**Basic Chemistry Activity**

1. Read the following “givens”.
2. All matter is composed of elements. All elements are composed of atoms.
3. An atom is the smallest piece of an element.
4. The periodic table shows all of the elements and how to create the atoms of each.
5. The Atomic Number = # of protons.
6. Protons are positive and electrons are negative so p = e.
7. The Atomic Mass is how “heavy” the atom is. The protons and neutrons add together to equal the atomic mass. Protons and neutrons are always found in the center of the atom called the nucleus.
8. Electrons are so light they do not add into the atomic mass.
9. Use the periodic table square that is on the board.
10. Use the givens and the periodic table to answer the following questions:
11. What is the atomic number of Boron (B)?
12. What is the atomic number of Boron (B)?
13. How many protons does Boron have? What charge are the protons?
14. How many electrons does Boron have? What charge are the protons?
15. How many neutrons does Boron have? What charge are the protons?
16. Have Mrs. Hawley check your table’s work before you move on.
17. Use the givens, periodic table and your models to answer the following questions:
18. Which atom is Carbon (C)? How do you know?
19. How many protons does atom D have? Which element is atom D?
20. Look at atom A. What element is atom A? How many electrons does it have?
21. What part of the atoms represents the nucleus?
22. Where are the electrons in the atom diagrams?
23. How many electrons can the first circle hold?
24. How many electrons can the second circle hold?
25. Have Mrs. Hawley check your table’s work before you move on.
26. Water
27. Water is a compound. This means that more than one atom are bonded together. What is the chemical formula for water? How many Hydrogens are in one molecule of water? How many Oxygens?
28. Use your atom models to create one molecule of the compound water.
29. Look at the size of the oxygen and hydrogens. Which atom is the largest?
30. Have Mrs. Hawley check your table’s work.