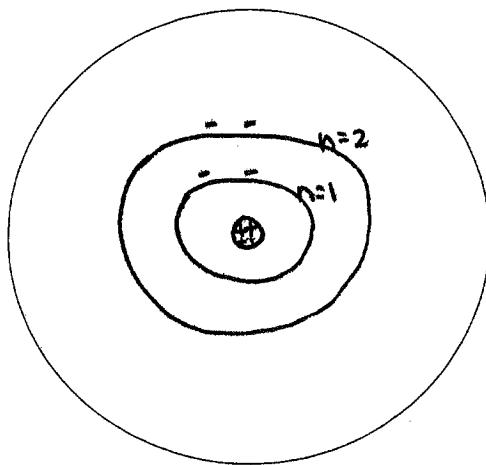


Worksheet: Electrons

**Key**

1. Draw new model



2. List the following in order of increasing energy: \_\_\_\_\_

a, d, b, c

- a. s sublevel
- b. d sublevel
- c. f sublevel
- d. p sublevel

3. Write the symbol for the element with each of the following electron configurations:

a.  $1s^2 2s^2 2p^4$

O

b.  $1s^2 2s^2 2p^6 3s^1$

Na

c.  $1s^2 2s^2 2p^6 3s^2 3p^5$

Cl

d.  $1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^2$

Ti

4. Write the number of valence electrons for each of the following:

a. Group 1 elements

1

b. Elements with 5 electrons in the p shell

7

c. Group 15 elements

5

d. Elements with a completed s shell

2