

GIRLS' HIGH SCHOOL & COLLEGE, PRAYAGRAJ

WORKSHEET-2

SESSION-2020-21

CLASS-7(A,B,C,D,E,F)

SUBJECT-CHEMISTRY

CHAPTER 1- Matter and Its Composition

TOPIC-Interconversion of states of matter and composition of matter

(Note-Parents are expected to ensure that the child takes reference from a book or internet and thereafter answer the following questions)

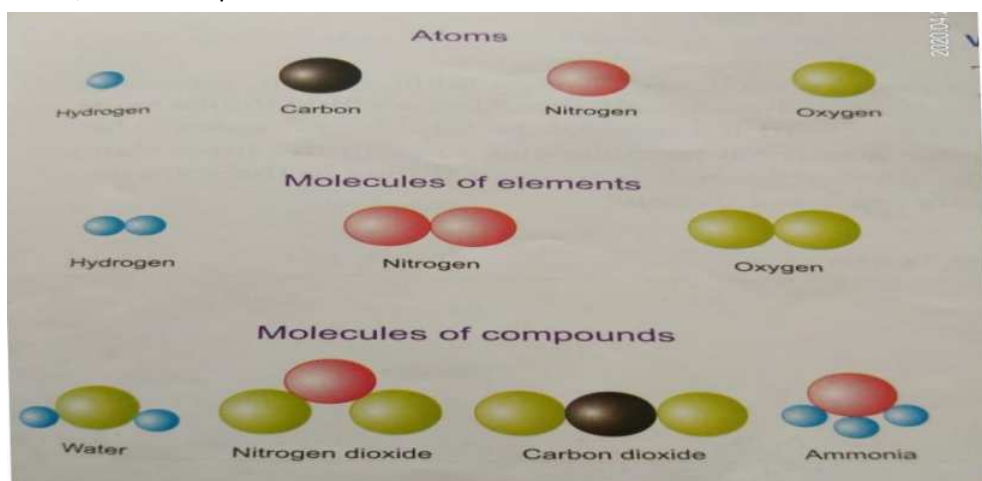
Like water, substances change their states on being heated or cooled. The change in state of matter from one to another is called interconversion of state.

On being heated to a particular temperature, a solid changes to liquid state. This is called melting of solid and the temperature at which solid melts is called its melting point. On being cooled, a liquid changes into the corresponding solid. This is called freezing of liquid and the temperature at which liquid freezes is called its freezing point. We can say that the freezing point of liquid is same as the melting point of corresponding solid.

Are vapours different from gases? Vapours and gases both are in the gaseous state. Substances that ordinarily exist in the gaseous state (e.g. hydrogen, oxygen, nitrogen) are called gases in this state. But, substances that ordinarily exist in solid or liquid state are called vapours in gaseous state. Thus in gaseous state sulphur (ordinarily a solid) is called sulphur vapour.

A substance that cannot be split into simpler substances by chemical means is called an element. Example: copper, nitrogen, sodium etc.

A substance that can be split into simpler substance by chemical means is called a compound. Example: water, sodium sulphate etc.



An atom is the smallest part of an element that takes part in a chemical reaction and generally does not exist independently whereas a molecule is the smallest part of an element or compound that can exist independently. Atoms combine in whole numbers to form a molecule

There are forces of attraction that hold together the atoms in a molecule and molecules in matter. The force that holds atoms together is called a chemical bond. A chemical bond is much stronger than an intermolecular force. So, the atoms are held together in a molecule far more strongly than the molecules in matter. It is much more difficult to separate the atoms of a molecule than to separate the molecules of matter.

Answer the following questions:

Q1. Fill in the blanks:

- a. The force that holds atoms together is called a.....
- b. Some solids vaporise without melting. This phenomenon is called.....
- c. Molecule of an element is made up of atoms of only kind

Q2. Define boiling and boiling point?

Q3. Differentiate between:

- a. Vapour and gas
- b. Atom and molecule
- c. Element and compound

Q4. Why is it difficult to separate the atoms of a molecule than to separate the molecules of matter?

End