

Name: \_\_\_\_\_ Science-8 Teacher \_\_\_\_\_ Date: \_\_\_\_\_

## ***Chemistry Unit Review***

**Answer all questions on a separate sheet of paper!!**

1. The atomic number of Phosphorus is 15. What does this tell you about Phosphorus?
2. What is the number of neutrons in a neutral atom of Rubidium?
3. Describe the most reactive and least reactive families of the periodic table.
4. How many valence electrons exist in an electrically neutral atom of Aluminum? What does this tell you about the Boron Family?
5. Describe possible evidence that would suggest that a chemical change has occurred.
6. How many protons are in one molecule of  $\text{NH}_4$ ? Two molecules?
7. Describe the chemical formula:  $4\text{NaHCO}_3$
8. List and describe the 3 subatomic particles. Include location, mass and charge.
9. Name 3 elements that have the most similar chemical properties to Cesium.
10. Explain why chemical equation must be balanced.
11. In the chemical equation:  
$$\text{O}_2 + \text{C}_6\text{H}_{12}\text{O}_6 \rightarrow \text{CO}_2 + \text{H}_2\text{O} + \text{energy}$$
, what are the reactants?
12. How many atoms are in one molecule of  $\text{C}_6\text{H}_{12}\text{O}_6$ ?
13. Describe a chemical formula. What is it used for?
14. Define the following words: atom, element, compound, molecule.
15. Is the chemical equation  $6\text{O}_2 + \text{C}_6\text{H}_{12}\text{O}_6 \rightarrow 3\text{CO}_2 + 4\text{H}_2\text{O}$  balanced?
16. List the following information about the element Potassium: atomic number, symbol, atomic mass, number of protons, electrons, neutrons, and # of valence electrons.
17. Draw a Bohr model of the element Silicon.

***Make sure you can do the following for the test:***

- Draw a Bohr model of any element in the first 3 periods;
- Be able to determine an element from an atom model;
- Describe the implications of the Law of Conservation of Mass.