

Name \_\_\_\_\_ Date \_\_\_\_\_ Period \_\_\_\_\_

## Chemistry Foundations Ws #3: Elements, Atoms and Ions

1. What is an element?
2. How many elements are presently known?
3. How many of these occur naturally and how many are man-made?
4. Which elements are most abundant on the earth?
5. Which elements are most abundant in the human body?
6. What are the three fundamental particles that compose all atoms?
7. Indicate the electrical charge and relative mass of each of these particles.
8. Where is each type of particle found in the atom?
9. Which general area of the periodic table contain the metallic elements?
10. Which general area of the periodic table contain the nonmetallic elements?
11. What are ions?
12. How are ions formed from atoms?
13. To what do the terms cation and anion refer?
14. Write the name of each of the following elements.  
He            Se            P            B            Ba            Sr
15. What simple ion does each of the following elements most commonly form?  
Mg            Ba            O            F            Na            Cl
16. How do we know that substances such as sodium chloride consist of positively and negatively charged particles?

Use the following list for questions 17 & 18.

- |                            |   |
|----------------------------|---|
| a. Spaghetti and meatballs | e. Chocolate pudding with chocolate chips |
| b. Cesar salad             | f. The contents of the human body         |
| c. Jello                   | g. The contents of a glass of water       |
| d. Chocolate pudding       | h. Apple juice                            |
17. Which letters represent Heterogeneous mixtures?
  18. Which letters represent Homogeneous mixtures?