

Period

1

2

3

4

5

6

7

1

H

Hydrogen

1.008

1s¹

3

Li

Lithium

6.94

[He]2s¹

11

Na

Sodium

22.989 769 28

[Ne]3s¹

19

K

Potassium

39.0983

[Ar]4s¹

37

Rb

Rubidium

85.4678

[Kr]5s¹

55

Cs

Cesium

132.905 4519

[Xe]6s¹

87

Fr

Francium

(223)

[Rn]7s¹

4

Be

Beryllium

9.012 182

[He]2s²

12

Mg

Magnesium

24.3050

[Ne]3s²

20

Ca

Calcium

40.078

[Ar]4s²

38

Sr

Strontium

87.62

[Kr]5s²

56

Ba

Barium

137.327

[Xe]6s²

88

Ra

Radium

(226)

[Rn]7s²

5

Sc

Scandium

44.955 912

[Ar]3d¹4s²

21

Y

Yttrium

88.905 85

[Kr]4d¹5s²

39

La

Lanthanum

138.905 47

[Xe]5d¹6s²

89

Ac

Actinium

(227)

[Rn]6d¹7s²

6

Ti

Titanium

47.867

[Ar]3d²4s²

22

Zr

Zirconium

91.224

[Kr]4d²5s²

72

Hf

Hafnium

178.49

[Xe]4f¹⁴5d²6s²

104

Rf

Rutherfordium

(261)

[Rn]5f¹⁴6d²7s²

7

V

Vanadium

50.9415

[Ar]3d³4s²

23

Nb

Niobium

92.906 38

[Kr]4d⁴5s¹

73

Ta

Tantalum

180.947 88

[Xe]4f¹⁴5d³6s²

105

Db

Dubnium

(262)

[Rn]5f¹⁴6d³7s²

8

Cr

Chromium

51.9961

[Ar]3d⁵4s¹

24

Mo

Molybdenum

95.94

[Kr]4d⁵5s¹

74

W

Tungsten

183.84

[Xe]4f¹⁴5d⁴6s²

106

Sg

Seaborgium

(266)

[Rn]5f¹⁴6d⁴7s²

9

Mn

Manganese

54.938 045

[Ar]3d⁵4s²

25

Tc

Technetium

(98)

[Kr]4d⁶5s¹

75

Re

Rhenium

186.207

[Xe]4f¹⁴5d⁵6s²

107

Bh

Bohrium

(264)

[Rn]5f¹⁴6d⁵7s²

10

Fe

Iron

55.845

[Ar]3d⁶4s²

26

Ru

Ruthenium

101.07

[Kr]4d⁷5s¹

76

Os

Osmium

190.23

[Xe]4f¹⁴5d⁶6s²

108

Hs

Hassium

(277)

[Rn]5f¹⁴6d⁶7s²

11

Co

Cobalt

58.933 195

[Ar]3d⁷4s²

27

Rh

Rhodium

102.905 50

[Kr]4d⁸5s¹

77

Ir

Iridium

192.217

[Xe]4f¹⁴5d⁷6s²

109

Mt

Meitnerium

(268)

[Rn]5f¹⁴6d⁷7s²

12

Ni

Nickel

58.6934

[Ar]3d⁸4s²

28

Pd

Palladium

106.42

[Kr]4d¹⁰

78

Pt

Platinum

195.084

[Xe]4f¹⁴5d⁹6s¹

110

Ds

Darmstadtium

(271)

[Rn]5f¹⁴6d⁹7s¹

13

B

Boron

10.81

[He]2s²2p¹

31

Al

Aluminum

26.981 5386

[Ne]3s²3p¹

49

In

Indium

114.818

[Kr]4d¹⁰5s²5p¹

81

Tl

Thallium

204.38

[Xe]4f¹⁴5d¹⁰6s²6p¹

113

Uut*

Ununtrium

(284)

[Rn]5f¹⁴6d¹⁰7s²7p¹

14

C

Carbon

12.01 1

[He]2s²2p²

32

Ge

Germanium

72.63

[Ar]3d¹⁰4s²4p²

50

Sn

Tin

118.710

[Kr]4d¹⁰5s²5p²

82

Pb

Lead

207.2

[Xe]4f¹⁴5d¹⁰6s²6p²

114

Uuq*

Ununquadium

(289)

[Rn]5f¹⁴6d¹⁰7s²7p²

15

N

Nitrogen

14.007

[He]2s²2p³

33

As

Arsenic

74.921 60

[Ar]3d¹⁰4s²4p³

51

Sb

Antimony

121.760

[Kr]4d¹⁰5s²5p³

83

Bi

Bismuth

208.980 40

[Xe]4f¹⁴5d¹⁰6s²6p³

115

Uup*

Ununpentium

(288)

[Rn]5f¹⁴6d¹⁰7s²7p³

16

O

Oxygen

15.999

[He]2s²2p⁴

34

Se

Selenium

78.96

[Ar]3d¹⁰4s²4p⁴

52

Te

Tellurium

127.60

[Kr]4d¹⁰5s²5p⁴

84

Po

Polonium

(209)

[Xe]4f¹⁴5d¹⁰6s²6p⁴

116

Uuh*

Ununhexium

(292)

[Rn]5f¹⁴6d¹⁰7s²7p⁴

17

F

Fluorine

18.998 4032

[He]2s²2p⁵

35

Br

Bromine

79.904

[Ar]3d¹⁰4s²4p⁵

53

I

Iodine

126.904 47

[Kr]4d¹⁰5s²5p⁵

85

At

Astatine

(210)

[Xe]4f¹⁴5d¹⁰6s²6p⁵

117

Uus*

Ununseptium

(294)

[Rn]5f¹⁴6d¹⁰7s²7p⁵

18

Ar

Argon

39.948

[Ne]3s²3p⁶

36

Kr

Krypton

83.798

[Ar]3d¹⁰4s²4p⁶

54

Xe

Xenon

131.293

[Kr]4d¹⁰5s²5p⁶

86

Rn

Radon

(222)

[Xe]4f¹⁴5d¹⁰6s²6p⁶

118

Uuo*

Ununoctium

(294)

[Rn]5f¹⁴6d¹⁰7s²7p⁶

Key:

Atomic number

Symbol

Name

Average atomic mass

Electron configuration

13

Al

Aluminum

26.981 5386

[Ne]3s²3p¹

Hydrogen

Semiconductors

(also known as metalloids)

Metals

Alkali metals

Alkaline-earth metals

Transition metals

Other metals

Nonmetals

Halogens

Noble gases

Other nonmetals

* The systematic names and symbols for elements greater than 112 will be used until the approval of trivial names by IUPAC.

Elements whose average atomic masses appear bolded and italicized are recognized by the International Union of Pure and Applied Chemistry (IUPAC) to have several stable isotopes. Thus, the average atomic mass for each of these elements is officially expressed as a range of values. A range of values expresses that the average atomic mass of a sample of one of these elements is not a constant in nature but varies depending on the physical, chemical, and nuclear history of the material in which the sample is found. However, the values in this table are appropriate for everyday calculations. A value given in parentheses is not an average atomic mass but is the mass number of that element's most stable or most common isotope.

58 Ce Cerium 140.116 [Xe]4f ¹ 5d ¹ 6s ²	59 Pr Praseodymium 140.907 65 [Xe]4f ³ 6s ²	60 Nd Neodymium 144.242 [Xe]4f ⁴ 6s ²	61 Pm Promethium (145) [Xe]4f ⁵ 6s ²	62 Sm Samarium 150.36 [Xe]4f ⁶ 6s ²	63 Eu Europium 151.964 [Xe]4f ⁷ 6s ²	64 Gd Gadolinium 157.25 [Xe]4f ⁷ 5d ¹ 6s ²	65 Tb Terbium 158.925 35 [Xe]4f ⁹ 6s ²	66 Dy Dysprosium 162.500 [Xe]4f ¹⁰ 6s ²	67 Ho Holmium 164.930 32 [Xe]4f ¹¹ 6s ²	68 Er Erbium 167.259 [Xe]4f ¹² 6s ²	69 Tm Thulium 168.934 21 [Xe]4f ¹³ 6s ²	70 Yb Ytterbium 173.04 [Xe]4f ¹⁴ 6s ²	71 Lu Lutetium 174.967 [Xe]4f ¹⁴ 5d ¹ 6s ²
90 Th Thorium 232.038 06 [Rn]6d ² 7s ²	91 Pa Protactinium 231.035 88 [Rn]5f ² 6d ¹ 7s ²	92 U Uranium 238.028 91 [Rn]5f ³ 6d ¹ 7s ²	93 Np Neptunium (237) [Rn]5f ⁴ 6d ¹ 7s ²	94 Pu Plutonium (244) [Rn]5f ⁶ 7s ²	95 Am Americium (243) [Rn]5f ⁷ 7s ²	96 Cm Curium (247) [Rn]5f ⁷ 6d ¹ 7s ²	97 Bk Berkelium (247) [Rn]5f ⁹ 7s ²	98 Cf Californium (251) [Rn]5f ¹⁰ 7s ²	99 Es Einsteinium (252) [Rn]5f ¹¹ 7s ²	100 Fm Fermium (257) [Rn]5f ¹² 7s ²	101 Md Mendelevium (258) [Rn]5f ¹³ 7s ²	102 No Nobelium (259) [Rn]5f ¹⁴ 7s ²	103 Lr Lawrencium (262) [Rn]5f ¹⁴ 6d ¹ 7s ²

The discoveries of elements with atomic numbers 113–118 have been reported but not fully confirmed.