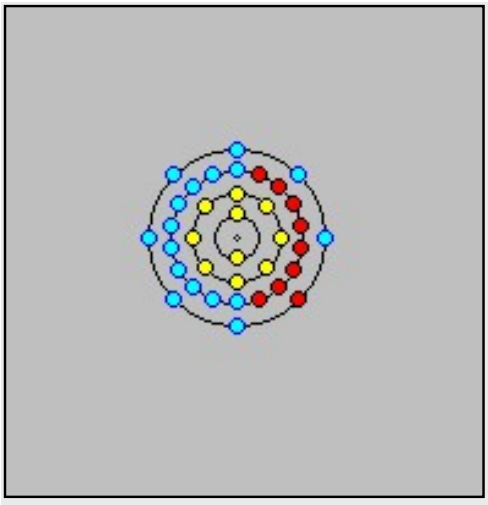
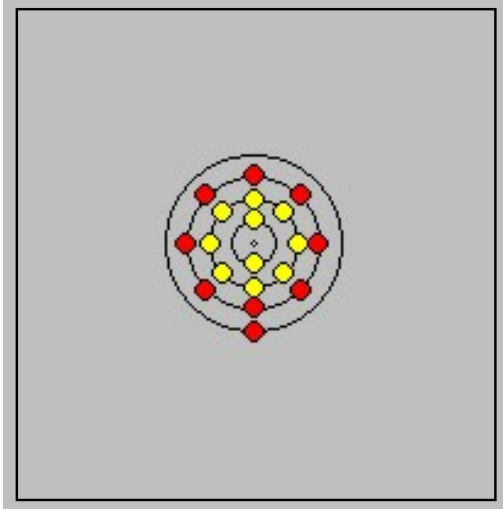
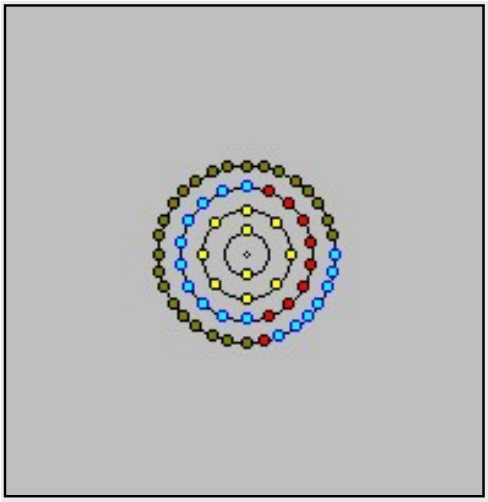
H	Li	Na	K	Rb	Cs	Fr	Uue	Uhe	Bue
1	3	11	19	37	55	87	119	169	219

Potassium

Symbol	K
Atomic Number	19
Relative Atomic Mass $^{12}C = 12.0000$	39.0983 (1) [Since 1979]
Atomic Radius pm	227
First Ionisation Energy kJ mol $^{-1}$	418.8
Ionisation Energy (eV)	4.3407
Electronegativity	0.82
Density kg m $^{-3}$	862 [293 K] 828 [l., m.p.]
Molar Volume cm ^{3}	45.36
Thermal Conductivity W m $^{-1}$ K $^{-1}$	102.4 [300 K]
Melting Point K	336.80
Boiling Point K	1047
Number of Isotopes	18
Isotope Atomic mass/u Mole fraction	39K 38.963 7069(3) 0.932 581(44) 40K 39.963 998 67(29) 0.000 117(1) 41K 40.961 825 97(28) 0.067 302(44)
Inner + outer Shells	2 + 2 =4
Inner + outer Orbitals	10 + 9 =19
Filling Orbital	4s ^{1}
Ground State Electron Configuration	[Ar] 4s ^{1}
Ground State Electron Configuration with free Orbitals (n= 17) 0, 0, 10, 7	



2, 8, 8, 1

Ground State Electron Configuration with compressed Orbitals (n= 24)	
0, 0, 0, 24	

Singularity	60 = 10 + 9 + 17 + 24

	s	p	d	f	g	h	i	j
1	2							
2	2	6						
3	2	6	10					
4	1 1	6	10	14				
5								
6								
7								

Term Symbol	$^{2}S_{1/2}$
Discovery	It was first isolated by the British chemist Humphry Davy (London, England) in 1807 from electrolysis of potash (KOH).
Name Derived From	The name derives from the English "potash" or "pot ashes" because it is found in caustic potash (KOH). The chemical symbol [K] derives from the Latin kalium via the Arabic qali for alkali.