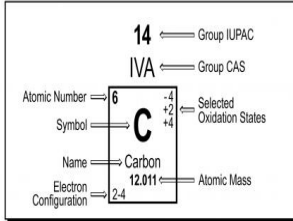


# PERIODIC TABLE OF THE ELEMENTS

1 IA																	18 VIIIA	
1 H Hydrogen 1.0079	2 IIA												13 B Boron 10.811	14 C Carbon 12.011	15 N Nitrogen 14.007	16 O Oxygen 15.999	17 F Fluorine 18.998	18 Ne Neon 20.179
2 Li Lithium 6.941	Be Beryllium 9.0122											Al Aluminium 26.982	Si Silicon 28.086	P Phosphorus 30.974	S Sulphur 32.065	Cl Chlorine 35.453	Ar Argon 39.948	
3 Na Sodium 22.990	Mg Magnesium 24.305	3 IIIB	4 IVB	5 VB	6 VIB	7 VIIB	8 VIII	9 VIII	10 VIII	11 IB	12 IIB							
4 K Potassium 39.098	Ca Calcium 40.078	Sc Scandium 44.956	Ti Titanium 47.867	V Vanadium 50.942	Cr Chromium 51.996	Mn Manganese 54.938	Fe Iron 55.845	Co Cobalt 58.933	Ni Nickel 58.693	Cu Copper 63.546	Zn Zinc 65.39	Ga Gallium 69.723	Ge Germanium 72.64	As Arsenic 74.922	Se Selenium 78.96	Br Bromine 79.904	Kr Krypton 83.80	
5 Rb Rubidium 85.468	Sr Strontium 87.62	Y Yttrium 88.906	Zr Zirconium 91.224	Nb Niobium 92.906	Mo Molybdenum 95.94	Tc Technetium (98)	Ru Ruthenium 101.07	Rh Rhodium 102.91	Pd Palladium 106.42	Ag Silver 107.87	Cd Cadmium 112.41	In Indium 114.82	Sn Tin 118.71	Sb Antimony 121.76	Te Tellurium 127.60	I Iodine 126.90	Xe Xenon 131.29	
6 Cs Cesium 132.91	Ba Barium 137.33	La Lanthanide	Hf Hafnium 178.49	Ta Tantalum 180.95	W Tungsten 183.84	Re Rhenium 186.21	Os Osmium 190.23	Ir Iridium 192.22	Pt Platinum 195.08	Au Gold 196.97	Hg Mercury 200.59	Tl Thallium 204.38	Pb Lead 207.2	Bi Bismuth 208.98	Po Polonium (209)	At Astatine (210)	Rn Radon (222)	
7 Fr Francium (223)	Ra Radium (226)	Ac Actinide	Rf Rutherfordium (261)	Db Dubnium (262)	Sg Seaborgium (266)	Bh Bohrium (264)	Hs Hassium (277)	Mt Meitnerium (268)	Uun Ununnilium (281)	Uuu Ununnilium (272)	Uub Ununnilium (285)	Uut Ununnilium (284)	Uuq Ununnilium (289)	Uup Ununnilium (288)	Uuh Ununnilium (291)	Uus Ununnilium (291)	Uuo Ununnilium (294)	



## Electron Shells

1	K	2	S	P	D	F
2	L	8	2	6		
3	M	18	2	6	10	
4	N	32	2	6	10	14
5	O	32	2	6	10	14
6	P	18	2	6	10	
7	Q	8	2	6		
8	R	2				

## Lanthanide

57	58	59	60	61	62	63	64	65	66	67	68	69	70	71
La	Ce	Pr	Nd	Pm	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu
Lanthanum 138.91 2-8-18-18-9-2	Cerium 140.12 2-8-18-20-9-2	Praseodymium 140.91 2-8-18-21-8-2	Neodymium 144.24 2-8-18-22-8-2	Promethium (145)	Samarium 150.36 2-8-18-24-8-2	Europium 151.96 2-8-18-25-8-2	Gadolinium 157.25 2-8-18-25-9-2	Terbium 158.93 2-8-18-27-8-2	Dysprosium 162.50 2-8-18-28-8-2	Holmium 164.93 2-8-18-29-8-2	Erbium 167.26 2-8-18-30-8-2	Thulium 168.93 2-8-18-31-8-2	Ytterbium 173.04 2-8-18-32-8-2	Lutetium 174.97 2-8-18-32-9-2

## Actinide

89	90	91	92	93	94	95	96	97	98	99	100	101	102	103
Ac	Th	Pa	U	Np	Pu	Am	Cm	Bk	Cf	Es	Fm	Md	No	Lr
Actinium (227)	Thorium 232.04 2-8-18-18-10-2	Protactinium 231.04 2-8-18-20-9-2	Uranium 238.03 2-8-18-32-19-2	Neptunium (237)	Plutonium (244)	Americium (243)	Curium (247)	Berkelium (247)	Californium (251)	Einsteinium (252)	Fermium (257)	Mendelevium (258)	Nobelium (259)	Lawrencium (262)