

Unit: Pre-AP Chemical Equations
Read Textbook: Chapter 8

Objectives

1. List the diatomic elements (I_2 , Br_2 , Cl_2 , F_2 , O_2 , N_2 , H_2)
2. Write equations describing chemical reactions using appropriate symbols. (\rightarrow , (s), (l), (g), (aq), *Note: Δ placed over the yield sign is sometimes used to indicate the addition of heat, an element symbol over the yield sign indicates its presence as a catalyst, \downarrow is sometimes used for solids, and \uparrow is sometimes used for gases*)
3. Write balanced chemical equations when given the names of formulas of the reactants and products.
4. Identify the type of chemical reaction: (synthesis, decomposition, single replacement, double replacement, or combustion).
5. Predict products for synthesis, decomposition, and combustion reactions.
6. Use the activity series to predict products of single replacement reactions.
7. Use solubility rules to predict the precipitates formed in double replacement reactions.
8. Write and balance net ionic reactions.

Key Terms:

activity series of metals
balanced equation
catalyst
chemical equation
coefficients
combustion reaction
complete ionic equation
decomposition reaction
double replacement
reaction

formula or skeleton
equation
net ionic equation
precipitate
single replacement
reaction
solubility rules
spectator ions
synthesis (combination)
reaction

If you're not part of the solution, you're part of the
precipitate!

**A sign outside the chemistry hotel reads:
"Great Day Rates, Even Better NO_3^- 's"**