**COSTAATT**

**CHEM 111**

**Lesson 3 – Worksheet**

1. The periodic table is defined as an organization of the elements in order

of increasing \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and grouped according to similar \_\_\_\_\_\_\_\_\_\_\_

properties and similar \_\_\_\_\_\_\_\_\_\_\_\_ arrangements.

2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_are substances that cannot be broken down into

simplermaterial by any chemical means.

3. Dmitri Mendeleev was a Russian scientist who set up the

periodic table in the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ century.

4. Using Mendeleev’s system elements with similar\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ properties fell into families or groups.

5. Families or groups are designated by what? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

6. Elements on the periodic table are usually identified with three things.

What are they?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

7. Protons are found in the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of an atom.

8. Metals are found on the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ side of the table, while the

nonmetals are found on the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ side of the table.

9. An element that is an alkali metal is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

10. Helium (He) is a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

11. Name 2 elements in Period 2.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

12. Name two elements in group VII

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

13. (a) What is the collective name for all the elements in Group II?

(b) What is similar in the electronic configuration of the elements in Group II?

(c) Does the reactivity of the elements in Group II increase or decrease down the group?

14. (a) What is the collective name for all the elements in Group VII?

(b) What is similar in the electronic configuration of the elements in Group VII?

(c) How does the reactivity of the elements in Group VII change as one moves up the group?