

PERIODIC TABLE of the ELEMENTS



DEPARTMENT OF
SCIENCE AND TECHNOLOGY

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VII A 18
He
Helium 2
4.00

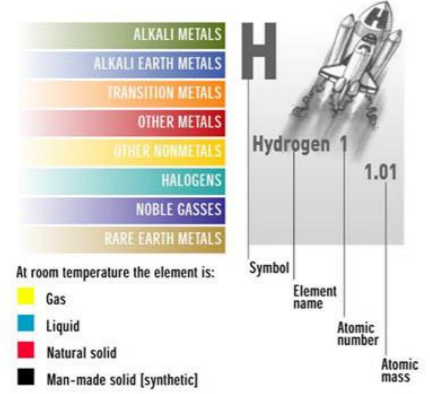
IA 1
H
Hydrogen 1
1.01

IIA 2
Li
Lithium 3
6.94

Be
Beryllium 4
9.01

Mg
Magnesium 12
24.31

Na
Sodium 11
22.99

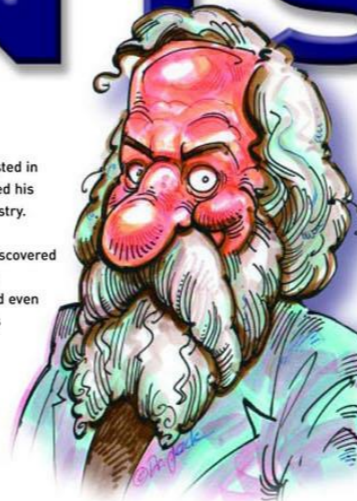


DMITRI MENDELEYEV (1834 - 1907)

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, Mendeleevium.



III B 3
K
Potassium 19
39.10

Ca
Calcium 20
40.08

Rb
Rubidium 37
85.47

Sr
Strontium 38
87.62

Ba
Barium 56
137.33

Cs
Caesium 55
132.91

Ra
Radium 88
(226)

Fr
Francium 87
(223)

IV B 4
Sc
Scandium 21
44.96

Ti
Titanium 22
47.88

Y
Yttrium 39
88.91

Zr
Zirconium 40
91.22

Nb
Niobium 41
92.91

Hf
Hafnium 72
178.49

Rf
Rutherfordium 104
(261)

Db
Dubnium 105
(262)

Sg
Seaborgium 106
(263)

Bh
Bohrium 107
(262)

Hs
Hassium 108
(265)

Mt
Meitnerium 109
(266)

V B 5
V
Vanadium 23
50.94

Cr
Chromium 24
52.00

Mn
Manganese 25
54.94

Fe
Iron 26
55.85

Co
Cobalt 27
58.93

Ni
Nickel 28
58.69

Cu
Copper 29
63.55

Zn
Zinc 30
65.39

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

Xe
Xenon 54
131.29

Rn
Radon 86
(222)

VIB 6
Mn
Manganese 25
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Iron 26
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IX 11
La
Lanthanum 57
138.91

Ce
Cerium 58
140.12

Pr
Praseodymium 59
140.90

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

Dy
Dysprosium 66
162.50

Ho
Holmium 67
164.93

Er
Erbium 68
167.26

Tm
Thulium 69
168.93

Yb
Ytterbium 70
173.04

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Lutetium 71
174.96

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