Chemistry CP Final Part 2 Topics

Name _____ Date _____ Mod _____ Final Date _____

Unit Seven:

- **Chemical Equations & Reactions (Chapter 8)**
  - ☐ chemical reaction / indicators of reaction
  - ☐ Law of Conservation of Mass
  - ☐ balancing equations (coefficients / special symbols)
  - ☐ types of reactions
  - ☐ activity series

- **Stoichiometry (Chapter 9)**
  - ☐ mole ratio / molar mass / balanced equations for chemical reactions
  - ☐ solve for amount of R or P in moles or mass
  - ☐ limiting reactants
  - ☐ % yield / theoretical yield / actual yield

Unit Eight:

- **Physical Characteristics of Gases (Chapter 10)**
  - ☐ Kinetic-molecular theory / focus on energy of particles
  - ☐ ideal gas / real gas
  - ☐ 5 assumptions for ideal gases
  - ☐ physical properties of gases – expansion / fluidity / density / compressibility / diffusion / effusion
  - ☐ variables to measure - volume / pressure / temperature / amount in moles
  - ☐ pressure / units
  - ☐ STP
  - ☐ gas laws – Boyle's / Charles' / Gay-Lussac's / Combined / Dalton's partial pressures

- **Molecular Composition of Gases (Chapter 11)**
  - ☐ combining volumes of gases in reaction / Avogadro's law
  - ☐ molar volume
  - ☐ ideal gas law

Unit Nine:

- **Liquids & Solids (Chapter 12)**
  - ☐ Kinetic- Molecular Theory / focus on energy of particles
  - ☐ properties of liquids – density / incompressible / viscosity / surface tension / capillary action
  - ☐ properties of solids – density / incompressible / crystal structures
  - ☐ amorphous solids
  - ☐ changes in state – name of each / define / focus on gain or loss of energy
  - ☐ phase diagram
  - ☐ water chemistry (where / amount /need) / structure / polar / density / ice

- **Solutions (Chapter 13)**
  - ☐ mixtures / types
  - ☐ solutions / types
  - ☐ dissolving process / rates of dissolving **/** like dissolves like
  - ☐ solubility / saturated / unsaturated / supersaturated
  - ☐ concentration / molarity

- **Ions in Aqueous Solutions (Chapter 14)**
  - ☐ dissociation / ionization
  - ☐ ionic equations for each
  - ☐ electrolytes / nonelectrolytes
  - ☐ semipermeable membrane / osmosis

Unit Ten:

- **Carbon & Hydrocarbons (Chapter 20)**
  - ☐ carbon / allotropes
  - ☐ vocab – prefixes / suffixes for naming
  - ☐ structural formulas (must be able to draw compound & name)
  - ☐ isomers – structural / geometric / optical
  - ☐ aliphatic hydrocarbons – alkanes / alkenes /alkynes
  - ☐ aromatic hydrocarbons / benzene ring

- **Other Organic Compounds (Chapter 21)**
  - ☐ functional groups
  - ☐ alkyl halides / alcohols / carboxylic acids / amines (functional group for each / draw compound & name)

- **Biological Compounds**