

Electron Configurations

Electromagnetic Repulsion, electromagnetic repulsion, electromagnetic repulsion!!!!
All paths for electrons are determined by this simple rule.

Electron configuration is the set up for electrons that fits the maximum number of electrons into the minimum amount of space.

Electrons occupy very specific orbit heights, or altitudes. These represent certain energies, so are called Principle Energy levels, designated $n = 1$, $n = 2$, $n = 3$, etc. Each energy level is divided up into sublevels based on the physical shape of the orbital pathway. The number of sublevels that an energy level will possess is the same as the energy level “number”, i.e. $n = 1$ has 1 sublevel, $n = 2$ has two sublevels, etc.

So, some examples of sublevels include: s, p, d and f each sublevel will have a number of actual orbits (or pathways) determined by shape. Happens to be every odd number, so

s has 1 orbit

p has 3 orbits

d has 5 orbits

f has 7 orbits

maximum of two electrons per orbit, if two, spin in opposite direction