Blackline Master 6.5a

How To Count Atoms Review

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

e.g., Ca =

2. 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 in the molecule, then a subscript is used to indicate the number of atoms.

e.g., N₂ =

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

e.g., $Ba_3(PO_4)_2 =$

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., 3C =

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.

3FeSO₄ =

 $4Cu(NO_3)_2 =$

Blackline Master 6.5b

Counting Atoms Worksheet

Na ₂ CO ₃		$Ca_3(PO_4)_2$	
Type of Atom	# of Atoms	Type of Atom	# of Atoms
Total		Total	
K ₂	CrO ₄	38	aCl ₂
Type of Atom	# of Atoms	Type of Atom	# of Atoms
			`
		Total	
Total		4AI,	(CO ₃) ₃
$NH_4C_2H_3O_2$		Type of Atom	# of Atoms
Type of Atom	# of Atoms		
		Total	
Total		<u> </u>	
Pb(1	NO ₃) ₂	2(NH₄)	₂ Cr ₂ O ₇
Type of Atom	# of Atoms	Type of Atom	# of Atoms
Total		Total	