Test Review Chapter 5 Chemistry

1. Where are the electrons located in the Bohr model of an atom?

2. Where are protons located in the above model?

3. If an electron moves further away from the nucleus what happens to its energy?

4. What is the shape of an S orbital? What is the shape of a P orbital?

5. How many energy sublevels are in the third principal energy level? (Hint Energy sublevels are s,p,d,f. not the number of orbitals.)

Notes: Principal energy Level = Principal quantum number = 1,2,3,4 etc.
Energy Sub levels = Atomic Orbits = s,p,d,f
Orbitals – There are 3 orbitals in the p energy sub level

6. What is the maximum number of d orbital in a principal energy level?

7. What is the maximum number of electrons in the third principal energy level?

8. What needs to happen to move an electron to a different energy level?

9. What do the letters (s,p,d,f) represent?

10. What types of atomic orbits are in the second principal energy level?

11. What is the number of electrons in the outermost energy level of a Aluminum atom? (Hint: The outermost energy level would be the highest number. 3 in this case

12. If 4 electrons are available to fill 3p orbitals, how will the electrons be distributed?

13. How many unpaired (or half-filled) orbitals ar in a Flourine atom

14. State the highest and lowest frequency electromagnetic waves.

15. How are the frequency and wavelength related?

16. How are the energy and the wavelength related?

17. How are the energy and frequency related?

18. What is a photon?

19. What is the difference between the Bohr and quantum mechanical model?

20. What makes an atom give off an emission of light?

21. Know which has a higher energy difference. Example: 1st and 2nd energy level or 5th and 6th energy level.