

Stuff to know when writing Balanced Chemical Equations (BCE)

1. Metals are placed first in a compound (ionic cpd). Always use charges when metals are involved.

2. Use subscripts.

- you can determine whether a precipitate might form using your solubility chart



- Remember all group 1A and NH_4^+ and NO_3^- cpds are soluble in water i.e. (aq)



- you should know the state of certain chemicals at room temperature and pressure conditions



2. **P S I H ave N o B r ight O r C l ever F riends**

3. Be able to determine the type of chemical reaction.

Refer to pages 25 - 27 in your textbook. Make notes for yourself if need be.

Types:

- Acid + Base = Salt + Water

- Synthesis = a cpd forming from elements or cpds

- Decomposition = a cpd breaking apart into elements and/or simpler cpds

- Precipitation

- **Single Displacement = 1 element and 1 cpd**

Remember Metals bump out Metals.

Remember Nonmetals bump out Nonmetals

- **Double Displacement = 2 cpds becoming 2 new cpds (usually in solution)**

- **Oxidation and Combustion = for now, requires oxygen (more info later this year)**

Slow oxidation = rusting

Fast oxidation = burning/combustion

- **Photosynthesis and Respiration**

- **Endothermic and Exothermic**

Endothermic = More energy is absorbed during the reaction than is released.

Exothermic = More energy is released than is absorbed during the reaction.

Fire Triangle