

Worksheet: Write - A - Formulas

Name _____

<u>Name of Compound.</u>	<u>Positive Ion</u>	<u>Negative Ion</u>	<u>Formula</u>
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Cesium Bromide	Cs ⁺¹	Br ⁻¹	CsBr
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Calcium Iodide

Aluminum Chloride

Strontium Oxide

Radium Chloride

Aluminum Phosphide

Tin (II) Sulfide Sn⁺²Tin (IV) Sulfide Sn⁺⁴

Barium Chloride

Magnesium Sulfide

Beryllium Nitride

Lead (IV) Fluoride

Sodium Oxide

Magnesium Arsenide

Question 1: Develop a rule explaining how to write a formula for a compound.

Question 2: Write an algebraic expression that relates oxidation numbers and subscripts in a formula.

Using your paper ions for help, write the following formulas, which consist of positive ions and negative polyatomic ions. Note the use of parentheses when more than one polyatomic ion is required in the formula. Do not use parentheses around a single polyatomic ion.

<u>Name of Compound</u>	<u>Positive Ion</u>	<u>Negative Ion</u>	<u>Formula</u>
Aluminum Carbonate	Al^{+3}	CO_3^{2-}	$Al_2(CO_3)_3$
Lithium Carbonate			
Barium Sulfate			
Calcium Carbonate			
Aluminum Phosphate			
Sodium Nitrate			
Strontium Nitrate			
Calcium Phosphate			
Potassium Arsenate			

Conclusion: You have discovered that formulas are formed as a ratio of ions that is determined by the ratio of the charges.

Please erase all marks on the paper "ions."

Name _____ Date _____

Compound Names and Formulas

For the list on the left, name the compound. For the list on the right, give the chemical formula that corresponds to the name

Name	Formula
1) NaF	13) potassium fluoride
2) K_2CO_3	14) ammonium sulfate
3) $MgCl_2$	15) magnesium iodide
4) $Be(OH)_2$	16) copper (II) sulfite
5) SrS	17) aluminum phosphate
6) Cu_2S	18) lead (II) nitrite
7) ZnI_2	19) cobalt (II) selenide
8) $Ca_3(PO_4)_2$	20) silver cyanide
9) NH_4I	21) copper (II) bicarbonate
10) $Mn(NO_3)_3$	22) iron (II) oxide
11) $FePO_4$	23) lithium cyanide
12) $CoCO_3$	24) lead (IV) sulfite