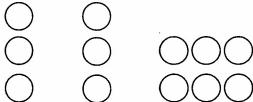
Sublevel	Number of orbitals	Maximum number of electrons
S		
p		
d		
f		

9. Complete the electron configurations for the following atoms by drawing in the arrows indicating the electrons with appropriate spins for each orbital.

	1s
a. beryllium (atomic number 4)	\bigcirc
b. carbon (atomic number 6)	\bigcirc

c. fluorine (atomic number 9)



Write T for true or F for false. If a statement is false, replace the underlined word with one that will make the statement true, and write your correction on the blank provided.

- 10. If two electrons occupy the same orbital, they must have opposite spins.
 - 11. The principal quantum number describes the energy level of an <u>electron</u> in an atom.
 - The Schrödinger wave equation is solvable for any multielectron system.

2p

13. Four quantum numbers are required to describe completely an electron in an atom.

M. The sum of all electron clouds in any sublevel (or energy level) is a tetrahedral cloud.