Electron Configurations

The Diagonal Rule:



electrons 2 6 10 14 18 22

- 1. Write electron configurations for the following elements:
 - a. Sodium b. arsenic
 - c. iron d. gold
- 2. Write the electron notation for iodine. What two sublevels are in the outer shell?

3. How many electrons are in the highest energy level of the following?	
a. antimony	b. tellurium
c. strontium	d. calcium
4. Draw dot diagrams for:	
a. oxygen	b. potassium
c. rubidium	e. indium
5. How many d electrons are in :	
a. vanadium	b. scandium
c. aluminum	d. arsenic
6. How many p electrons are in:	
a. aluminum	b. chlorine
c. neon	d. arsenic

Sublevel Sheet Two

- 1. Write electron configurations for the following elements:
 - a. Potassium b. Lithium
 - c. Cesium d. Francium
- 2. What do you notice about the outer shells for each of the above?
- 3. How many electrons are in the highest energy level of the following?
 - a. antimony b. arsenic
 - c. nitrogen d. bismuth

4. Draw dot diagrams for all of the elements in number 3. What do you notice about these diagrams?

5. What conclusion could you make about the number of electrons in the outer shell of all of the elements in the same column on the periodic table?