

4-5 Practice

1. Write out the electron configurations for (a) Potassium and (b) Cobalt. How many unpaired electrons does each possess?
2. Which element has the following electron configuration: $1s^2 2s^2 2p^3$?
3. Write out the electron configurations for (a) silicon and (b) lithium. How many unpaired electrons does each possess?
4. Which element has the following electron configuration: $1s^2 2s^2 2p^6 3s^2 3p^3$?
5. Write out the electron configurations for (a) Iridium and (b) Selenium. How many unpaired electrons does each possess?
6. Which element has the following electron configuration: $1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^1$?
7. Write out the electron configurations for (a) bismuth and (b) vanadium. How many unpaired electrons does each possess?
8. Which element has the following electron configuration: $1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^{10} 4p^6 5s^2 4d^{10}$?
9. Write out the electron configurations for (a) Sulfur and (b) Mercury. How many unpaired electrons does each possess?
10. Which element has the following electron configuration: $[\text{Xe}] 6s^2 4f^{14} 5d^6$?