

9/19/2009

Home assignment and Recommended problems:
(To be completed by the end of next week, Sept 26).

Chapter 8. – Read the whole Ch.8 (pp.294-327)

Recommended problems: on pp. 324-327: 8.XX, where XX is:

1, 8,12,16,22,
34,37,38,39,42
51, 55, 65
67,69,74,80,82,
107,103 ,73

(Remember, the blue ones have solutions in the end of the book – work out your own solution first, THEN check the book solution. Be sure you understand it.)

Some of the important terms (define/explain in writing):

Electron configuration and orbital diagram, Pauli exclusion principle, building-up principle, noble gas core, valence electrons, Hund's rule, paramagnetic/diamagnetic, periodicity, effective nuclear charge, ionization energy, electron affinity; basic, acidic and amphoteric oxides

developing skills:

1. decide whether the given electron configuration is possible according to Pauli principle
2. writing out electron configurations for a given atom or given position in periodic table
3. drawing orbital diagram for a given electron configuration
4. applying periodic trends to atomic and ionic sizes, ionic energy and electron affinity