

**CHEMISTRY****PERIODIC TABLE WORKSHEET II**

**Periodic Table Questions** *[Place your answer in the blank to the left of the question number.]*

**A. True or False [T or F](1-21)**

- a) True
- b) False

- \_\_\_ 1. Properties of the elements are periodic functions of their atomic numbers.
- \_\_\_ 2. There are more nonmetallic elements than metallic elements.
- \_\_\_ 3. Metallic properties of the elements increase from left to right across a period.
- \_\_\_ 4. Metallic properties of the elements increase from top to bottom in a family of elements.
- \_\_\_ 5. Calcium is a member of the alkaline earth family.
- \_\_\_ 6. Iron belongs to the alkali metal family.
- \_\_\_ 7. Bromine belongs to the halogen family.
- \_\_\_ 8. Neon is a noble gas.
- \_\_\_ 9. Group A elements do not contain partially filled "d" or "f" orbitals.
- \_\_\_ 10. An atom of oxygen has a larger volume than an atom of lithium.
- \_\_\_ 11. An atom of sulfur is larger than an atom of oxygen.
- \_\_\_ 12. An atom of aluminum (Group 13) has five (5) electrons in its outer shell.
- \_\_\_ 13. Uranium is a transition element.
- \_\_\_ 14. The element with the ECN  $1s^2 2s^2 2p^5$  belongs to Group 15.
- \_\_\_ 15. The element with the ECN  $1s^2 2s^2 2p^6 3s^2 3p^1$  belongs to Group 13.
- \_\_\_ 16. A chemical family consists of one of the horizontal rows on the periodic table.
- \_\_\_ 17. Elements within a family will have similar electron structures and will show some similarities in their chemical properties.
- \_\_\_ 18. Group A elements are known as the representative elements.
- \_\_\_ 19. Going from left to right in any period, the representative elements show an increasing number of s and p electrons.
- \_\_\_ 20. The potassium ion is smaller than the potassium atom.
- \_\_\_ 21. The bromide ion is smaller than the bromine atom.