Chemistry Study Guide for CH 4 and 5:

Atomic Structure and Energy Levels

1. History of the atom:
   1. Know the scientists that aided the discovery of the atom and their specific “claims to fame”
   2. Know the difference between the Bohr model and the QMM
2. Understand what the information on the “card” on the periodic table stands for ---atomic number, weighted mass, etc…
3. Be able to fill out a chart regarding sub-atomic particles and isotopes
4. Do you know how to write an isotope symbol correctly?
5. What is an isotope?
6. Can you determine the weighted atomic mass of an element using percent abundance and atomic mass of each isotope?
7. Can you write reactions for radioactive decay? (alpha and beta)
8. Can you give the ground state electron configuration for elements as well as the noble gas abbreviated version?
9. What is a valence electron?
10. Do you know how many valence electrons the representative elements have in their family?
11. Do you know the element names and symbols ?