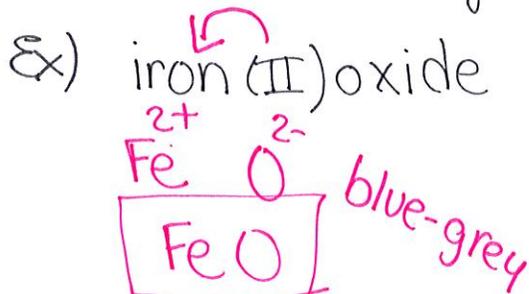


# Type II Binary Ionic Nomenclature

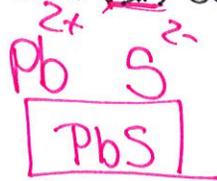
## Transition metal cation

### 1) Formulas

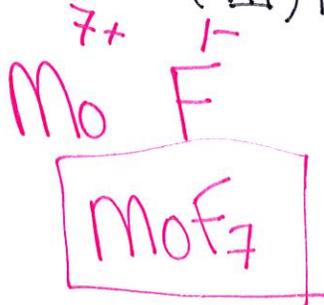
- write symbol & charge (Roman charge) of metal cation
- write symbol & charge of nonmetal anion
- Criss-cross charges.



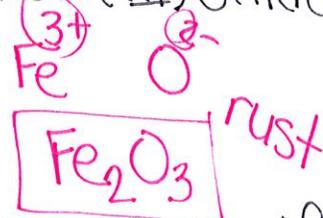
lead (II) sulfide



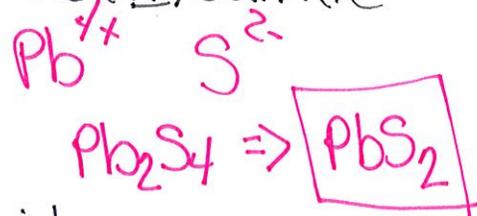
molybdenum (VII) fluoride



iron (III) oxide



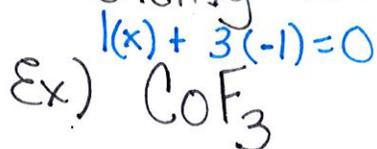
lead (IV) sulfide



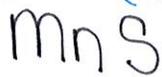
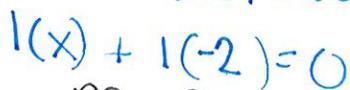
## 2) Names

- Write name of the metal cation, write the original charge of the metal as a Roman numeral.

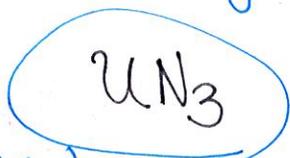
- Write name of nonmetal anion, change ending to -ide.



cobalt(III) fluoride

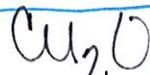
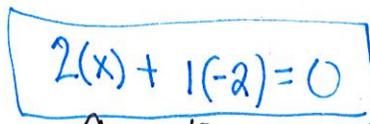


manganese(II)  
sulfide



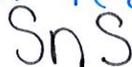
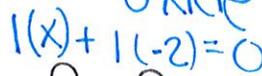
uranium(III)

nitride



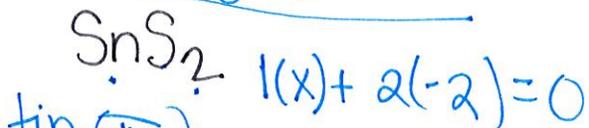
copper(I)

oxide



tin(II)

sulfide



tin(IV)

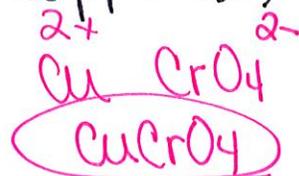
sulfide

# Type II Tertiary Ionic Nomenclature

## 1) Formulas

- Write symbol + charge of metal cation
- Write symbol + charge of nonmetal anion.
- Criss-cross charges. Use parentheses if needed.

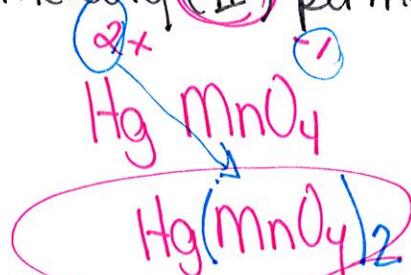
Ex) Copper (II) chromate



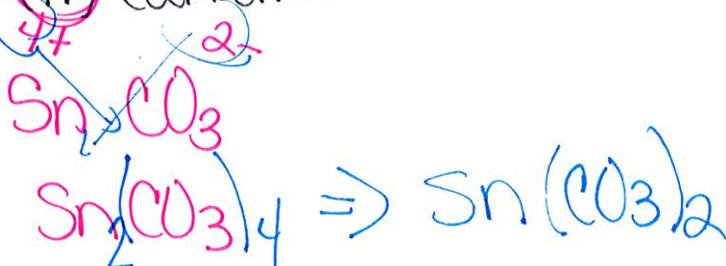
Nickel (I) sulfite



Mercury (II) permanganate



tin (IV) carbonate

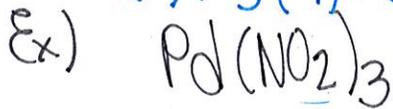


## 2) Names

Write name of metal cation. Write original charge as a Roman numeral.

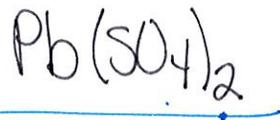
Write name of polyatomic anion.

$$1(x) + 3(-1) = 0$$



palladium (III)

nitrite



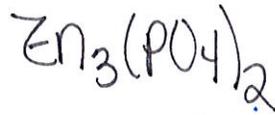
lead (IV) sulfate

$$1(x) + 2(-2) = 0$$

$$1x + \cancel{+4} = 0$$

$+4 \quad +4$

$$1x = +4$$



zinc (II) phosphate

$$3(x) + 2(-3) = 0$$

$$3x + \cancel{+6} = 0$$

$+6 \quad +6$

$$3x = 6$$

$$x = 2$$