

H.W  
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① How is sodium chloride different from its constituent elements, sodium and chlorine in its properties?

Ans- The constituent elements of sodium chloride are -  
Sodium and Chlorine

Sodium is a metal, which is stored in kerosene oil, as it reacts very fast with water and air.

Chlorine is a greenish-yellow reactive gas which is very poisonous.

When these two elements combine chemically to form common salt, ~~it is~~ common salt doesn't react to water and air, it is colourless and not poisonous.

We use common salt in our food for taste and to get nutrition from it.

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

Ans- The constituent elements of water are -

→ Hydrogen

→ Oxygen.

We can clearly say that water is a ~~com~~ compound as it exhibits all the important characteristics of compound -

→ It consists of two elements, i.e. hydrogen and oxygen.

→ It is pure and homogeneous.

→ Its physical and chemical properties differ from those of its constituent elements, i.e. it helps to put off fire whereas hydrogen is a gas which burns itself and oxygen is a gas which helps in combustion.

→ It can't be separated by any physical means.

③ What do you mean by electrolysis?

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

④ Mention 3 gaseous elements and write their molecular formulae.

Ans- 3 gaseous elements and their molecular formulae -

→ Oxygen ( $O_2$ )

→ Nitrogen ( $N_2$ )

→ Carbon (C)

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

Ans- Metals are ductile and malleable. This sentence means that metals can be stretched and drawn into thin wires, i.e. they are ductile, and metals can be beaten into thin sheets, i.e. they are malleable.