

1

H

Hydrogen

1.008

3

Li

Lithium

6.941

11

Na

Sodium

22.990

19

K

Potassium

39.098

37

Rb

Rubidium

85.468

55

Cs

Cesium

132.905

87

Fr

Francium

223.020

2

Be

Beryllium

9.012

12

Mg

Magnesium

24.305

20

Ca

Calcium

40.078

38

Sr

Strontium

87.62

56

Ba

Barium

137.328

88

Ra

Radium

226.025

4

Ti

Titanium

47.867

22

Zr

Zirconium

91.224

40

Hf

Hafnium

178.49

72

Rf

Rutherfordium

[261]

5

V

Vanadium

50.942

23

Nb

Niobium

92.906

41

Ta

Tantalum

180.948

73

Db

Dubnium

[262]

6

Cr

Chromium

51.996

24

Mo

Molybdenum

95.95

42

Sg

Seaborgium

[266]

7

Mn

Manganese

54.938

25

Tc

Technetium

98.907

43

Bh

Bohrium

[264]

74

Hs

Hassium

[269]

8

Fe

Iron

55.845

26

Ru

Ruthenium

101.07

44

Bt

Bohrium

[264]

75

Re

Rhenium

186.207

9

Co

Cobalt

58.933

27

Rh

Rhodium

102.906

45

Mt

Meitnerium

[278]

76

Os

Osmium

190.23

10

Ni

Nickel

58.693

28

Pd

Palladium

106.42

46

Ds

Darmstadtium

[281]

77

Ir

Iridium

192.217

11

Cu

Copper

63.546

29

Ag

Silver

107.868

47

Rg

Roentgenium

[280]

78

Pt

Platinum

195.085

12

Zn

Zinc

65.38

30

Cd

Cadmium

112.414

48

Cn

Copernicium

[285]

79

Au

Gold

196.967

13

B

Boron

10.811

31

Al

Aluminum

26.982

49

In

Indium

114.818

81

Tl

Thallium

204.383

14

C

Carbon

12.011

32

Ge

Germanium

72.631

50

Sn

Tin

118.711

82

Pb

Lead

207.2

15

N

Nitrogen

14.007

33

As

Arsenic

74.922

51

Sb

Antimony

121.760

83

Bi

Bismuth

208.980

16

O

Oxygen

15.999

34

Se

Selenium

78.971

52

Te

Tellurium

127.6

84

Po

Polonium

[208.982]

17

F

Fluorine

18.998

35

Br

Bromine

79.904

53

I

Iodine

126.904

85

At

Astatine

209.987

18

Ar

Argon

39.948

36

Kr

Krypton

83.798

54

Xe

Xenon

131.293

86

Rn

Radon

222.018

118

Og

Oganesson

[294]

6

C

Carbon

12.01

Atomic number

Element symbol

Element name

Atomic mass

18

He

Helium

4.003

10

Ne

Neon

20.180

18

Ar

Argon

39.948

36

Kr

Krypton

83.798

54

Xe

Xenon

131.293

86

Rn

Radon

222.018

118

Og

Oganesson

[294]

Lanthanide Series

57

La

Lanthanum

138.905

58

Ce

Cerium

140.116

59

Pr

Praseodymium

140.908

60

Nd

Neodymium

144.243

61

Pm

Promethium

144.913

62

Sm

Samarium

150.36

63

Eu

Europium

151.964

64

Gd

Gadolinium

157.25

65

Tb

Terbium

158.925

66

Dy

Dysprosium

162.500

67

Ho

Holmium

164.930

68

Er

Erbium

167.259

69

Tm

Thulium

168.934

70

Yb

Ytterbium

173.055

71

Lu

Lutetium

174.967

Actinide Series

89

Ac

Actinium

227.028

90

Th

Thorium

232.038

91

Pa

Protactinium

231.036

92

U

Uranium

238.029

93

Np

Neptunium

237.048

94

Pu

Plutonium

244.064

95

Am

Americium

243.061

96

Cm

Curium

247.070

97

Bk

Berkelium

247.070

98

Cf

Californium

251.080

99

Es

Einsteinium

[254]

100

Fm

Fermium

257.095

101

Md

Mendelevium

258.1

102

No

Nobelium

259.101

103

Lr

Lawrencium

[262]

Alkali Metal

Alkaline Earth

Transition Metal

Basic Metal

Metalloid

Nonmetal

Halogen

Noble Gas

Lanthanide

Actinide

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Speed of light	c	3×10^8 m/s	Mass of electron	m_e	9.1×10^{-31} kg
Planck constant	h	6.63×10^{-34} J s	Mass of proton	m_p	1.6726×10^{-27} kg
Molar gas constant	R	8.314 J/(mol K)	Mass of neutron	m_n	1.6749×10^{-27} kg
Avogadro's number	N_A	6.023×10^{23} mol ⁻¹	Atomic mass unit	u	1.66×10^{-27} kg
Charge of electron	e	1.602×10^{-19} C	Rydberg constant	R_∞	1.097×10^7 m ⁻¹
Faraday constant	F	96485 C/mol	Standard atmosphere	atm	1.01325×10^5 Pa