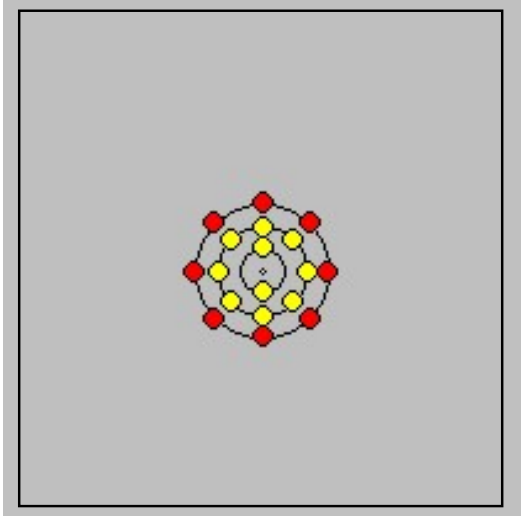
He	Ne	Ar	Kr	Xe	Rn	Uuo	Uho	Buo
2	10	18	36	54	86	118	168	218

Argon

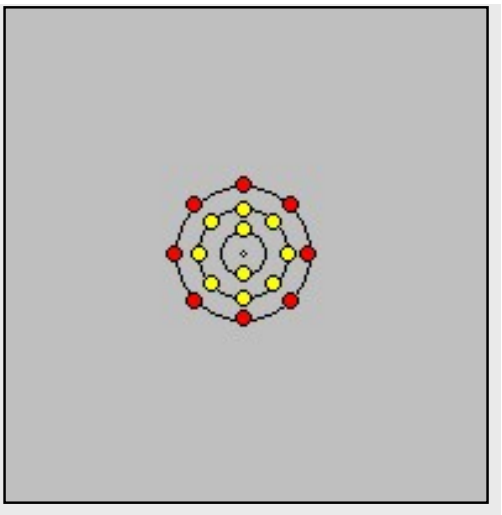
Symbol	Ar
Atomic Number	18
Relative Atomic Mass $^{12}C = 12.0000$	39.948 (±1) [Since 1979]
Atomic Radius pm	97
First Ionisation Energy kJ mol $^{-1}$	1520.4
Ionisation Energy (eV)	15,7596
Electronegativity	
Density kg m $^{-3}$	1656 [40 K] 1380 [b.p.] 1.784 [273 K]
Molar Volume cm ^{3}	24.12 [40K]
Thermal Conductivity W m $^{-1}$ K $^{-1}$	0.0177 [300 K]
Melting Point K	83.78
Boiling Point K	87.29
Number of Isotopes	15
Isotope Atomic mass/u Mole fraction	36Ar 35.967 546 26(27) 0.003 365(30) 38Ar 37.962 7322(5) 0.000 632(5) 40Ar 39.962 383 124(5) 0.996 003(30)
Inner + outer Shells	2 + 1 =3
Inner + outer Orbitals	10 + 8 =18
Filling Orbital	3p ^{6}
Ground State Electron Configuration	[Ne] 3s ^{2} 3p ^{6} = [Ar]



2, 8, 8

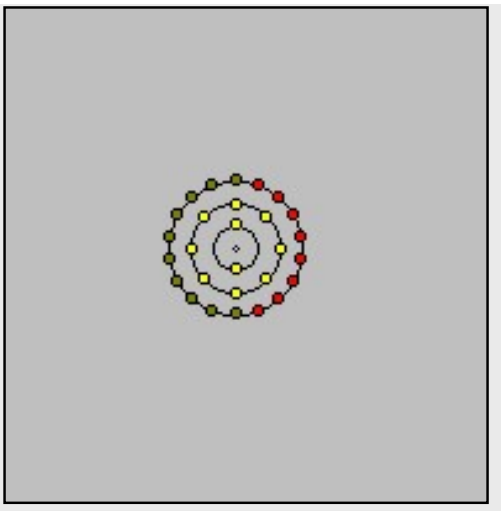
Ground State Electron Configuration with free Orbitals (n= 0)

0, 0, 0



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

0, 0, 10



Singularity

28 = 10 + 8 + 0 + 10

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

Term Symbol

$^{1}S_{0}$

Discovery	**It was discovered in 1894 by the Scottish chemist Sir William Ramsay (Bristol, England) and the physicist Robert John Strutt (Lord Rayleigh London, England) in liquefied air. Rayleigh's initial interest derived from a problem posed by the English physicist Henry Cavendish in 1785, i.e., when oxygen and nitrogen were removed from air, there was an unknown residual gas remaining.**
Name Derived From	**The name derives from the Greek argos for "lazy" or "inactive" because it does not combine with other elements.**

Created: 2002- 06-04
Page update: 2004-05-24