

# The Periodic Table of Elements

1

2

3

4

5

6

7

0 (8)

1.0

H

hydrogen

1

(1)

(2)

(3)

(4)

(5)

(6)

(7)

(8)

(9)

(10)

(11)

(12)

(13)

(14)

(15)

(16)

(17)

relative atomic mass

atomic symbol

name

atomic (proton) number

6.9

Li

lithium

3

23.0

Na

sodium

11

39.1

K

potassium

19

85.5

Rb

rubidium

37

132.9

Cs

caesium

55

[223]

Fr

francium

87

9.0

Be

beryllium

4

24.3

Mg

magnesium

12

40.1

Ca

calcium

20

137.3

Ba

barium

56

[226]

Ra

radium

88

45.0

Sc

scandium

21

138.9

La\*

lanthanum

57

[227]

Ac\*

actinium

89

47.9

Ti

titanium

22

178.5

Hf

hafnium

72

[261]

Rf

rutherfordium

104

50.9

V

vanadium

23

180.9

Ta

tantalum

73

[262]

Db

dubnium

105

52.0

Cr

chromium

24

183.8

W

tungsten

74

[266]

Sg

seaborgium

106

54.9

Mn

manganese

25

186.2

Re

rhenium

75

[264]

Bh

bohrium

107

55.8

Fe

iron

26

190.2

Os

osmium

76

[277]

Hs

hassium

108

58.9

Co

cobalt

27

192.2

Ir

iridium

77

[268]

Mt

meitnerium

109

58.7

Ni

nickel

28

195.1

Pt

platinum

78

[271]

Ds

darmstadtium

110

63.5

Cu

copper

29

197.0

Au

gold

79

[272]

Rg

roentgenium

111

65.4

Zn

zinc

30

200.6

Hg

mercury

80

Elements with atomic numbers 112-116 have been reported but not fully authenticated

10.8

B

boron

5

27.0

Al

aluminium

13

69.7

Ga

gallium

31

114.8

In

indium

49

12.0

C

carbon

6

28.1

Si

silicon

14

118.7

Sn

tin

50

14.0

N

nitrogen

7

31.0

P

phosphorus

15

209.0

Bi

bismuth

83

16.0

O

oxygen

8

32.1

S

sulfur

16

[209]

Po

polonium

84

19.0

F

fluorine

9

35.5

Cl

chlorine

17

[210]

At

astatine

85

20.2

Ne

neon

10

39.9

Ar

argon

18

83.8

Kr

krypton

36

131.3

Xe

xenon

54

[222]

Rn

radon

86

\* Lanthanide series

\* Actinide series

140 <b>Ce</b> cerium 58	141 <b>Pr</b> praseodymium 59	144 <b>Nd</b> neodymium 60	[147] <b>Pm</b> promethium 61	150 <b>Sm</b> samarium 62	152 <b>Eu</b> europium 63	157 <b>Gd</b> gadolinium 64	159 <b>Tb</b> terbium 65	163 <b>Dy</b> dysprosium 66	165 <b>Ho</b> holmium 67	167 <b>Er</b> erbium 68	169 <b>Tm</b> thulium 69	173 <b>Yb</b> ytterbium 70	175 <b>Lu</b> lutetium 71
232 <b>Th</b> thorium 90	[231] <b>Pa</b> protactinium 91	238 <b>U</b> uranium 92	[237] <b>Np</b> neptunium 93	[242] <b>Pu</b> plutonium 94	[243] <b>Am</b> americium 95	[247] <b>Cm</b> curium 96	[245] <b>Bk</b> berkelium 97	[251] <b>Cf</b> californium 98	[254] <b>Es</b> einsteinium 99	[253] <b>Fm</b> fermium 100	[256] <b>Md</b> mendelevium 101	[254] <b>No</b> nobelium 102	[257] <b>Lr</b> lawrencium 103