PERIODIC TABLE OF THE ELEMENTS

Dmitri Mendeleyev (1834 -1907)

The Russian Chemist, Dmitri Mendeleyev, 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.

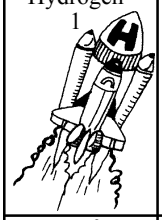
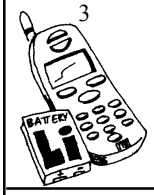
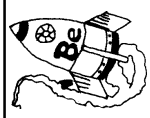
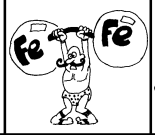
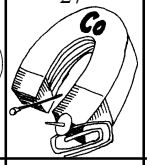
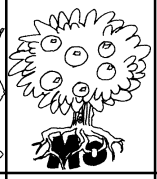
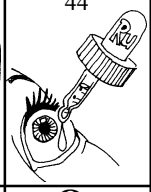
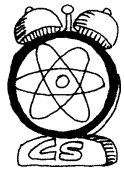
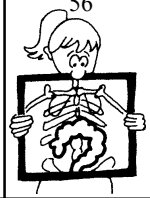
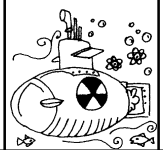
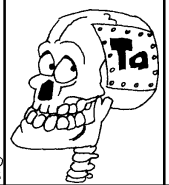
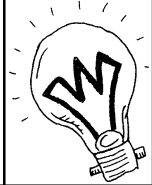
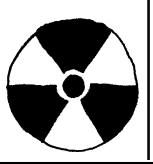
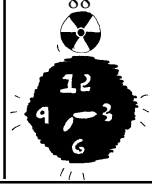
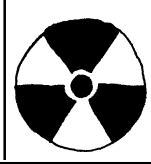
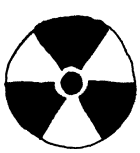
The crowning achievement of Mendeleyev's periodic table lay in his prophecy of then, undiscovered elements. In 1869, the year he published his periodic classification, the element gallium, germanium and scandium were unknown. Mendeleyev left spaces for them in his table and even predicted their atomic 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 Mendeleyev.

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** Yitrium 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 	**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 	**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** Thalium 81	**Pb** Lead 82	**Bi** Bismuth 83	**Po** Polonium 84	**At** Astantine 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								