



Chemistry

Name: _____

Section _____

ORGANIZING ELEMENTS WS

Date: _____

Organizing Elements

Part A: Completion. Use this exercise to check your understanding of the concepts and terms introduced in this unit. Each blank can be completed with a term, short phrase, or number.

Chemists used the 1 of elements to sort them into groups. The periodic table organizes the elements into vertical 2 and horizontal 3 in order of increasing 4. The table is constructed so that elements that have similar chemical properties are in the same 5. 6 have a high luster or sheen when cut. Most nonmetals are 7 at room temperature. Elements with properties that are similar to those of metals and nonmetals are called 8. Across the periodic table, the properties of elements become 9 metallic and 10 nonmetallic.

- 1 _____ 2 _____ 3 _____ 4 _____
5 _____ 6 _____ 7 _____ 8 _____
9 _____ 10 _____

Part B: True-False. Classify each statement as always true (AT), sometimes true (ST), or never true (NT).

- _____ 11. In his periodic table, Mendeleev arranged the elements in order of atomic number.
_____ 12. There are six periods in a periodic table.
_____ 13. Most of the elements on a periodic table are metals.
_____ 14. The elements within a period have similar properties.

Part C: Matching. Match each description in Column B to the correct term in Column A.

- | | |
|----------------------|---|
| _____ 15. metals | a. a vertical column of elements in the periodic table |
| _____ 16. periods | b. good conductors of heat and electric current |
| _____ 17. group | c. poor conductors of heat and electric current |
| _____ 18. nonmetals | d. have properties similar to both metals and nonmetals |
| _____ 19. metalloids | e. the horizontal rows of the periodic table |

Part D: Questions and Problems. Answer each question in the space provided.

20. List the elements of Group 15. Tell whether each is a metal, nonmetal, or metalloid.

21. List three properties of metals.

22. Name two elements with properties similar to those of chlorine.
