













Counting Atoms in Compounds (Honors Chemistry)

Formula	Number of Atoms	Formula	Number of Atoms
$\text{Cu}_3(\text{PO}_4)_2$	Cu = 3 P = 1 x 2 = 2 O = 4 x 2 = 8	Be_3P_2	Be = 3 P = 2
CaCO_3	Ca = 1 C = 1 O = 3	$\text{Mg}(\text{OH})_2$	Mg = 1 O = 1 x 2 = 2 H = 1 x 2 = 2
$\text{C}_9\text{H}_8\text{O}_4$	C = 9 H = 8 O = 4	$\text{C}_6\text{H}_4\text{Cl}_2$	C = 6 H = 4 Cl = 2
$\text{C}_7\text{H}_5(\text{NO}_2)_3$	C = 7 H = 5 N = 1 x 3 = 3 O = 2 x 3 = 6	$\text{Ca}(\text{H}_2\text{PO}_4)_2$	Ca = 1 H = 2 x 2 = 4 P = 1 x 2 = 2 O = 4 x 2 = 8
Fe_2S_3	Fe = 2 S = 3	$\text{Cu}(\text{C}_2\text{H}_3\text{O}_2)_2$	Cu = 1 C = 2 x 2 = 4 H = 3 x 2 = 6 O = 2 x 2 = 4
$\text{C}_6\text{H}_7\text{O}_2(\text{OH})_2$	C = 6 H = 1 x 2 = 2 + 7 = 9 O = 1 x 2 = 2 + 2 = 4	$\text{Mg}(\text{NO}_3)_2$	Mg = 1 N = 1 x 2 = 2 O = 3 x 2 = 6
$\text{Al}_2(\text{SO}_4)_3$	Al = 2 S = 1 x 3 = 3 O = 4 x 3 = 12	Na_3PO_4	Na = 3 P = 1 O = 4
$(\text{NH}_4)_3\text{PO}_4$	N = 1 x 3 = 3 H = 4 x 3 = 12 P = 1 O = 4	NH_4NO_3	N = 1 + 1 = 2 H = 4 O = 3
Li_2SiO_3	Li = 2 Si = 1 O = 3	$\text{Fe}_2(\text{CrO}_4)_3$	Fe = 2 Cr = 1 x 3 = 3 O = 4 x 3 = 12

Drawing Dot Structures

(Honors Chemistry)

❖ For each element, write the orbital diagram and the Lewis Dot structure! (*Abbreviated method accepted*)

Orbital Diagram	Dot Structure
Hydrogen:	
Helium:	
Lithium:	
Carbon:	
Nitrogen:	
Oxygen:	
Fluorine:	
Neon:	
Sodium:	
Magnesium:	
Aluminum:	
Phosphorus:	
Sulfur:	
Chlorine:	
Argon:	
Potassium:	
Bromine:	