

HW  
05/10/21

## Ch-4 Elements, Compounds, Symbols and Formulae

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

Ans Sodium chloride is a compound where as sodium and chlorine are elements.  
Sodium chloride form  
~~It~~ can be broken down into simpler, whereas as sodium and chlorine can't be broken down into form.

Sodium Chloride has independent existence where as sodium and chlorine doesn't has independent existence.

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

Ans Water is formed when 2 <sup>hydrogen</sup> ~~hydrogen~~ atoms and 1 oxygen atom come together in the ratio of 2:1.

The following characteristics justify that water is a compound:-

- i) It is made up of two atoms.
- ii) It can be divided into simpler form.
- iii) It has independent existence.

3) What is electrolysis?

Ans The components of a compound can only be separated by a chemical process known as electrolysis.

4) Name 3 gaseous elements and write their molecular formulae.

Ans The 3 gaseous elements with their molecular formulae are:-

i) Zinc oxide  $\rightarrow$   $ZnO$

ii) Copper sulphide  $\rightarrow$   $CuS$

iii) Iron oxide  $\rightarrow$   $FeO$

5) What do you understand by the statement:-  
'metals are ductile and malleable'?

Ans Metals are ductiles because they can be drawn into thin wires. Metals are malleable because they can be beaten into thin sheets.