

**Electron Configurations Practice #1: Long-Hand Notation**

Name: \_\_\_\_\_

**Part I: In the spaces provided, write the long-hand electron configuration of each element:**

1) Sodium (Na) \_\_\_\_\_

2) Iron (Fe) \_\_\_\_\_

3) Bromine (Br) \_\_\_\_\_

4) Barium (Ba) \_\_\_\_\_

5) Cobalt (Co) \_\_\_\_\_

6) Phosphorus (P) \_\_\_\_\_

7) Aluminum (Al) \_\_\_\_\_

8) Zinc (Zn) \_\_\_\_\_

9) Yttrium (Y) \_\_\_\_\_

10) Tungsten (W) \_\_\_\_\_

**Part II: Determine the name of the element that is denoted by each electron configuration. Ensure the correct spelling AND element symbol of each element!**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)  $1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^{10} 4p^6 5s^2 4d^{10} 5p^3$  \_\_\_\_\_14)  $1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^{10} 4p^6 5s^2 4d^{10} 5p^6 6s^1$  \_\_\_\_\_15)  $1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^5$  \_\_\_\_\_16)  $1s^2 2s^2 2p^6 3s^2 3p^6$  \_\_\_\_\_17)  $1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^{10} 4p^6$  \_\_\_\_\_18)  $1s^2 2s^2 2p^6 3s^2 3p^6 4s^1$  \_\_\_\_\_19)  $1s^2 2s^2 2p^6 3s^2 3p^2$  \_\_\_\_\_20)  $1s^2 2s^2 2p^5$  \_\_\_\_\_