Review Sheet for Quiz 5: Atomic Structure

Quiz 5: Friday, September 19

All notes are found under the class blog on the website or from the book.

Atomic Theory: (pg 102-106)

- Compare and contrast the 5 different models of the atom.
- Know how Dalton, Thomson, Rutherford, and Bohr contributed to the atomic theory
- Describe what the current atom looks like

Atomic Structure: (pg 106-108)

- Identify the number of protons, neutrons, and electrons for an element
- Identify the atomic number (z) for an element
- Identify the mass number for an element
- Identify the symbol for an element
- Find the correct number of neutrons for an isotope
- Create a Bohr model given the atomic number, protons #, electron # or periodic table

Periodic Table: (pg 109-115; Specific families/groups 118 – 135)

- Describe how the periodic table is organized (Z, periods, groups, valence e-, atomic mass…)
- Explain the trends of the periodic table:
    - # of e-
    - Atomic radii
    - Ionization potential
    - Metallic characteristics
    - Reactive elements
    - Trends in specific families for alkali metals, halogens, noble gases, and transition metals.
- Be able to identify key information from the periodic table (# of p, n, e, Z, atomic mass, family, valence e-)
- Create a Lewis dot structure of an atom
- Explain the number of valence e- for a specific atom

Bonding: (pg 149-156) (Ionic: 158-163) (Covalent: 166-169)

- Compare and contrast ionic and covalent bonding
- Explain how valence e- relate to bonding
- Identify if an atom would be best suited to bond with another atom (Ex: Na & Cl or C & H)
- Important information to know but will **not** be tested on this quiz this week:
    - Predict and defend which elements are most likely to create ionic bonds
    - Predict and explain which elements are able and like to create covalent bonds
    - Draw the lewis dot structure for a compound
    - Write the molecular formula for a compound