

Name \_\_\_\_\_

**Naming Ionic Compounds**

REMEMBER THE 2 SIMPLE RULES:

- Write cation first, then the anion.
- The correct formula contains the fewest positive and negative ions needed to make the total electrical charge zero.

Cation	Anion	Formula	Name
$\text{Na}^{+1}$	$\text{HCO}_3^{-1}$		Sodium bicarbonate
$\text{K}^{+1}$	$\text{Cl}^{-1}$		Potassium chloride
$\text{Zn}^{2+}$	$\text{OH}^{-1}$		Zinc hydroxide
$\text{Fe}^{3+}$	$\text{O}^{2-}$		Iron(III) oxide
$\text{Cu}^{+1}$	$\text{O}^{2-}$		Copper(I) oxide
$\text{Ba}^{2+}$	$\text{F}^{-1}$		Barium fluoride
$\text{Pb}^{2+}$	$\text{NO}_3^{-1}$		Lead nitrate
$\text{NH}_4^{+1}$	$\text{CO}_3^{2-}$		Ammonium carbonate
$\text{Al}^{3+}$	$\text{PO}_4^{3-}$		Aluminum(III) phosphate
$\text{Mg}^{2+}$	$\text{O}^{2-}$		Magnesium oxide
$\text{Na}^{+1}$	$\text{CO}_3^{2-}$		Sodium carbonate
$\text{Ag}^{+1}$	$\text{PO}_4^{3-}$		Silver phosphate
$\text{Cd}^{2+}$	$\text{SO}_4^{2-}$		Cadmium sulfate
$\text{Fe}^{2+}$	$\text{PO}_4^{3-}$		Iron(II) phosphate
$\text{Cu}^{2+}$	$\text{NO}_2^{-1}$		Copper(II) nitrite
$\text{Na}^{+1}$	$\text{SO}_3^{2-}$		Sodium sulfite
$\text{Al}^{3+}$	$\text{SO}_4^{2-}$		Aluminum sulfate
$\text{Fe}^{3+}$	$\text{Cl}^{-1}$		Iron(III) chloride
$\text{Ba}^{2+}$	$\text{I}^{-1}$		Barium iodide

**Polyatomic Ions and Writing Chemical Formulas (Criss-Cross Method)**

Write the formulas of the compounds produced from the listed ions.

	$\text{Cl}^{-1}$	$\text{CO}_3^{-2}$	$\text{OH}^{-1}$	$\text{SO}_4^{-2}$	$\text{PO}_4^{-3}$	$\text{NO}_3^{-1}$
$\text{Na}^{+1}$						
$\text{NH}_4^{+1}$						
$\text{K}^{+1}$						
$\text{Ca}^{+2}$						
$\text{Mg}^{+2}$						
$\text{Zn}^{+2}$						
$\text{Fe}^{+3}$						
$\text{Al}^{+3}$						
$\text{Co}^{+3}$						
$\text{Fe}^{+2}$						
$\text{H}^{+1}$						