COUNTING ATOMS

The formula for a compound shows the elements that make up the compound and the number of atoms that are present in the compound. The number of atoms are indicated by the use of small numbers called subscripts.
If there is no number next to an atom the subscript is assumed to be one.
Sometimes a group of atoms will act like a single atom and the group will have a subscript. The group of atoms will be in parentheses.
For example, the formula $Fe(OH)_3$.
The three is a subscript and tells us that there are three (OH) groups of atoms in this compound.
So this formula tells us that there are:
Fe - one atom O - three atoms H - three atoms
There are three atoms of oxygen and hydrogen because of there are three (OH) groups in the formula.

Name	Use	Formula	Atoms in Formula
Calcium carbonate	Limestone	$CaCO_3$	Ca- O- C- Total-
Aspirin	Pain reliever	$C_9H_8O_4$	C- H- O- Total-
Magnesium hydroxide	Found in milk of magnesia	$Mg(OH)_2$	Mg- $(OH)_2$- Listen Total-
Paradicholrobenzene	Moth Balls	$C_6H_4Cl_2$	C- H- Cl- Total-
Trinitrotoluene (TNT)	Explosive	$C_7H_5(NO_2)_3$	C- $(NO_2)_3$- H- Listen Total-
Calcium dihydrogen phosphate	Fertilizer	$Ca(H_2PO_4)_2$	Ca- $(H_2PO_4)_2$- Listen Total-
Pyrite	Fool's Gold	FeS_2	Fe- S- Total-