

Polyatomic Compounds

Tuesday, February 28, 2017
9:58 AM

- group of atoms with a common name and ion charge

ex. $\text{OH}^{-1} \rightarrow$ hydroxide

$\text{PO}_4^{-3} \rightarrow$ phosphate

$\text{PO}_3^{-3} \rightarrow$ phosphite

- easy to identify because the formula has 3 or more different elements

Naming:

1. Positive polyatomic ions are written 1st, like metals
2. Negative polyatomic ions are written 2nd and the name of the ion is **NOT** changed.

Ex.

#1. Calcium + nitrate \rightarrow calcium nitrate

#2. Hydrogen + dichromate \rightarrow hydrogen dichromate

#3. $\text{K}_2\text{SO}_4 \rightarrow$ potassium sulfate

#4. $\text{Cu}(\text{NO}_3)_2 \rightarrow$ copper (II) nitrate

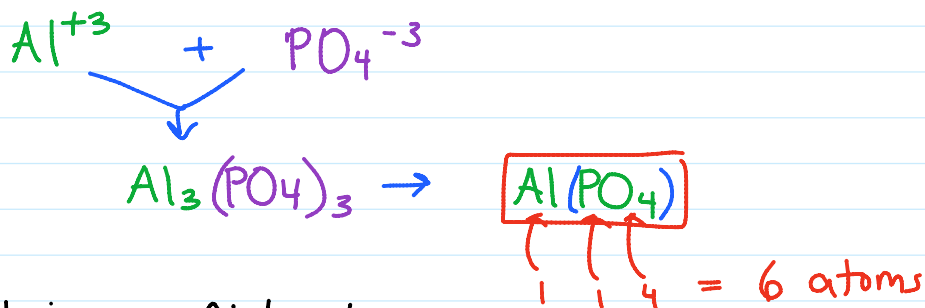
Formula:

1. Write metal + non-metal elements in their ion form
* polyatomic is always written in brackets
2. re-write elements without ion charges.
criss-cross the numbers (keep brackets)
- reduce if common factor

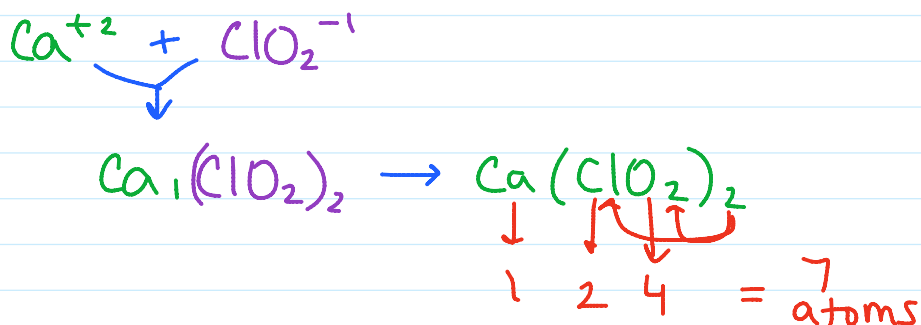
- Omit brackets if there is only 1 of a polyatomic group.

Ex. #2

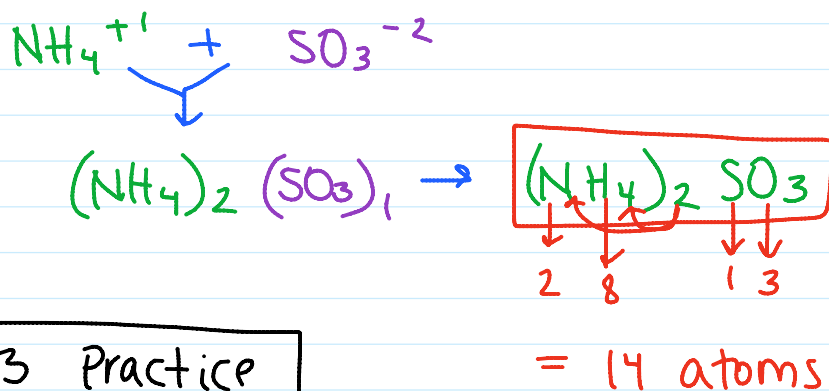
#1. Aluminum phosphate



#2 Calcium Chlorite



#3. Ammonium Sulfite



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