

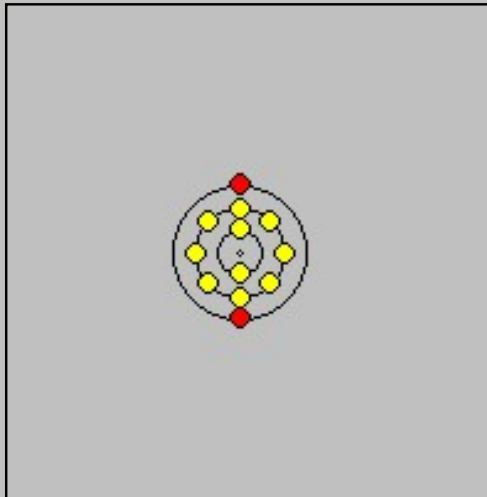


<u>Be</u> 4	<u>Mg</u> 12	<u>Ca</u> 20	<u>Sr</u> 38	<u>Ba</u> 56	<u>Ra</u> 88	<u>Ubn</u> 120	<u>Usn</u> 170	<u>Bbn</u> 220
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Magnesium

Truss Element

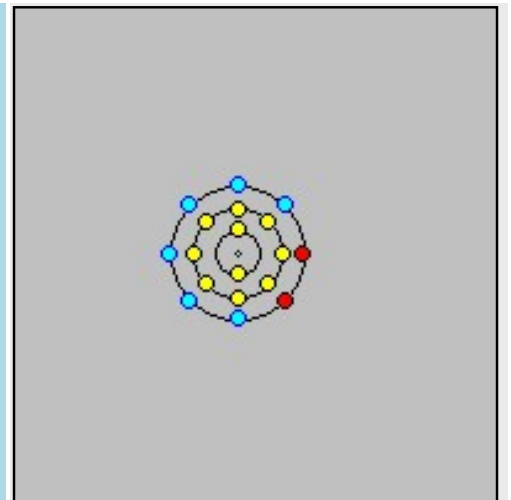
Symbol	Mg
Atomic Number	12
Relative Atomic Mass $^{12}\text{C} = 12.0000$	24.3050
Atomic Radius pm	160
First Ionisation Energy kJ mol^{-1}	737.7
Ionisation Energy (eV)	7,6462
Electronegativity	1.31
Density kg m^{-3}	1738 [293 K] 1585 [l., m.p.]
Molar Volume cm^3	13.98
Thermal Conductivity $\text{W m}^{-1} \text{K}^{-1}$	156 [300 K]
Melting Point K	922.0
Boiling Point K	1363
Number of Isotopes	12
Inner + outer Shells	2 + 1 = 3
Inner + outer Orbitals	10 + 2 = 12
Filling Orbital	3s ²
Ground State Electron Configuration	[Ne] 3s ²



2, 8, 2

Ground State Electron Configuration with free Orbitals (n= 6)

0, 0, 6



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

0, 0, 10



Singularity

28 = 10 + 2 + 6 + 10

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

Term Symbol

$1S_0$

Discovery

Discovered by J. Black (Edinburgh, Scotland) in 1755 and isolated by Sir. H. Davey in 1808

Name Derived From

Greek Megnesia meaning 'district of Thessaly'