

Name: \_\_\_\_\_

## Formulas

### I. Counting atoms and naming

1. Identify the ions in each formula unit.
2. Name the ionic compound.

Formula	Ions	Compound name
NaCl		
BaO		
CuCl <sub>2</sub>		
H <sub>2</sub> SO <sub>4</sub>		
MgSO <sub>4</sub>		
AgNO <sub>3</sub>		
Al(NO <sub>3</sub> ) <sub>3</sub>		
Al <sub>2</sub> O <sub>3</sub>		
KH <sub>2</sub> PO <sub>4</sub>		
Fe <sub>2</sub> (SO <sub>4</sub> ) <sub>3</sub>		

### II. Balancing charges

1. Label each ion with its charge.
2. Determine the smallest number of each ion to balance the charges and write the complete formula with subscripts.
3. Name the ionic compound.

Cation	Anion	Formula	Compound name
Ba	HCO <sub>3</sub>		
Al	NO <sub>3</sub>		
Ca	ClO		
K	Br		
Ca	PO <sub>4</sub>		

### III. Names to formulas

Find the charge of each ion, determine the number of each ion, and write the complete ionic formula.

Compound name	Formula	Compound name	Formula
Copper(I) sulfide		Calcium bicarbonate	
Aluminum hydroxide		Chromium(VI) oxide	