**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Date \_\_\_\_\_\_\_\_\_Period\_\_**

**Valence Electrons**

The valence electrons are the electrons in the “outermost” energy level (shell). They are always the outermost electrons. Using your periodic table, determine the valence electrons for the elements listed below.

Example: Carbon is located in-group 14 on the Periodic Table. Carbon has 4 valence electrons, carbon\_\_\_\_

1. fluorine \_\_\_\_\_ 11. lithium \_\_\_\_\_

2. phosphorus \_\_\_\_\_ 12. zinc \_\_\_\_\_

3. calcium \_\_\_\_\_ 13. carbon \_\_\_\_\_

4. nitrogen \_\_\_\_\_ 14. iodine \_\_\_\_\_

5. iron \_\_\_\_\_ 15. oxygen \_\_\_\_\_

6. argon \_\_\_\_\_ 16. barium \_\_\_\_\_

7. potassium \_\_\_\_\_ 17. aluminum \_\_\_\_\_

8. helium \_\_\_\_\_ 18. hydrogen \_\_\_\_\_

9. magnesium \_\_\_\_\_ 19. xenon \_\_\_\_\_

10. sulfur \_\_\_\_\_ 20. copper \_\_\_\_\_

1. What are valence electrons used for by an element?

1. Which elements listed above want to lose electrons?
2. Which elements above want to gain electrons?