

The formula for a compound indicates the elements that make up the compound and the number of atoms of each element present in the compound. These numbers of atoms are indicated by the use of small numbers called subscripts. Sometimes groups of atoms act as a single atom. This is called a polyatomic ion. These are often put in parentheses. If a number appears outside the parentheses, it indicates that all the elements inside the parentheses should be multiplied by that subscript.

In the following examples, list each element in the compound and the number of atoms of each element present. The first example has been done for you.

Name	Use	Formula	Atoms in Formula
Calcium Carbonate	Limestone	CaCO_3	Ca - 1 C - 1 O - 3
Aspirin	Pain reliever	$\text{C}_9\text{H}_8\text{O}_4$	
Magnesium hydroxide	Found in milk of magnesia	$\text{Mg}(\text{OH})_2$	
Paradichlorobenzene	Moth crystals	$\text{C}_6\text{H}_4\text{Cl}_2$	
Acetic Acid	Found in vinegar	$\text{C}_2\text{H}_4\text{O}_2$	
Trinitrotoluene (TNT)	Explosive	$\text{C}_7\text{H}_5(\text{NO}_2)_3$	
Calcium dihydrogen phosphate	Fertilizer	$\text{Ca}(\text{H}_2\text{PO}_4)_2$	