SCIENCE 1206
Worksheet: Polyatomic Ionic Compound Nomenclature

Use the periodic table and the poly atomic chart to find the two ions (positive ion and the negative ion) for each compound. Then write the formula

Remember, the overall charge of the compound is neutral (Zero Charge). Thus the overall positive charge must be equal to the overall negative charge

Note:

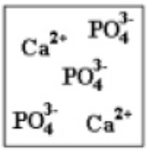
If more than one polyatomic ion needed, brackets must be placed around the polyatomic ion

Example: calcium phosphate

Ca^{2+} PO_4^{3-} **(The calcium ion has a 2+ charge and the phosphate ion has a 3- charge. To have the positive and the negative be equal, 3 calcium ions are needed and 2 phosphate ions are needed. That will give 6 - 6 = 0 which is a zero charge.)**

$Ca_3^{2+}(PO_4^{3-})_2$

Therefore, $Ca_3(PO_4)_2$ **is the answer.**



Count up the total charge.
2+, 2+, 2+, 3-, 3- = 6 - 6 =0
This adds up to zero!!

Brackets are placed around the phosphate ion since there are two of them

	Name	Positive Ion	Negative Ion	Formula
1)	Sodium Nitrate			
2)	Potassium Hydroxide			
3)	Calcium Carbonate			
4)	Magnesium Sulfate			
5)	Zinc Chlorate			
6)	Sodium Chromate			
7)	Strontium Nitrate			
8)	Lithium Carbonate			
9)	Potassium Phosphate			
10)	Aluminium Phosphate			
11)	Aluminium Hydroxide			
12)	Calcium Phosphate			
13)	Aluminium Sulfate			
14)	Magnesium phosphate			
15)	Aluminium Chromate			

use you polyatomic chart and the periodic table to name these compounds

	Formula	**Name of Ionic Compund**
1.	NaOH	
2.	$Ba(N0_2)_2$	
3.	$(NH_{4)2}CO_3$	
4.	$ZnSO_3$	
5.	Ag_2CrO_4	
6.	$Al(NO_3)_3$	
7.	$MgSO_4$	
8.	$Sr(CN)_2$	
9.	$KClO_2$	
10.	$Li_2S_2O_3$	
11.	$(NH_4)_3P$	
12.	$Ca(HCO_3)_2$	
13.	$KMnO_4$	
14.	$Zn\ (OH)_2$	
15.	$Mg_3(PO_4)_2$	
16.	$AgNO_3$	
17	$Al_2(SO_4)_3$	
18.	$BaCO_3$	
19.	$Ca(ClO_3)_2$	
20	Na_3PO_4	