

# Common Polyatomic Ions

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## Cations

- $\text{H}_3\text{O}^+ \rightarrow$  Hydronium
- $\text{NH}_4^+ \rightarrow$  Ammonium
- $\text{PH}_4^+ \rightarrow$  Phosphonium

## Anions

### Group 3



### Group 4

#### Inorganic

- $\text{CN}^- \rightarrow$  Cyanide
- $\text{CO}_3^- \rightarrow$  Carbonate
- $\text{HCO}_3^- \rightarrow$  Bicarbonate
- $\text{SiO}_3^{2-} \rightarrow$  Silicate/Metasilicate
- $\text{SnO}_3^{2-} \rightarrow$  Stannate

#### Organic

- $\text{C}_2\text{O}_4^{2-} \rightarrow$  Oxalate
- $\text{C}_2\text{H}_3\text{O}_2^- \rightarrow$  Acetate
- $\text{C}_3\text{H}_5\text{O}_3^- \rightarrow$  Lactate/Propionate
- $\text{C}_6\text{H}_8\text{O}_7^{3-} \rightarrow$  Citrate
- $\text{C}_7\text{H}_5\text{O}_2^- \rightarrow$  Benzoate
- $\text{C}_7\text{H}_5\text{O}_3^- \rightarrow$  Salicylate

## Group 5

- $\text{N}_3^- \rightarrow$  Azide
- $\text{NO}_3^- \rightarrow$  Nitrate
- $\text{NO}_2^- \rightarrow$  Nitrite
- $\text{PO}_4^{3-} \rightarrow$  Phosphate
- $\text{HPO}_4^{2-} \rightarrow$  Hydrogen Phosphate
- $\text{H}_2\text{PO}_4^- \rightarrow$  Dihydrogen Phosphate
- $\text{AsO}_4^{3-} \rightarrow$  Arsenate
- $\text{AsO}_3^{3-} \rightarrow$  Arsenite

## Group 6

- $\text{O}_2^{2-} \rightarrow$  Peroxide
- $\text{OH}^- \rightarrow$  Hydroxide
- $\text{SO}_4^{2-} \rightarrow$  Sulfate/Sulphate
- $\text{SO}_3^{2-} \rightarrow$  Sulfite/Sulphite
- $\text{HSO}_4^- \rightarrow$  Bisulfate/Bisulfate
- $\text{HSO}_3^- \rightarrow$  Bisulfite/Bisulfite
- $\text{SCN}^- \rightarrow$  Thiocyanate
- $\text{S}_2\text{O}_3^{2-} \rightarrow$  Thiosulfate/Thiosulphate
- $\text{S}_2\text{O}_8^{2-} \rightarrow$  Peroxydisulfate/Peroxydisulphate
- $\text{SeO}_4^{2-} \rightarrow$  Selenate

## Group 7

- $\text{FO}_3^- \rightarrow$  Fluorate
- $\text{ClO}_4^- \rightarrow$  Perchlorate
- $\text{ClO}_3^- \rightarrow$  Chlorate
- $\text{ClO}_2^- \rightarrow$  Chlorite
- $\text{ClO}^- \rightarrow$  Hypochlorite
- $\text{BrO}_3^- \rightarrow$  Bromate
- $\text{BrO}_2^- \rightarrow$  Bromite
- $\text{IO}_3^- \rightarrow$  Iodate
- $\text{IO}_2^- \rightarrow$  Iodite
- $\text{AtO}_3^- \rightarrow$  Astatate

## Transitional Metal Anions

- $\text{CrO}_4^{2-} \rightarrow$  Chromate
- $\text{Cr}_2\text{O}_7^{2-} \rightarrow$  Dichromate
- $\text{MnO}_4^- \rightarrow$  Permanganate

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- $\text{MnO}_4^{2-} \rightarrow$  Maganate
- $\text{WO}_4^{2-} \rightarrow$  Tungstate
- $\text{MoO}_4^{2-} \rightarrow$  Molybdate
- $\text{Fe}(\text{CN})_6^{4-} \rightarrow$  Ferrocyanide
- $\text{VO}_3^- \rightarrow$  Vanadate