**8th Grade Science Homework Menu Week #4**

Directions: You are to perform the following tasks on separate sheets of paper and submit on Friday, October 10th. Each task is worth a specific amount of points. You NEED TO COMPLETE 20 POINTS worth of Homework to receive full credit.

1. Navigating the periodic table. What are the names of the following elements

**(5 Points)**

a. C \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ b. Cl \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

c. Au \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ d. Sr \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

What period are the following elements in?

a. He \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ b. Ge \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

c. Rb \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ d. I \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

What group are the following elements?

a. Sulfur \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ b. Ca \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

c. Iodine \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ d. Fe \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. Draw the **Bohr Models** for Carbon (C), Hydrogen (H) and Neon (Ne). ***Before you start,*** list the following for each element: atomic number, mass number, # protons, # neutrons, # electrons, group #, # valence electrons. **(5 Points)**

3. **Periodic Table Trends:** Answer the following questions **(5 Points)**

1. What is a group?
2. What is a period?
3. Give the group and periods of the following elements;

a. He \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ b. Ge \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

c. S \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ d. Ca \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. What group of elements are the most unreactive? Why?
2. What properties do the halogens have in common?

4. Give three examples of elements in each family **(5 points)**

**-Alkali Metals -Halogens -Transition Metals**

**-Noble Gases -Alkali Earth Metals**

5. **Ionic Compounds (5 Points):**

Part I: Write the formulas for the following **ionic** compounds:

a) sodium iodide b) calcium chloride c) potassium sulfide   
Part II: Name the following **ionic** compounds:

a) SrS b) MgCl2 c) ZnI2

**6. Covalent Compounds (5 points):**

Part I: Name the following **covalent** compounds:

a) SO3 b) ICl3 c) PBr5

Part II: Write the formulas for the following **covalent** compounds:

a) carbon tetraiodide b) phosphorus trichloride c) dinitrogen trioxide