

# The Periodic Table of Elements

1

2

3

4

5

6

7

0 (8)

1.0

H

hydrogen

1

4.0

He

helium

2

(1)

6.9

Li

lithium

3

(2)

9.0

Be

beryllium

4

(13)

10.8

B

boron

5

(14)

12.0

C

carbon

6

(15)

14.0

N

nitrogen

7

(16)

16.0

O

oxygen

8

(17)

19.0

F

fluorine

9

20.2

Ne

neon

10

23.0

Na

sodium

11

24.3

Mg

magnesium

12

(3)

45.0

Sc

scandium

21

(4)

47.9

Ti

titanium

22

(5)

50.9

V

vanadium

23

(6)

52.0

Cr

chromium

24

(7)

54.9

Mn

manganese

25

(8)

55.8

Fe

iron

26

(9)

58.9

Co

cobalt

27

(10)

58.7

Ni

nickel

28

(11)

63.5

Cu

copper

29

(12)

65.4

Zn

zinc

30

69.7

Ga

gallium

31

72.6

Ge

germanium

32

74.9

As

arsenic

33

79.0

Se

selenium

34

79.9

Br

bromine

35

83.8

Kr

krypton

36

85.5

Rb

rubidium

37

87.6

Sr

strontium

38

88.9

Y

yttrium

39

91.2

Zr

zirconium

40

92.9

Nb

niobium

41

95.9

Mo

molybdenum

42

[98]

Tc

technetium

43

101.1

Ru

ruthenium

44

102.9

Rh

rhodium

45

106.4

Pd

palladium

46

107.9

Ag

silver

47

112.4

Cd

cadmium

48

114.8

In

indium

49

118.7

Sn

tin

50

121.8

Sb

antimony

51

127.6

Te

tellurium

52

126.9

I

iodine

53

131.3

Xe

xenon

54

132.9

Cs

caesium

55

137.3

Ba

barium

56

138.9

La\*

lanthanum

57

178.5

Hf

hafnium

72

180.9

Ta

tantalum

73

183.8

W

tungsten

74

186.2

Re

rhenium

75

190.2

Os

osmium

76

192.2

Ir

iridium

77

195.1

Pt

platinum

78

197.0

Au

gold

79

200.6

Hg

mercury

80

204.4

Tl

thallium

81

207.2

Pb

lead

82

209.0

Bi

bismuth

83

[209]

Po

polonium

84

[210]

At

astatine

85

[222]

Rn

radon

86

[223]

Fr

francium

87

[226]

Ra

radium

88

[227]

Ac\*

actinium

89

[261]

Rf

rutherfordium

104

[262]

Db

dubnium

105

[266]

Sg

seaborgium

106

[264]

Bh

bohrium

107

[277]

Hs

hassium

108

[268]

Mt

meitnerium

109

[271]

Ds

damstadtium

110

[272]

Rg

roentgenium

111

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

relative atomic mass

atomic symbol

name

atomic (proton) number

\* 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