

## Nomenclature Review

Cation → Simple

$\text{Na}^{1+}$  → sodium

→ Polyvalent

$\text{Fe}^{2+}$  → iron (II)

vs.

$\text{Fe}^{3+}$  → iron (III)

see periodic table  
for oxidation  
states

always follow octet rule

Anion → Elemental

$\text{S}^{2-}$  → sulphide

→ Polyatomic

$\text{SO}_4^{2-}$  → sulphate

see table provided 😊

eg:  $\text{CO}_3^{2-}$  - carbonate  $\text{OH}^{1-}$  - hydroxide

$\text{NO}_3^{1-}$  - nitrate  $\text{ClO}_3^{1-}$  - chlorate

$\text{PO}_4^{3-}$  - phosphate  $\text{CN}^{1-}$  - cyanide

$\text{SO}_4^{2-}$  - sulphate  $\text{NH}_4^{1+}$  - ammonium

eg:  $\text{MgCl}_2$  - magnesium chloride

$\text{Mg}(\text{ClO}_3)_2$  - magnesium chlorate

$\text{Hg}_3(\text{PO}_4)_2$  - Mercury (II) phosphate

$\text{Hg}_3\text{PO}_4$  - Mercury (I) phosphate

$\text{SnO}$  - Tin (II) oxide

$\text{SnO}_2$  - Tin (IV) oxide

Ammonium phosphate -  $(\text{NH}_4)^{+}_3 \text{PO}_4^{3-}$

Gold (III) sulphide -  $\text{Au}_2^{3+} \text{S}_3^{2-}$