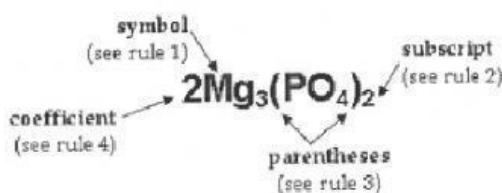


Using the tips and rules below (what we just went over in class. Complete the following problems.

Counting Atoms Rules:



1ST RULE OF SYMBOLS

Chemical symbols consist of either a capital letter or a capital letter and a lower case letter. This means that at least one atom of this element is present in the compound.

2ND RULE OF SUBSCRIPTS

The subscript goes with the element it directly follows and indicates how many atoms of that element are present.

3RD RULE OF PARENTHESES

The elements in the () go with the subscript that follows it. Numbers inside the () are multiplied by the numbers outside the ().

4TH RULE OF COEFFICIENTS

The coefficient on a chemical compound tells how many molecules of that compound are present. The coefficient applies to every element in the compound and is multiplied with any subscripts present on an element.

Easy (only subscripts)

	Molecule	Total atoms of each element	Total atoms
Ex	H ₂ O	H = 2 O = 1	3
1	CO ₂		
2	H ₂ O ₂		
3	CH ₄ O		
4	NaCl *	*Sodium Chloride (the symbol Cl is Chlorine)	
5	MgSO ₄		

Medium (Coefficients & Subscripts)

	Molecule	Total atoms of each element	Total atoms
Ex	2H ₂ O	H = 4 O = 2	6
6	2CO ₂		
7	2H ₂ O ₂		
8	3CH ₄ O		
9	2NaCl		
10	3MgSO ₄		

Difficult (Parenthesis and subscripts)

	Molecule	Total atoms of each element	Total atoms
ex	$Mg(SO_3)_2$	$Mg=1 \ S=2 \ O=6$	9
11	$Na(SO_4)_2$		
12	$Mg(PO_4)_2$		
13	$Ca(CO_3)_2$		
14	$N(CH_4)_2$		
15	$Cu(NO_3)_2$		