Review Topics: Chapter 5

CHEM 30A

Chapter 5:
- Moles
- Avogadro’s number
- Molar mass
- Conversions using molar mass and Avogadro’s number
- Molar ratios
- Formulas of chemical species and chemical equations
  - subscripts, coefficients, symbols, and terminology
- Types of chemical reactions
  - combination
  - decomposition
  - single displacement
    - activity series
    - diatomic elements (Br I N Cl H O F)
  - double displacement
    - precipitation reactions
    - solubility rules
  - combustion
  - acid-base neutralization
  - redox reactions
    - oxidation and reduction
    - oxidizing agents and reducing agents
    - redox ½ reactions
    - examples of redox reactions
- Balancing equations
- Predicting the products of reactions
  - combination (of a metal and a non-metal element)
  - single displacement
  - double displacement
  - combustion (of hydrocarbons in air)
  - acid-base neutralization
- Stoichiometry
  - limiting reactant
  - theoretical yield
  - stoichiometric amount
  - determining which reactant is the limiting reactant
  - calculating theoretical yields and stoichiometric amounts
  - percent yield
  - reasons for not obtaining 100% yield

Manage your time wisely as you study. Cover all the basic concepts before delving too deeply into any one topic. If you have a specific question, you can e-mail me at albi.romero@cabrillo.edu I will reply to e-mails several times the night before an exam. Continue to study other topics while you wait for a response.