

8.7.2021

HOMEWORK

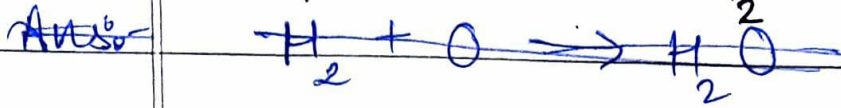
Q1. Give five ~~not~~ major differences between elements and compounds.

Ans:- Elements

Compounds

- | | |
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| <p>1. Elements are composed of only one type of atoms.
Ex:- O_2, N_2, O_8, Br, etc.</p> <p>2. Elements can't be broken into simpler forms.</p> <p>3. In elements, ^{constituting} atoms don't ^{retain} lose their properties during formation.</p> <p>4. Elements can be classified into metals, non-metals and metalloids.</p> <p>5. Formation of elements is a physical change.</p> | <p>1. Compounds are composed of two or more elements.
Ex:- H_2O, NaCl, $CaCO_3$</p> <p>2. Compounds can be separated by few chemical methods.</p> <p>3. In compounds, constituting elements lose their properties during formation.</p> <p>4. On the basis of properties, compounds can be classified into acids, bases and salts.</p> <p>5. Formation of compounds is a chemical change.</p> |
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Q.2. Explain, why we say H_2O is a compound but H_2 and O_2 are elements?



If we break down H_2O chemically, we get Hydrogen (H_2) & Oxygen (O). Hydrogen and oxygen combine in the ratio 1:8 for H_2O . This is the property of compounds.
∴ H_2O is a compound.

If H_2 and O are broken down, chemically, no simpler substance is obtained. Therefore H_2 & O are elements.