

1. How is sodium Chloride different from its constituent elements, sodium and chlorine properties? Justify?

Ans- Sodium is a metal that is stored in Kerosene oil as it reacts very fast with air and water. Chlorine is a reactive greenish yellow gas which is poisonous. When these two elements combine chemically they form Common Salt, Sodium Chloride which is non-poisonous colourless solid substance that we use in our food to add taste and to obtain some nutrition.

2. Name the elements which form water. State three characteristics water to justify that it is a compound.

Ans- The elements which form water are i) Hydrogen and oxygen.

Justification- Water has entirely different properties (i.e. a liquid, extinguishes fire) from the elements it is made up of i.e.

Hydrogen a gas catches fire oxygen a gas supporter of combustion.

1. Energy is needed to form water on combining O₂ with H₂.

2. We cannot separate the constituents of water by simple physical means.

3. What do you mean by electrolysis?

Ans- Electrolysis is a chemical process in which electric current is passed through a compound in liquid state to separate its constituent element.

4. Mention 3 gaseous elements and write their molecular formulae.

Ans-	Three gaseous elements	Molecular Formula	Atoms in one molecule
	Hydrogen	H_2	2
	Oxygen	O_2	2
	Chlorine	Cl_2	2

5. Metals are ductile and malleable. What do you understand by this statement?

Ans- Metals are ductile i.e. they can be drawn or stretched into thin wire. They are malleable i.e. they can be beaten into thin sheets.