

NAME _____

Chemistry I Worksheet
Electron Configuration
(15 Problems)

1. Write the complete electron configuration for the following elements:
 - a. Bromine
 - b. Strontium
 - c. Antimony
 - d. Rhenium
 - e. Terbium
 - f. Titanium
2. How many electrons are in orbitals related to the third energy level of the sulfur atom?
3. How many electrons occupy p orbitals in the chlorine atom?
4. What element has the following ground state electron configuration?
 $1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^{10} 4p^6 5s^2 4d^{10} 5p^1$
5. What element has the following ground state electron configuration?
 $1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^{10} 4p^6 5s^2 4d^{10} 5p^6 6s^2$
6. State the Aufbau Principle in your own words.
7. Apply the Pauli Exclusion Principle, Aufbau Principle, and Hund's Rule draw the arrow diagrams for the following elements:
 - a. Silicon
 - b. Fluorine
 - c. Calcium
 - d. Krypton