Gas have neither a fixed space shape nor a fixed volume they have no free surface.

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

Ans- Because its particle diffuse with ~~part~~ particle of water slowly but continuously.

q.a) Cohesive force - The force of attraction between like particle and molecule are called cohesive force.

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

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

Chemical change - Wax is the fuel that  
heat and light, carbon dioxide and water <sup>prod.</sup>

Physical change: wax melts when it gets hot  
and solidifies when it gets cold.