

Advanced Placement Chemistry: 1st Semester Schedule

Zumdahl, *Chemistry*, 7th edition

Problems are due on the day after the test for that unit. *Work must be original, complete, and done in detail for credit.* Homework assignments must be organized and legible in order to receive credit. All problem numbers must be clearly labeled and circled, boxed or highlighted so they are easy to find. DO NOT place problems on the right side of paper in empty space. I will not give credit for these problems.

Chapter 1 – Chemical Foundations

Read pages 1-30

Problems - 27, 29, 37, 49, 56, 83

Chapter 2 – Atoms, Molecules, and Ions

Read pages 39-69

Problems – 43, 49, 51, 59, 65

Chapter 3 – Stoichiometry

Read pages 77-115

Problems – 27, 41, 73, 95a, 103, 104, 109, 119

Intro test - _____

Chapter 4 – Types of Chemical Reactions and Solution Stoichiometry

Read pages 127-170

Problems – 15, 17, 21, 25, 46, 47, 48, 51, 73, 75, 103, 115

Lab: The Six Solution Problem Lab

Chapter Test – _____

Chapter 6 – Thermochemistry

Read pages 229-265

Problems – 12, 15, 23, 29, 35, 49, 55a, 59, 61, 67, 79, 87, 95, 98a, 103

Lab: Heat of Reaction and Hess's Law

Chapter Test – _____

Chapter 7 – Atomic Structure and Periodicity

Read pages 275-320 and section 8.4

Problems – 26, 59, 63, 65, 71, 73, 89, 95, 103, 115, 117, 118, 125, 126

Chapter 8 # 33, 37

Lab: Electronic Structure of the Hydrogen Atom

Chapter Test – _____

Chapter 8 – Bonding: General Concepts

Read 329-381 omit section 8.4

Problems – 213, 25, 27, 43, 47, 53, 67, 73, 81, 87, 93, 131

Project: Building VSEPR models

Chapter 9 – Covalent Bonding: Orbitals

Read pages 391-417

Problems – 27, 31, 33, 34, 37, 43, 47, 55, 59, 61, 85

Chapter Test – _____

Chapter 5 – Gases

Read pages 179-216

Problems – 31, 49, 59, 62, 67, 79, 85, 89, 91, 103, 108, 111, 127

Lab: Molar volume of a gas (and possibly molar mass of CO₂)

Chapter Test – _____

Chapter 10 – Liquids and Solids

Read pages 425-474 omit X-ray analysis and Bragg's equation

Problems – 19, 23, 29, 31, 33, 35, 37, 61, 75, 81, 91, 97, 121 (omit n-type and p-type)

Lab: Vapor Pressure

Chapter Test – _____

Chapter 11 – Properties of Solutions

Read pages 485-518

Problems – 17, 21, 27, 29, 37, 39, 49, 51, 59, 71, 73, 81, 83, 93, 101

Lab: Molar Mass by Freezing Point Depression

Chapter Test – _____

Chapter 18 – The Nucleus: A Chemist's View

Read pages 841-868

Problems – 11, 13, 15, 19, 21, 23

Chapter 22 – Organic Chemistry

Read pages 996-1015

Problems – 15, 19, 21, 25, 27, 29, 32, 47, 49, 51, 55, 56, 119

Chapter Test – _____

Finals – _____