

PERIODIC TABLE OF THE ELEMENTS

Dmitri Mendeleev (1834-1907)

The Russian Chemist, Dmitri Mendeleev, was the first to observe that if elements were listed in order of atomic mass, they showed regular (periodical) repeating properties. He formulated his discovery in a periodic table of elements, now regarded as the backbone of modern chemistry.

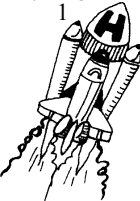










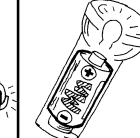

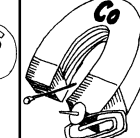





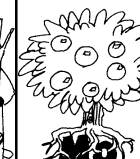
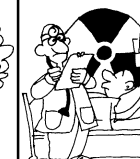
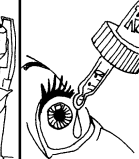

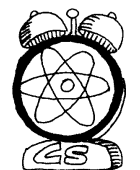
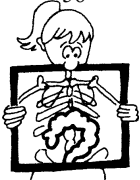

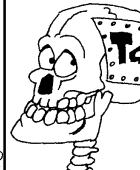
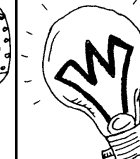
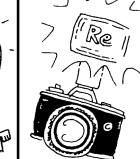
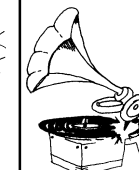
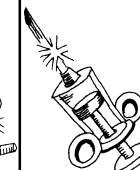

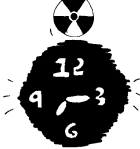

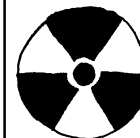
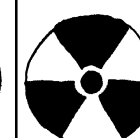
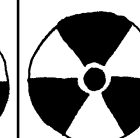
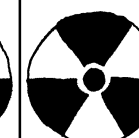
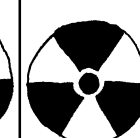
The crowning achievement of Mendeleev's periodic table lay in his prophecy of then, undiscovered elements. In 1869, the year he published his periodic classification, the element gallium, germanium and scandium were unknown. Mendeleev left spaces for them in his table and even predicted their atomic masses and other chemical properties. Six years later, gallium was discovered and his predictions were found to be accurate. Other discoveries followed and their chemical behaviour matched that predicted by Mendeleev.

The remarkable man, the youngest in a family of 17 children, has left the scientific community with a classification system so powerful that it became the cornerstone in chemistry teaching and the predication of new elements ever since.

In 1955, element 101 was named after him: Md - Mendelevium.

In this remarkable chart, originally prepared by the South African Agency for Science & Technology Advancement (SASTA) the elements are shown with an item of daily use. The symbols, names and atomic numbers of the elements are given.

Redrawn by - Dr. Vidula Mhaiskar

H Hydrogen 1 									
Li Lithium 3 	Be Beryllium 4 								
Na Sodium 11 	Mg Magnesium 12 								
K Potassium 19 	Ca Calcium 20 	Sc Scandium 21 	Ti Titanium 22 	V Vanadium 23 	Cr Chromium 24 	Mn Manganese 25 	Fe Iron 26 	Co Cobalt 27 	
Rb Rubidium 37 	Sr Strontium 38 	Y Yttrium 39 	Zr Zirconium 40 	Nb Niobium 41 	Mo Molybdenum 42 	Tc Technetium 43 	Ru Ruthenium 44 	Rh Rhodium 45 	
Cs Caesium 55 	Ba Barium 56 	Lanthanide Series L	Hf Hafnium 72 	Ta Tantalum 73 	W Tungsten 74 	Re Rhenium 75 	Os Osmium 76 	Ir Iridium 77 	
Fr Francium 87 	Ra Radium 88 	Actinide Series A	Rf Rutherfordium 104 	Db Dubnium 105 	Sg Seaborgium 106 	Bh Bohrium 107 	Hs Hassium 108 	Mt Meitnerium 109 	

															He Helium 2 								
															B Boron 5 	C Carbon 6 	N Nitrogen 7 	O Oxygen 8 	F Fluorine 9 	Ne Neon 10 			
															Al Aluminium 13 	Si Silicon 14 	P Phosphorus 15 	S Sulphur 16 	Cl Chlorine 17 	Ar Argon 18 			
															Ni Nickel 28 	Cu Copper 29 	Zn Zinc 30 	Ga Gallium 31 	Ge Germanium 32 	As Arsenic 33 	Se Selenium 34 	Br Bromine 35 	Kr Krypton 36
															Pd Palladium 46 	Ag Silver 47 	Cd Cadmium 48 	In Indium 49 	Sn Tin 50 	Sb Antimony 51 	Te Tellurium 52 	I Iodine 53 	Xe Xenon 54
															Pt Platinum 78 	Au Gold 79 	Hg Mercury 80 	Tl Thallium 81 	Pb Lead 82 	Bi Bismuth 83 	Po Polonium 84 	At Astatine 85 	Rn Radon 86
L	La 57	Ce 58	Pr 59	Nd 60	Pm 61	Sm 62	Eu 63	Gd 64	Tb 65	Dy 66	Ho 67	Er 68	Tm 69	Yb 70	Lu 71								
Lanthanide Series																							
A	Ac 89	Th 90	Pa 91	U 92	Np 93	Pu 94	Am 95	Cm 96	Bk 97	Cf 98	Es 99	Fm 100	Md 101	No 102	Lr 103								
Actanide Series																							