

Assignment = 1

1) The 5 elements of matter are :-

* Solid

* Plasma

* Liquid

* Bose - Einstein
Condensates

* Gas

2) Matter is anything that has mass and occupies

space and are sensible by our organs.

3) An atom is the smallest possible unit of matter

that exhibits all the properties of that matter.

* A molecule is the smallest unit of matter

which exhibits all the properties of that kind of matter.

4) The particles of matter are :-

* Particles of water have space between them - This

space is called interparticular or intermolecular space.

→ Particles of matter are always in random motion

* Particles of matter attract each other.

5) Solid :-

* A solid has a definite shape and a definite volume -"

* The particles are tightly packed in solids.

* The intermolecular force of attraction is very strong and intermolecular space is almost negligible.

* The particles are not free to move.

Liquid \equiv

- * A liquid has a definite volume but no definite shape.
- * The particles in a liquid are less tightly packed in comparison to solids. In liquid intermolecular gaps are large. Thus the particles
 - * The ~~particular~~ are free to move within the bulk.

Gas \equiv

- * A gas has neither a definite shape nor a definite volume.
- * The particles in a gas are far apart.
- * The intermolecular force of attraction between them are large.

* The particles are free to move in any direction.

6) The matter that changes from solid to liquid directly ^{gas} is called sublimation. Example \Rightarrow Camphor, naphthalene.

\Rightarrow The change of state of a matter from one form into another is called interconversion of states of matter.

The factors that caused the interconversion are:

* Change in temperature

+ by applying pressure

7) All substances that can flow are called fluids

Example \div Liquids, gas.

q) a) Condensation

b) Sublimation

c) ~~g~~ Fluids

v) When a teaspoon of sugar is added to 100 ml of water the volume doesn't increase as the water particles are less tightly packed thus the sugar particles mix with the sugar particles.

v) Mass is the matter contained in an object where as weight is force of attraction by the earth.

v) LPG means Liquefied Petroleum Gas. It is used as gas cylinders.