COMPOUNDS

A compound is a substance which contains two or more elements chemically combined together. A compound is formed as a result of a chemical change (or reaction). It is a new substance with entirely different properties from those of:

- the substance(s) from which it was formed, or
- its component elements.

The component elements of a given compound are always present in a fixed ratio by mass. For example, water is a compound formed as a result of a chemical reaction between the component elements, hydrogen and oxygen, in the ratio of 2:1 respectively.

Compounds are also represented in chemical formula based on the combinational ratio of its constituent elements. Water is written chemically as H_2O.

Some other compounds are

Limestone	Calcium, carbon, oxygen	$CaCO_3$
Sugar (sucrose)	Carbon, hydrogen, oxygen	$C_6H_{12}O_6$
Common salt	Sodium chloride	NaCl

Classically, we can classify compounds into acids, bases, water, and salts. While acids are substance which produce hydrogen ions as the only positive ions when dissolved in water, Bases are substances which neutralize acids into water and salt only. Salt is a compound formed when all or part of the ionisable hydrogen of an acid is replaced by metallic or ammonium ions.