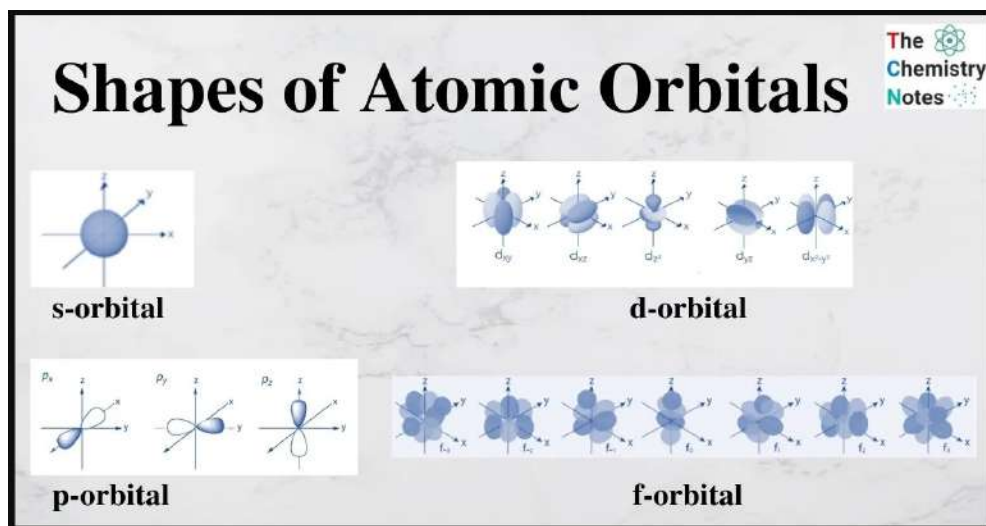


Electron Configuration

Principle Energy Levels (n)	Sub-levels within	Quantum # (n=)	Quantum # (l=) Angular Momentum (Shape of Orbitals) s=0, p=1, d=2, f=3	Amount of Orbitals Within	Total # of Electrons within Orbitals	Quantum # (m _l) Magnetic Orientation of the Electron +3,+2,+1,0,-1,-2,-3	Quantum # (m _s) Direction of Electron Spin (up/down) +½ or -½
n-1>	s	1	0	s = 1	2	0	 0
n-2>	s,p	2	0,1	p = 3	6	+1,0,-1	 +1 0 +2
n-3>	s,p,d	3	0,1,2	d = 5	10	+2,+1,0,-1,-2	 +2 +1 0 -1 -2
n-4>	s,p,d,f	4	0,1,2,3	f = 7	14	+3,+2,+1,0,-1,-2,-3	And so on.....
n-5>	s,p,d,f,g	5	0,1,2,3,4	g = 9	18	And so on.....	
n-6>	, h	6	And so on.....	And so on.....	And so on.....		
N-7>	, i	7					



Example:

Hydrogen's Quantum # =
1, 0, 0, +½

Helium's Quantum # =
1, 0, 0, -½

***Note:** The m_l tells you which magnetic orientation the electron is in and the m_s tells you the direction/position of the electron.

*** Remember Up spins all have to be filled before you fill down spins**

