

PERIODIC TABLE of the ELEMENTS



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VII A 18

He
Helium 2
4.00

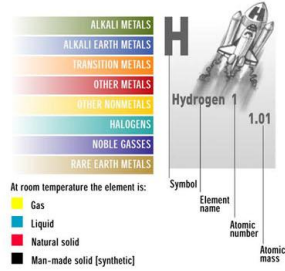
IA 1
H
Hydrogen 1
1.01

2
Lithium 3
6.94
Li

IIA 2
Be
Beryllium 4
9.01

3
Na
Sodium 11
22.99

Mg
Magnesium 12
24.31

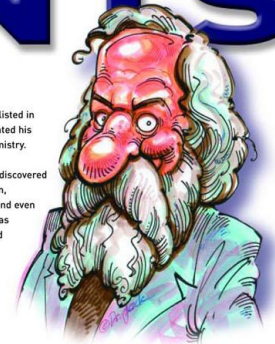


DMITRI MENDELEYEV (1834 - 1907)

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 elements 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.

This 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 prediction of new elements ever since. In 1955, element 101 was named after him: Md, Mendelevium.



4
K
Potassium 19
39.10

Ca
Calcium 20
40.08

IIIB 3
Sc
Scandium 21
44.96

IVB 4
Ti
Titanium 22
47.88

VB 5
V
Vanadium 23
50.94

Cr
Chromium 24
52.00

VIB 6
Mn
Manganese 25
54.94

VII B 7
Fe
Iron 26
55.85

VIII 8
Co
Cobalt 27
58.93

VIII 9
Ni
Nickel 28
58.69

VIII 10
Cu
Copper 29
63.55

IB 11
Zn
Zinc 30
65.39

II B 12
Ga
Gallium 31
69.72

Ge
Germanium 32
72.61

As
Arsenic 33
74.92

Se
Selenium 34
78.96

Br
Bromine 35
79.90

Kr
Krypton 36
83.80

5
Rb
Rubidium 37
85.47

Sr
Strontium 38
87.62

Y
Yttrium 39
88.91

Zr
Zirconium 40
91.22

Nb
Niobium 41
92.91

Mo
Molybdenum 42
95.94

Tc
Technetium 43
(98)

Ru
Ruthenium 44
101.07

Rh
Rhodium 45
102.91

Pd
Palladium 46
106.42

Ag
Silver 47
107.87

Cd
Cadmium 48
112.41

In
Indium 49
114.82

Sn
Tin 50
118.71

Sb
Antimony 51
121.76

Te
Tellurium 52
127.60

I
Iodine 53
126.90

Xe
Xenon 54
131.29

6
Cs
Caesium 55
132.91

Ba
Barium 56
137.33

Lanthanide Series

Hf
Hafnium 72
178.49

Ta
Tantalum 73
180.95

W
Tungsten 74
183.85

Re
Rhenium 75
186.21

Os
Osmium 76
190.23

Ir
Iridium 77
192.22

Pt
Platinum 78
195.08

Au
Gold 79
196.97

Hg
Mercury 80
200.59

Tl
Thallium 81
204.38

Pb
Lead 82
207.20

Bi
Bismuth 83
208.98

Po
Polonium 84
(209)

At
Astatine 85
(210)

Rn
Radon 86
(222)

7
Fr
Francium 87
(223)

Ra
Radium 88
(226)

Actinide Series

Rf
Rutherfordium 104
(261)

Db
Dubnium 105
(262)

Sg
Seaborgium 106
(263)

Bh
Bohrium 107
(262)

Hs
Hassium 108
(265)

Mt
Meitnerium 109
(266)

La
Lanthanum 57
138.91

Ce
Cerium 58
140.12

Pr
Praseodymium 59
140.91

Nd
Neodymium 60
144.24

Pm
Promethium 61
(145)

Sm
Samarium 62
150.36

Eu
Europium 63
151.96

Gd
Gadolinium 64
157.25

Tb
Terbium 65
158.92

Ac
Actinium 89
227.03

Th
Thorium 90
232.04

Pa
Protactinium 91
231.04

U
Uranium 92
238.03

Np
Neptunium 93
(237)

Pu
Plutonium 94
(244)

Am
Americium 95
(243)

Cm
Curium 96
(247)

Bk
Berkelium 97
(247)

