Name:

Blackline Master 2.7a How to Count Atoms

1. The symbol of an element represents one atom of that element.

e.g. Na =

 A subscript is a number written at the lower right corner behind the symbol of an element. If there is more than one atom of the element, then a subscript is used to indicate the number of atoms.

e.g. H₂ =

3. A subscript outside a bracket multiplies all the elements inside the brackets.

 $Mg_{3}(PO_{4})_{2} =$ e.g.

4. a) A coefficient is a number written in front of a chemical symbol and indicates the number of atoms of that element.

e.g. · 3 C =

OR

b) A coefficient is a number written in front of a chemical formula and indicates the number of molecules of that compound.

**NOTE: A coefficient multiplies the number of atoms of each element in the formula.

e.g. 2 H₂O =

 $3 CuSO_4 =$

 $4 Pb(NO_3)_2 =$

Blackline Master 2.7b Counting Atoms Worksheet

Use the Periodic Table to complete the following charts.

Na₂CO₃

C	1	<u>۲</u>		
Cag		\cup	A	0
	١.		~~	2

Type of Atom	# of Atoms
Na = Sodium	2
Total	

of Atoms

K₂CrO₄

Type of Atom	# of Atoms
C. S.	
Total	

NH4C2H3O2

# of Atoms		

Pb(NO3)2

Type of Atom	# of Atoms		
Total			

-	m /	21
Υ.	Hat	10

Type of Atom	# of Atoms
	r .
Total	

4 Al₂(CO₃)₃

Type of Atom	#	of Atoms
Total		

2 (NH₄)₂Cr₂O₇

Type of Atom	#	of Atoms
Total		