



Test 4 Review

Dr. Turner

Chapter 16

- Entropy (S)
- Entropy Change (ΔS)
- Qualitatively Predicting Entropy
- 3 Laws of Thermodynamics
- Entropy of the Universe
- Gibbs Free Energy (G)
- Getting ΔG from ΔH , ΔS , and Temperature
- Using Hess's Law to calculate ΔS_{rxn} and ΔG_{rxn}
- Using standard enthalpies of formation to calculate ΔS_{rxn} and ΔG_{rxn}
- Predicting Spontaneity
- Relating ΔG° and K
- Relating ΔG to ΔG° using Reaction Quotients

Chapter 17

- Reduction, Oxidation, Reducing Agents, and Oxidizing Agents
- Identifying Components of Redox Reactions and Half-Reactions
- Balancing Redox Equations in Acidic and Basic Solutions
- Galvanic Cells and Cell Notation
- E_{cell}°
- Relating E_{cell}° , ΔG , and K
- E_{cell}° and E_{cell} and the Nernst Equation
- Batteries and Fuel Cells
- Metal Activities
- Corrosion
- Electrolysis