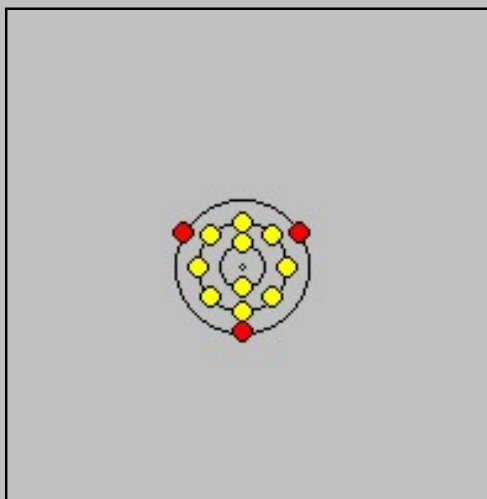


<u>B</u>	<u>Al</u>	<u>Ga</u>	<u>In</u>	<u>Tl</u>	<u>Uut</u>	<u>Uht</u>	<u>But</u>
5	13	31	49	81	113	163	213

## Aluminium

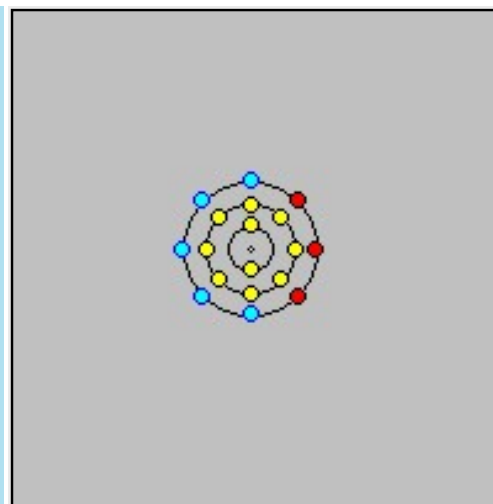
Symbol	Al
Atomic Number	13
Relative Atomic Mass $^{12}\text{C} = 12.0000$	26.981538
Atomic Radius pm	143
First Ionisation Energy $\text{kJ mol}^{-1}$	577.4
Ionisation Energy (eV)	5,9858
Electronegativity	1.61
Density $\text{kg m}^{-3}$	2698 [293 K] 2390 [m.p.]
Molar Volume $\text{cm}^3$	10.00
Thermal Conductivity $\text{W m}^{-1} \text{K}^{-1}$	237 [300 K]
Melting Point K	933.52
Boiling Point K	2740
Number of Isotopes	11
Inner + outer Shells	2 + 1 = 3
Inner + outer Orbitals	10 + 3 = 13
Filling Orbital	3p <sup>1</sup>
Ground State Electron Configuration	[Ne] 3s <sup>2</sup> 3p <sup>1</sup>



2, 8, 3

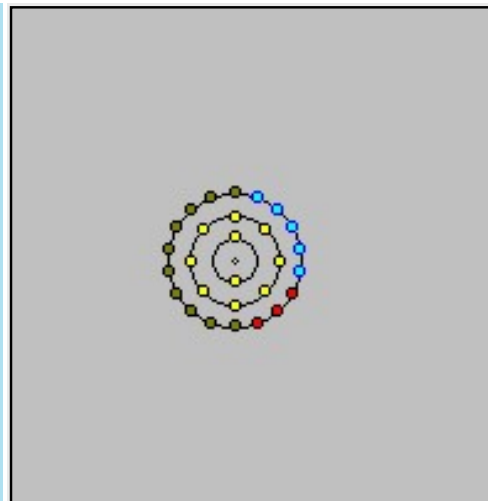
Ground State Electron Configuration with free Orbitals (n= 5)

0, 0, 5



**Ground State Electron Configuration with compressed Orbitals (n=10)**

0, 0, 10



**Singularity**

28 = 10 + 3 + 5 + 10

	s	p	d	f	g	h	i	j
1	2							
2	2	6						
3	2	1	5	10				
4								
5								
6								
7								
8								

**Term Symbol**

$^2P_{1/2}$

**Discovery**

Discovered by Oersted (Copenhagen, Denmark) in 1825

**Name Derived From**

Latin alumen meaning 'alum'