

6/7/21

> Home ASSIGNMENT-2

1. Give 5 major differences b/w elements & compounds?
2. Explain why we say H_2O is a compound but H_2 and O_2 are elements?

Answers

1. Elements

① Elements are made up of one kind of atoms.

Compound

① Compounds are made up of 2 or more kinds of atoms.

(i) Elements cannot be broken down into simpler substances by any physical or chemical method.

(ii) Elements have their own set of properties.

(iii) An element is represented using symbols.

(iv) Elements are classified into Metals, Non-Metals and Metalloid.

(v) Examples: Hydrogen (H)

(i) Compounds can be broken down into simpler substances by chemical methods.

(ii) Properties of a compound differ from those of their elements.

(iii) A compound is represented by a molecular formula.

(iv) Compounds are classified into molecular compounds, ionic compounds, intermetallic compounds and complexes.

(v) Examples: Water (H₂O)

2. As we know that elements are pure substances which are composed of only one type of atoms. Hence, H₂ and O₂ i.e. they have 2 atoms of Hydrogen and 2 atoms of oxygen.

respectively, are considered as elements. On the contrary, when 2 or more elements chemically combine with each other with a definite ratio by mass, they form compound. Therefore, H_2O i.e. it has 2 atoms of Hydrogen and 1 atom of Oxygen chemically bonded together. Thus, H_2O is a compound whereas H_2 and O_2 are elements.