

NAME → FORMULA

**-ide**

Contains  
prefixes (mono,  
di, tri...)?

YES

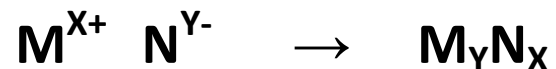
**Covalent**

NO

**Ionic**



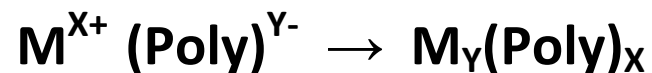
Use the prefixes in the name to determine the numbers which fill in the subscripts "X" and "Y".



Assemble the formula via "swap and drop". If a **roman numeral** is present, use this as the metal's charge (X+). Otherwise, use the periodic table to determine charges. Simplify when possible.

**-ate / -ite**

**Polyatomic**



Assemble the formula via "swap and drop". If a **roman numeral** is present, use this as the metal's charge (X+). Use the back of the p.table to find the poly's formula. Place the poly in ( ) and swap as usual. **Simplify** if possible. If "X" is "1" at this point, remove the parentheses.

**acid**

Starts with  
"hydro-"?

YES

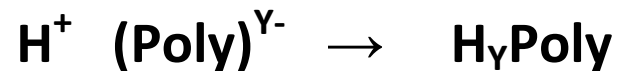
**Binary Acid**

NO

**Polyatomic Acid**

**H-Halogen**

This is a single H paired with a single halogen (G17).



Assemble the formula via "swap and drop".

To identify the original polyatomic:

-ic comes from -ate      chloric → chlorate

-ous comes from -ite      chlorous → chlorite

