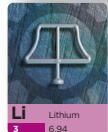


Group 1



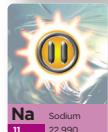
Alkaline earth metals
Group 2



Li Lithium
3 6.94



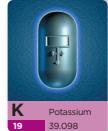
Be Beryllium
4 9.012



Na Sodium
11 22.990



Mg Magnesium
12 24.305



K Potassium
19 39.098



Ca Calcium
20 40.078



Rb Rubidium
37 85.468



Sr Strontium
38 87.62



Cs Caesium
55 132.905



Ba Barium
56 137.327



Fr Francium
87 [223]



Ra Radium
88 [226]



Ac Actinium
89 [227]



Rf Rutherfordium
104 [267]



Ce Cerium
58 140.116



Pr Praseodymium
59 140.908



Th Thorium
90 232.038



Pa Protactinium
91 231.036

ROYAL SOCIETY OF CHEMISTRY

Noble gases
Group 18

He Helium
2 4.003



Ne Neon
10 20.180

Periodic Table

These are the 118 currently known and officially named elements that make up the periodic table (IUPAC 2016).

The periodic table arranges the elements, with their diverse physical and chemical properties, in order of atomic number and fits them into a logical pattern. Eighteen columns divide the elements into groups with closely related physical properties. Rows list elements in order of mass and are called series or periods. Properties of elements change in a systematic way through a period.

Atomic number

The atomic number is equal to the number of protons in the nucleus.



Cu Copper
29 63.546

Relative atomic mass

The ratio of the average mass of the various isotopic forms of an element to one-twelfth the mass of a carbon-12 atom in its ground state. A number in brackets indicates that all isotopes of the element are unstable, ie radioactive.

Group 13



B Boron
5 10.81



C Carbon
6 12.011



N Nitrogen
7 14.007



O Oxygen
8 15.999



F Fluorine
9 18.998

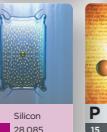


Ne Neon
10 20.180

Group 14



Al Aluminium
13 26.962



Si Silicon
14 28.085



P Phosphorus
15 30.974



S Sulfur
16 32.06



Cl Chlorine
17 35.45

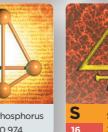


Ar Argon
18 39.95

Group 15



Ga Gallium
31 69.723



Ge Germanium
32 72.630



As Arsenic
33 74.922



Se Selenium
34 78.971



Br Bromine
35 79.904



Kr Krypton
36 83.798

Group 16



Tl Tellurium
52 127.60



I Iodine
53 126.904



Xe Xenon
54 131.293



Rn Radon
86 [222]

Lanthanides



Lu Lutetium
71 174.967



Ac Actinides

Transition metals

Group 3

Group 4

Group 5

Group 6

Group 7

Group 8

Group 9

Group 10

Group 11

Group 12

Group 13

Group 14

Group 15

Group 16

Group 17



Visual Elements is a project that aims to reflect the diversity of elements in a unique and innovative manner. For images and element data, visit rsc.org/periodic-table, or scan the QR code.

rsc.org/periodic-table

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Registered charity number: 207890

Periodic Table

Group 1

H	Hydrogen
1	1.008

Alkaline earth metals Group 2

Li	Lithium
3	6.94

Be

Beryllium

Na	Sodium
11	22.990

Mg

Magnesium

K	Potassium
19	39.098

Ca

Calcium

Sc	Scandium
21	44.956

Ti

Titanium

V	Vanadium
23	50.942

Cr

Chromium

Mn	Manganese
25	54.938

Fe

Iron

Co	Cobalt
27	58.933

Ni

Nickel

Cu	Copper
29	63.546

Zn

Zinc

Ga	Gallium
31	69.723

Al

Aluminium

Si	Silicon
13	28.085

Ge

Germanium

P	Phosphorus
15	30.974

S

Sulfur

Cl	Chlorine
16	32.06

Ar

Argon

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Copper

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Relative atomic mass

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Group 13	Group 14	Group 15	Group 16	Group 17
B Boron	C Carbon	N Nitrogen	O Oxygen	F Fluorine
5 [10.81]	6 [12.011]	7 [14.007]	8 [15.999]	9 [18.998]
Al Aluminium	Si Silicon	P Phosphorus	S Sulfur	Cl Chlorine
13 [26.982]	14 [28.085]	15 [30.974]	16 [32.06]	17 [35.45]
Ga Gallium	Ge Germanium	As Arsenic	Se Selenium	Br Bromine
31 [69.723]	32 [72.630]	33 [74.922]	34 [78.971]	35 [79.904]
In Indium	Tin Antimony	Sb Tellurium	I Iodine	Xe Xenon
49 [114.818]	50 [118.710]	51 [121.760]	52 [127.60]	53 [126.904]
Tl Thallium	Pb Lead	Bi Bismuth	Po Polonium	At Astatine
81 [204.38]	82 [207.2]	83 [208.980]	84 [209]	85 [210]
Pt Platinum	Au Gold	Hg Mercury	Tl Thallium	Rn Radon
78 [195.084]	79 [196.967]	80 [200.592]	81 [204.38]	86 [222]
Ir Iridium	Os Osmium	Re Rhenium	W Tungsten	Fr Francium
77 [192.217]	76 [190.23]	75 [186.207]	74 [183.84]	87 [223]
Ds Darmstadtium	Pd Palladium	Ru Ruthenium	Ta Tantalum	Ba Barium
110 [281]	46 [106.42]	44 [101.07]	72 [178.49]	56 [137.327]
Rg Roentgenium	Ag Silver	Rh Rhodium	Hf Hafnium	Cs Caesium
111 [280]	47 [107.868]	45 [102.906]	73 [180.948]	55 [132.905]
Cn Copernicium	Cd Cadmium	Pt Platinum	La Lanthanum	Ra Radium
112 [285]	48 [112.414]	79 [195.084]	57 [138.905]	88 [226]
Nh Nihonium	Sn Tin	Hg Mercury	Ac Actinium	Rf Rutherfordium
113 [286]	50 [118.710]	80 [200.592]	89 [227]	104 [267]
Fl Flerovium	Pb Lead	Tl Thallium	Db Dubnium	Db Dubnium
114 [289]	82 [207.2]	81 [204.38]	105 [268]	106 [269]
Mc Moscovium	Bi Bismuth	Pt Platinum	Sg Seaborgium	Bohrium
115 [289]	51 [121.760]	78 [195.084]	107 [270]	108 [269]
Lv Livermorium	Am Americium	Ir Iridium	U Uranium	Th Thorium
116 [293]	95 [243]	77 [192.217]	92 [238.029]	90 [232.038]
Ts Tennessee	Cm Curium	Eu Europium	Np Neptunium	Pr Praseodymium
117 [294]	96 [247]	63 [151.964]	93 [237]	59 [140.908]
Og Oganesson	Bk Berkelium	Gd Gadolinium	Pu Plutonium	Ce Cerium
118 [294]	97 [247]	64 [157.25]	94 [244]	58 [140.116]

Noble gases Group 18

He
Helium

2 [4.003]

Lanthanides

Actinides