Review Sheet for Atomic Structure Test

1. Know the 3 sub atomic particles found in an atom. Which are in the nucleus? Which have mass? What are their charges?

2. Recognize that the atomic number is the number of protons in an atom (and also the number of electrons if the atom is neutral with a net charge = 0)

3. Recognize the atomic mass is the mass of the protons + mass of the neutrons

4. Be able to use the numbers on the periodic table to calculate the number of neutrons in an atom

5. Be able to calculate the net charge of an atom when given the number or protons and the number of electrons

6. Be able to use the chemical symbols and numbers to answer questions about atoms. For example ${}_{7}N^{14}$ What does this tell you?

7. Be able to draw Bohr Model diagrams of atoms with the correct number of electrons in each energy level

8. Recognize the energy levels (quantum number n) – How many are there? Which energy level has the most energy?

9. If an "excited" atom falls from a higher energy level to a lower energy level, what occurs?

10. Be able to use the formula $2n^2$ to calculate the number of electrons that can fit in each energy level (n). For example – energy level 4 is n=4 so the formula is $2(4)^2 = 32$

11. Recognize that each energy level has sublevels and orbitals too. The orbitals are s,p,d,f.