

KLING MEMORIAL SCHOOL OF UBS

CHEMISTRY

VIII-2020-2021 - WORKSHEET NO 6

PERIOD: 11-05-2020 to 15-05-2020

1. Explain the meaning of the term matter.

Ans: Anything that occupies space, has mass and can be perceived by our senses are termed as Matter.

2. Matter in any state is composed of small particle- molecules, atoms or ions. Differentiate between them.

Atoms	Molecules	Ions
An Atom is the smallest particle of an element which can take part in a reaction and is considered the basic unit of matter.	A molecule is the smallest particle of a substance that normally exist separately and retain the characteristics of the substance.	An ion is any atom or a group of atom which has a resultant charge due to loss or gain of electrons.
Examples : O, H, Cl are atoms	Example : O ₂ , H ₂ , Cl ₂ are molecules	Examples : O ²⁻ , H ⁺ , Cl ⁻ are ions.

3. Differentiate between the two characteristics of matter- Mass and weight

Mass	Weight
The quantity of matter represents its mass.	The gravitational pull on matter represents its weight.

4. State which of the three states of matter i.e. solid, liquid or gases have

- a) No definite volume
- b) A Definite shape
- c) High density
- d) No. of free surface
- e) Particles which diffuse very easily

5. State the main postulates of the kinetic theory with special reference to:

- a) Inter-particle space
- b) inter – particle attraction
- c) Energy possessed by particle of matter.

6. State in which of the following examples i.e. a piece of wood, water, a light gas is the

- a) Inter- particle space maximum
- b) Inter –particle attraction maximum
- c) Energy possessed by particles of matter is very large

7. In which of the three states of matter – solid, liquid and gases is the movement of atoms about their own position. Give a reason for the same

8. 'Inter particle attraction between atoms of gases is very weak. State five properties of gases which correlate as a consequence of weak inter particle attraction between particles of gases

9. What is inter conversion of matter? Give the meaning of the terms involved in inter conversion of matter

- a) Melting
- b) Vaporisation
- c) Liquifaction or condensation
- d) Solidification or freezing
- e) Sublimation

10. Draw a labelled schematic diagram representing the terms – a) to e) involved in the inter conversion of matter

11. With reference to inter conversion of matter on the basis of kinetic theory explain in brief the conversion of-

- a) A solid into a liquid
- b) A liquid into a vapour
- c) Vapour in to a liquid
- d) A liquid into a solid

With special reference to inter-particle space and inter-particle attraction at eh different stage of conversion

12. On the basis of kinetic theory explain why ammonium sublime and goes from solid state directly into vapour state.

13. State the law of conservation of mass. State the main points of landolt's experiment for experimental evidence of the law.