

*Write the unabbreviated electron configurations of the following elements:*

- 1) copper \_\_\_\_\_
- 2) iodine \_\_\_\_\_
- 3) potassium \_\_\_\_\_
- 4) bismuth \_\_\_\_\_
- 5) zirconium \_\_\_\_\_

*Write the abbreviated electron configurations of the following elements:*

- 6) iridium \_\_\_\_\_
- 7) chlorine \_\_\_\_\_
- 8) nobelium \_\_\_\_\_
- 9) caesium \_\_\_\_\_
- 10) magnesium \_\_\_\_\_

*The following electron configurations belong to which elements:*

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

*Determine if the following electron configurations are correct:*

- 16)  $1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 4d^{10} 4p^6 5s^1$  \_\_\_\_\_
- 17)  $1s^2 2s^2 2p^6 3s^3$  \_\_\_\_\_
- 18)  $[\text{Rn}] 7s^2 5f^9 6d^2$  \_\_\_\_\_
- 19)  $[\text{Ar}] 5s^2 4d^{10} 5p^5$  \_\_\_\_\_
- 20)  $[\text{Xe}] 6s^2 4f^{10}$  \_\_\_\_\_