




























































aufbau principle -
 electrons fill around
 the nucleus from
 the least energetic
 to the most
 energetic
 position

orbital notation 10/29

look →  - orbital

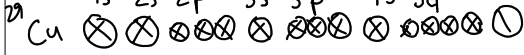
 - orbital

	1s	2s	2p			3s	3p
1 H							
2 He							
3 Li							
4 Be							
5 B							
6 C							
7 N							
8 O							
9 F							
10 Ne							
11 Na							
12 Mg							
16 S							  

1 H	1s ¹
2 He	1s ²
3 Li	1s ² 2s ¹
4 Be	1s ² 2s ²
12 Mg	1s ² 2s ² 2p ⁶ 3s ²

Hund's rule - electrons will half fill orbitals in the same sublevel before doubling up

Pauli's exclusion principle - no two electrons can have the same 4 quantum #s

29 Cu 

1s² 2s² 2p⁶ 3s² 3p⁶ 4s² 3d⁹