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

Objectives

1. List the diatomic elements (I₂, Br₂, Cl₂, F₂, O₂, N₂, H₂)
2. Write equations describing chemical reactions using appropriate symbols. (→, (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, ↓ is sometimes used for solids, and ↑ 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 NO₃⁻’s”