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# Elements, Compounds, Symbols and Formulae

## Revision Questions:

1. 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. It reacts <sup>very fast</sup> with water and air. Chlorine is a greenish yellow gas that is very poisonous. But when <sup>these two elements</sup> <sup>combine</sup> chemically, it becomes common salt <sup>as a solid substance</sup> that is not harmful. And <sup>it is</sup> used in our food to add taste and is a part of our nutrition.

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

ans The elements which form water are Hydrogen ( $H_2$ ) and oxygen ( $O_2$ ) that becomes  $H_2O$  (water). The three characteristics to justify that it is a compound :-

i) Water has entirely different ~~prop~~ properties (i.e. is a liquid extinguishes fire) from the elements it is made up of hydrogen a gas catches fire, Oxygen a gas supports fire.

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

iii) We cannot change the constituent of water by physical means.

3 What do you mean by electrolysis?

ans: Electrolysis is a chemical process by which ~~water is formed~~ <sup>separated</sup> from ~~its~~ <sup>its</sup> elements of Hydrogen are separated from water molecules.

4 Mention 3 gaseous elements and write their molecular formulae?

ans: ~~The three gaseous~~ <sup>gaseous</sup>

The gaseous elements	Their molecular formula
Hydrogen	$H_2$
Oxygen	$O_2$
Chlorine	$Cl_2$

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

ans: Metals are ductile i.e. they can be drawn and ~~are~~ structured into thin wires.   
• They are malleable i.e. they can be beaten into thin sheets.