

**Electron configuration practice**

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

1. Write the orbital notation for the following:
  - a. carbon
  - b. neon
  - c. sulfur
2. Write the superscript notation for the following:
  - a. carbon
  - b. neon
  - c. sulfur
3. Write the noble gas notation for the following:
  - a. carbon
  - b. neon
  - c. sulfur
4. Write orbital notations for the following:
  - a. P
  - b. B
  - c. Na
5. Write superscript notation for atoms containing the following number of electrons:
  - a. 3
  - b. 6
  - c. 8
  - d. 13
6. Write noble gas notation for each of the following elements:
  - a. Cl
  - b. Ca
  - c. Se
  - d. Na
  - e. Sr
  - f. P
7. Write superscript notations for the following:
  - a. Na
  - b. Sr
  - c. P
8. Identify the following elements based on their electron configurations:
  - a.  $1s^2 2s^2 2p^6 3s^2 3p^3$
  - b.  $[Ar]4s^1$
  - c.  $1s^2 2s^2 2p^1$
  - d.  $1s^2 2s^2 2p^5$
  - e.  $[Ne]3s^2$
  - f.  $[Ne]3s^2 3p^5$
  - g.  $[Ar]3d^6 4s^2$