

Chapter 7

Development of the periodic table/ Effective nuclear charge/ periodic trends in sizes of atoms and ions/ atomic radii/ periodic trends in atomic radii/ periodic trends in ionic radii/ Ionization energy/ periodic trends in first ionization energies/ Irregularities in the ionization energies/ Electron configuration of ions/ Electron affinities/ explanations of the irregularities of electron affinities/ Metals nonmetals and metalloids/ Metal oxides/ Nonmetals and their oxides/ basic and acidic nature of the metal and nonmetal oxides/ Reaction of first and second group elements with water/

Chapter 8

Chemical Bonds, Lewis symbols, Octet rule/ Ionic Bonding/ Energies of ionic bond formation/ Elec. Configuration of representative elements/ Transition metal ions/Polyatomic ions/Covalent Bonding/ Lewis Structure/ Multiple bonds/ Bond Polarity and electronegativity/ Dipole moments/ Drawing Lewis structures/ Bond types and nomenclature/ Formal charges/ Resonance structures/ Exceptions to the octet rule/odd number of electrons/ Less than an octet/ more than an octet/ Strengths of a covalent bond/ Bond enthalpies and enthalpies of reactions/ Bond enthalpy and bond length.

If I have taught it in the class it can be on the test.