

GENERAL RULES FOR PREDICTING PRODUCTS FOR THE A.P. CHEMISTRY EXAM - REACTION SECTION

1. First go over the six basic types of reactions.
 - single replacement
 - double replacement
 - decomposition
 - composition or synthesis
 - combustion
 - dissociation
2. Always try to form water. This is especially true when you are working with acids/bases or organics.
3. The products of an organic combustion (reacting with oxygen) are carbon dioxide and water.
4. When the ammonium ion is a reactant you can be confident that ammonia is a product.
5. Carbonates react to form carbon dioxide and water.
6. Remember your fundamental redox. A species must be oxidized and one must be reduced.
7. Often in organics you have two species. Form water and then put what is left together.
8. Remember your solubility rules. Especially the notable exceptions like barium sulfate and silver chloride.
9. Thiocyanate and ammonia as reactants like to form complexes.
10. Boron is electron deficient so it usually forms a composition reaction.
11. Metallic oxides are basic, non-metallic oxides are acidic.
12. Peroxides form H_2 and O_2