

Unit 5: Thermochemistry and Electrochemistry

AP Chemistry

Section 1- Thermochemistry

Vocabulary Terms to Know:

Thermodynamics, heat, system, surroundings, energy, potential, kinetic, exothermic, endothermic, state functions, enthalpy, Hess's Law, heat capacity, specific heat, calorimetry, calorimeter, entropy, Gibb's free energy, thermodynamically favored, thermodynamically unfavored

Textbook Practice Problems:

- Pgs. 202-208: 5.3, 5.11, 5.39, 5.41, 5.43, 5.45, 5.51, 5.53, 5.55, 5.57, 5.59, 5.61, 5.63, 5.65, 5.77
- Pgs. 845-851: 19.2, 19.4, 19.5, 19.7, 19.9, 19.11, 19.23, 19.27, 19.29, 19.35, 19.37, 19.39, 19.41, 19.43, 19.47, 19.53, 19.55, 19.57, 19.63, 19.65, 19.69, 19.77, 19.81

Section 2- Electrochemistry

Vocabulary Terms to Know:

Electrochemistry, oxidation number, oxidation, reduction, oxidizing agent, reducing agent, half-reaction, electrochemical cell, galvanic (voltaic) cell, electrolytic cell, anode, cathode, inert electrode, salt bridge, electron flow, voltmeter, cell potential, Volt, electrolysis, electroplating

Textbook Practice Problems:

- Pgs. 899-905: 20.3, 20.4, 20.5, 20.7, 20.8, 20.13, 20.15, 20.17, 20.21, 20.25, 20.29, 20.35, 20.37, 20.39, 20.41, 20.51, 20.53, 20.55, 20.57, 20.63, 20.65, 20.67, 20.85, 20.89, 20.91, 20.93