

Name \_\_\_\_\_ Per \_\_\_\_\_

### Electron Configuration Practice Worksheet

*In the space below, write the unabbreviated electron configurations of the following elements:*

1. sodium \_\_\_\_\_
2. magnesium \_\_\_\_\_
3. iron \_\_\_\_\_
4. potassium \_\_\_\_\_
5. selenium \_\_\_\_\_

*In the space below, write the abbreviated electron configurations of the following elements:*

6. cobalt \_\_\_\_\_
7. silver \_\_\_\_\_
8. tellurium \_\_\_\_\_
9. radium \_\_\_\_\_
10. lawrencium \_\_\_\_\_

*Determine what elements are denoted by the following electron configurations:*

11.  $1s^2 2s^2 2p^6 3s^2 3p^4$  \_\_\_\_\_
12.  $1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^{10} 4p^6 5s^1$  \_\_\_\_\_
13.  $[\text{Kr}] 5s^2 4d^{10} 5p^3$  \_\_\_\_\_
14.  $[\text{Xe}] 6s^2 4f^{14} 5d^6$  \_\_\_\_\_
15.  $[\text{Rn}] 7s^2 5f^{11}$  \_\_\_\_\_

*Explain what is wrong with the following electron configurations:*

16.  $1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 4d^{10} 4p^6$
17.  $1s^2 2s^2 2p^6 3s^3 3d^5$