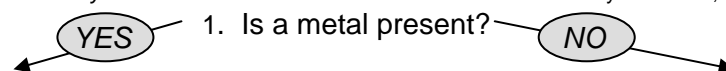


## NAME THAT COMPOUND

If **H** is written first, look to see determine if you need to reference **acid nomenclature** or if it is a hydrocarbon, look to **organic nomenclature**



Bonded Metals & Nonmetals  
**IONIC COMPOUNDS**

Bonded Nonmetals  
**MOLECULAR COMPOUNDS**

2. Does it have fixed charge or variable charged ions?  
3. Are there **more** than two elements? (*More? Look for the polyatomic ion or two ions*)

Use Greek **Prefixes** to identify how many atoms of each element are present in the compound.

Fixed Charge

Variable Charge

(mono, di, tri, tetra, etc.)

Name the metal then the nonmetal, changing the ending of the nonmetal to **-ide** (or **-ate** if a polyatomic ion is present)

Identify the fixed charge ion (anion) and then determine the variable charge on the cation (must be zero overall)

Name the element closest to a metal first using the proper **prefix**, then the second element with the proper **prefix**. Change the ending to **-ide**

*Note: Remember polyatomic ions keep their name*

Name the metal then the nonmetal, changing the ending of the nonmetal to **-ide** (or **-ate** if a polyatomic ion is present)

If the first element has only one atom it is unnecessary to start with the Greek prefix mono.

Indicate the charge on the variable ion using Roman Numerals, (I, II, III, IV... etc.) in parentheses

Examples:  
CCl<sub>4</sub>: carbon **tetrachloride**  
N<sub>2</sub>O<sub>5</sub>: **dinitrogen pentoxide**  
CO: carbon **monoxide**

Examples:  
NaCl: sodium **chloride**  
Ca(NO<sub>3</sub>)<sub>2</sub>: calcium **nitrate**

Examples:  
Fe<sub>2</sub>O<sub>3</sub>: iron(**III**) **oxide**  
NiCl<sub>2</sub>: nickel(**II**) **chloride**  
Cr<sub>3</sub>(PO<sub>4</sub>)<sub>2</sub>: chromium(**II**) **phosphate**

*NOTE: If there are **more** than two elements and no metal present you may have an **ionic compound** composed of two polyatomic ions or a complex ion.*