**General Review – Bohr, Flame Test, Quantum Mech.**

First, here are the topics that will be on the quiz:

* The structure of the atom in Bohr’s model
* The concept of energy levels of electrons, and their representation by n.
* A description of how light is given off from an atom when energy is added to it.
* An understanding of how this is related to spectroscopy.
* How the flame test we did in lab is related to spectroscopy.
* The main differences between the Bohr and quantum models of the atom.
* A basic understanding of quantum numbers

The practice questions:

1. Sketch the Bohr model of the atom and label all of the parts.
2. How is the variable “n” related to the energy of electrons in the Bohr atom?
3. How is light given off by an atom when energy is added to it?
4. What is the difference between a continuous spectrum and a line spectrum?
5. Why do all elements give off different line spectra?
6. Could we see line spectra when we did the flame test lab? Explain why or why not.
7. List three ways in which the Bohr model of the atom differs from the quantum model.
8. What are the four quantum numbers and what do they represent?
9. Which model of the atom has each of the following characteristics?
   1. Electrons travel around the atom in circular paths called orbitals.
   2. Electrons are waves
   3. The energy of electrons is determined mathematically