

Name: _____

Block: _____

Date: _____

Chemistry 11

Electron Configuration Worksheet

Assignment

Complete the following questions on a separate piece of paper.

- 1) Draw the energy level diagrams for the following atoms.

 - a. C
 - b. Chlorine
 - c. Zn
 - d. B
 - e. Ca

2) Write the electron configurations for the following atoms.

 - a. P
 - b. Co
 - c. Fe
 - d. Osmium
 - e. Nd
 - f. Sr
 - g. Beryllium
 - h. Si

3) Draw the energy level diagrams for the following ions.

 - a. Li^+
 - b. C^{4-}
 - c. Al^{3+}
 - d. H^+
 - e. Cl^-

4) Write the electron configurations for the following ions.

 - a. N^{3-}
 - b. Na^+
 - c. Fluoride ion
 - d. Mg^{2+}
 - e. P^{3-}
 - f. Iodide ion
 - g. Tin (2^+)
 - h. Sulphide ion

5) Using core notation, write the electron configurations for the following atoms and ions.

 - a. K
 - b. O^{2-}
 - c. Cr
 - d. V
 - e. Calcium
 - f. Tellurium
 - g. Xe
 - h. Hg
 - i. Cl^-
 - j. Zn^{2+}

6) How many valence electrons are in each of the atoms/ions from #5?