Topics to Study for Honors Chemistry 2nd Semester Final Exam

* Semester 1 material (about 20-25%)
* Stoichiometry, limiting reactant
* Percent Yield, Percent Error
* Empirical/Molecular forumla
* Gas laws - Boyle's, Charles', Guy-Lussac
* PV=nRT
* Ideal Gas Law conditions
* Gas/Liquid properties
* Intramolecular forces
* Phase change and phase change diagrams
* Solutions - Molarity, molality, dilutions (M1V1=M2V2)
* Potential Energy diagrams
* Catalyst
* Specific Heat - q=c x m x (delta)T
* delta H - thermochemical equation
* delta G - free energy
* delta S - disorder
* Hess's Law
* Endothermic vs. exothermic
* Reaction order
* Rate law equation
* Collision theory, factors that affect reaction rates
* Keq
* Le Chatelier's principle
* Acids/Base = pH, pOH, [H+], [pOH]
* acid/base properties, strengths, names
* Titration
* Buffers
* Redox
* Nuclear Chemistry