

AP CHEMISTRY

UNIT III TOPICS

I. Internal Atomic Structure

- A. Discovery of Elementary Particles pages 39-54
- B. Nuclear Chemistry chapter 18 (841-848; 853-861)

p. 869 #11,13,15,16a,16b,19,20,21,23,25,35,37,39,41

II. External Atomic Structure

- A. Spectroscopy pages 275-285; appendix 3: A16-A19
- B. The Bohr Atom 285-290
- C. Wave Nature of Electrons 290-299
- D. Atomic Properties & Atomic Structure 299-314

p. 319 “Review Question 1”

#31,33,35,37,41,45,47,49,67,68,71,73,75,78,80,83,85,87,93,99,101,117,118,122,123,135

p. 990 #13-15; 19, 20, 25

III. Periodic Properties

- A. Periodic Law pages 299-309
- B. Periodic Properties of Elements 314-318; chapters 19-21

IV. Bonding and Molecular Structure

- A. How & Why Atoms Bond pages 329-333
- B. Ionic Bonding 338-346
- C. Covalent Bonding 346-358
- D. Bond Polarity 333-338
- E. Hybrid Orbitals & Molecular Structure 358-377,391-403
- F. Metallic Bonding 440-442
- G. Molecular Orbitals 403-415
- H. Organic Chemistry 997-1016

p. 382 #23,25,29,37,43,45,53,57,67,71,73,81,99

p. 418 #27