

H.W  
6/10/21

Ch-4

Q1 - How is sodium chloride different from its constituent elements, sodium and chlorine in its 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 nonpoisonous colourless solid substance that we use in our food to add taste and to obtain some nutrition.

Q2 - Name the elements which form water? State three characteristics of water to

Ans - justify that it is a compound.

Ans - The elements which form water are Hydrogen and Oxygen.

Three characteristics of water to justify that it is a compound:-

(i) Water is formed when the two elements of hydrogen and oxygen. Water has entirely different properties from the element it is made up of.

(ii) Energy is needed to form water on combining  $O_2$  and  $H_2$ .

(iii) We cannot separate the constituents of water by simple physical means.

Q3- 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 elements.

Q4- Mention 3 gaseous elements and write their molecular formulae.

Three gaseous elements	molecular formulae
Hydrogen	$H_2$
Oxygen	$O_2$
Chlorine	$Cl_2$

Q5- Metals are ductile and malleable. What do you understand by this statement?

Ans- It means that a metal which can be drawn into the thin sheets and malleable means pliable or the metal which can be pressed in any shape easily without breaking or cracking.