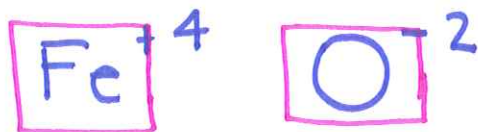
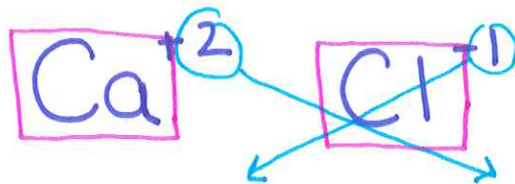
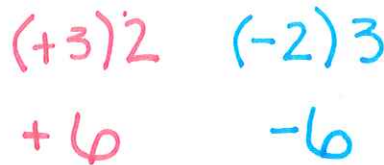
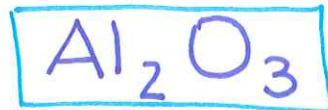
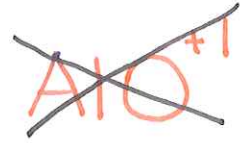
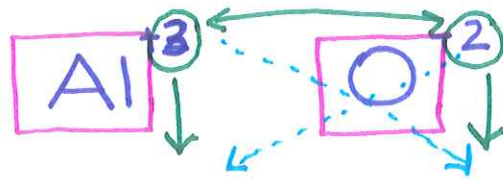


SWAP, DROP, & REDUCE

METHOD

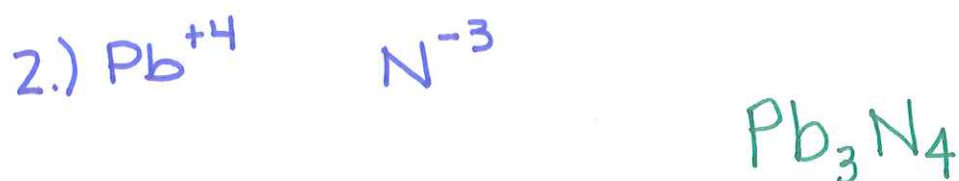


NEVER
CHANGE
WHAT'S
INSIDE

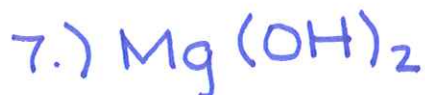


SWAP, DROP, & REDUCE

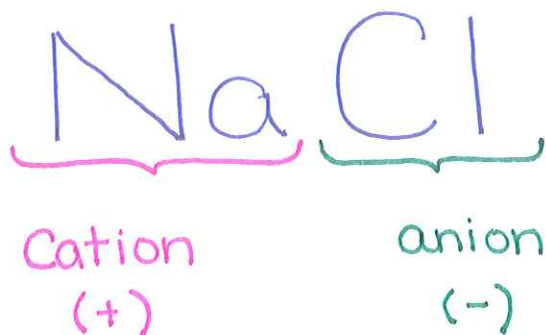
DETERMINE THE FOLLOWING FORMULAS:



Name the following:



ALWAYS REMEMBER:



- ⊗ In a chemical formula for an ionic compound
→ the CATION is ALWAYS first
‡ the ANION is ALWAYS last!

NaCl (✓ yes)

ClNa (x no)



$$\text{CrCl}_3 = \emptyset \text{ (charge)}$$

$$1\text{Cr} + 3\text{Cl} = \emptyset$$

$$x + 3(-1) = \emptyset$$

$$x - 3 = \emptyset$$

+3 +3

$$x = 3$$



Charge on Cr



Becomes the Roman
Numeral

⊗ NEVER GET
NEGATIVE #!



Chromium (III) chloride

CALCULATE CHARGE & NAME



$$2Mn + 3O = \emptyset$$

$$2(x) + 3(-2) = \emptyset$$

$$\begin{array}{r} 2x - 6 = \emptyset \\ + 6 \quad + 6 \end{array}$$

$$\frac{2x}{2} = \frac{6}{2}$$

$$x = 3$$

MANGANESE (III) OXIDE



$$2Ag + S = \emptyset$$

$$2x + (-2) = \emptyset$$

$$\begin{array}{r} 2x - 2 = \emptyset \\ + 2 \quad + 2 \end{array}$$

$$\frac{2x}{2} = \frac{2}{2}$$

$$x = 1$$

SILVER(I) SULFIDE



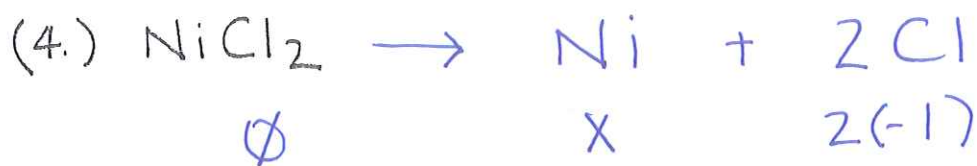
$$Zn + SO_4 = \emptyset$$

$$x + (-2) = \emptyset$$

$$\begin{array}{r} x - 2 = \emptyset \\ + 2 \quad + 2 \end{array}$$

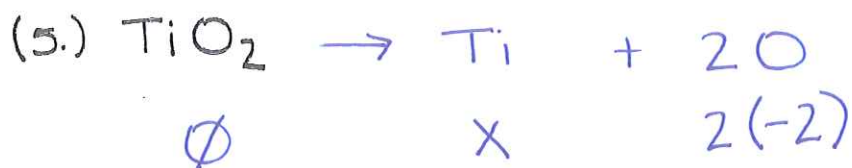
$$x = 2$$

Zinc (II) Sulfate



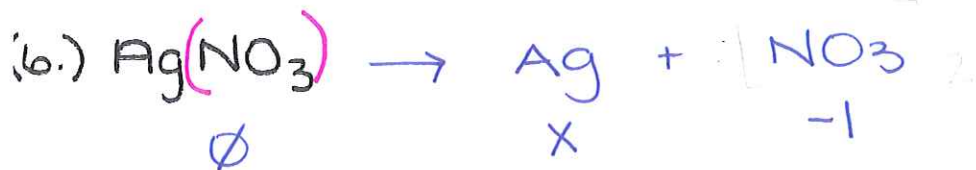
$$\begin{aligned} \emptyset &= x - 2 \\ +2 &\quad +2 \\ x &= 2 \end{aligned}$$

NICKEL (II) Chloride



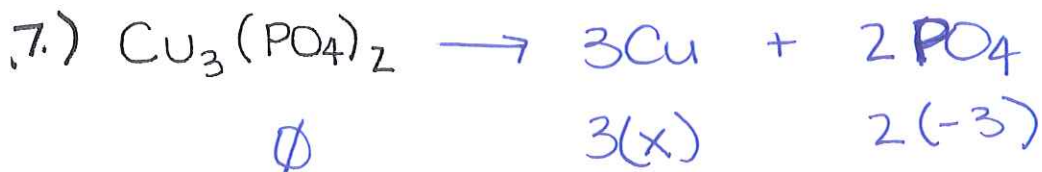
$$\begin{aligned} 0 &= x - 4 \\ +4 &\quad +4 \\ x &= 4 \end{aligned}$$

Titanium (IV) OXIDE



$$\begin{aligned} 0 &= x - 1 \\ +1 &\quad +1 \\ x &= 1 \end{aligned}$$

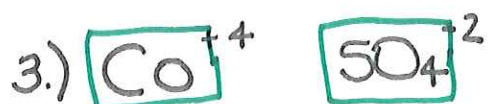
SILVER (I) NITRATE



$$\begin{aligned} \emptyset &= 3x - 6 \\ +6 &\quad +6 \\ \frac{6}{3} &= \frac{3x}{3} & x &= 2 \end{aligned}$$

COPPER (II) Phosphate

DETERMINE THE FORMULA & NAME FOR EACH OF THE FOLLOWING:



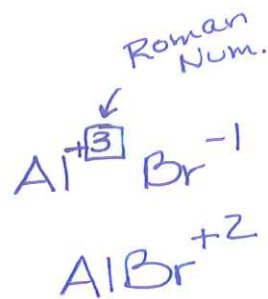
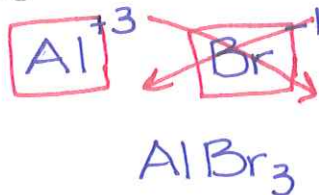
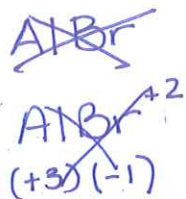
HOW TO GO FROM THE NAME TO THE FORMULA:

(1.) FIRST WRITE OUT IONS w/CHARGES.

(2.) SWAP / DROP / REDUCE

Ex:

(1.) Aluminum Bromide



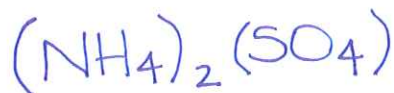
(2.) Beryllium Nitrate



(3.) Palladium (III) oxide



(4.) AMMONIUM SULFATE



(5.) Zinc (II) PHOSPHATE

