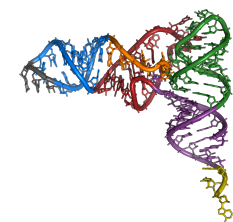
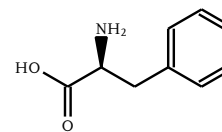


# Periodic Table of the Elements



Group 1

1

2.20

1s

H

hydrogen

1.008

2

3

0.98

2s

Li

lithium

6.9675

4

1.57

2s

Be

beryllium

9.0122

11

0.93

3s

Na

sodium

22.99

12

1.31

3s

Mg

magnesium

24.3055

19

0.82

4s

K

potassium

39.098

20

1.00

4s

Ca

calcium

40.078

37

0.82

5s

Rb

rubidium

85.468

38

0.95

5s

Sr

strontium

87.62

55

0.79

6s

Cs

caesium

132.91

56

0.89

6s

Ba

barium

137.33

87

0.9

7s

Fr

francium

(223)

88

0.9

7s

Ra

radium

(226)

2

2

He

helium

4.0026

13

2.04

2p

B

boron

10.8135

14

2.55

2p

C

carbon

12.0105

15

3.04

2p

N

nitrogen

14.007

16

3.44

2p

O

oxygen

15.9995

17

3.98

2p

F

fluorine

18.998

18

Ne

neon

20.18

13

1.61

3p

Al

aluminium

26.982

14

1.90

3p

Si

silicon

28.085

15

2.19

3p

P

phosphorus

30.974

16

2.58

3p

S

sulfur

32.0675

17

3.16

3p

Cl

chlorine

35.4515

18

Ar

argon

39.8775

31

1.81

4p

Ga

gallium

69.723

32

2.01

4p

Ge

germanium

72.63

33

2.18

4p

As

arsenic

74.922

34

2.55

4p

Se

selenium

78.971

35

2.96

4p

Br

bromine

79.904

36

Kr

krypton

83.798

49

1.78

5p

In

indium

114.82

50

1.96

5p

Sn

tin

118.71

51

2.05

5p

Sb

antimony

121.76

52

2.1

5p

Te

tellurium

127.6

53

2.66

5p

I

iodine

126.9

54

2.60

5p

Xe

xenon

131.29

81

1.62

6p

Tl

thallium

204.385

82

1.8

6p

Pb

lead

207.2

83

2.02

6p

Bi

bismuth

208.98

84

2.0

6p

Po

polonium

(209)

85

2.2

6p

At

astatine

(210)

86

Rn

radon

(222)

113

7p

Nh

nihonium

(286)

114

7p

Fl

flerovium

(289)

115

7p

Mc

moscovium

(290)

116

7p

Lv

livermorium

(293)

117

7p

Ts

tennessine

(294)

118

7p

Og

oganeson

(294)

Z

χ

ss

→

Sy

element saw

Z: atomic number

χ: Pauling electronegativity

ss: last occupied subshell

Sy: symbol

element: element name

saw: standard atomic weight†

←


→

*	57	1.1	5d <sup>1</sup>	58	1.12	4f <sup>1</sup>	59	1.13	4f <sup>2</sup>	60	1.14	4f <sup>3</sup>	61		4f <sup>4</sup>	62	1.17	4f <sup>5</sup>	63		4f <sup>6</sup>	64	1.2	4f <sup>7</sup>	65		4f <sup>7</sup>	66	1.22	4f <sup>7</sup>	67	1.23	4f <sup>7</sup>	68	1.24	4f <sup>7</sup>	69	1.25	4f <sup>7</sup>	70		4f <sup>7</sup>	71	1.27	4f <sup>7</sup>
	La			Ce			Pr			Nd			Pm			Sm			Eu			Gd			Tb			Dy			Ho			Er			Tm			Yb			Lu		
	lanthanum			cerium			praseodymium			neodymium			promethium		(145)	samarium			europium			gadolinium			terbium			dysprosium			holmium			erbium			thulium			ytterbium			lutetium		
	138.91			140.12			140.91			144.24						150.36			151.96			157.25			158.93			162.5			164.93			167.26			168.93			173.05			174.97		
**	89	1.1	6d <sup>1</sup>	90	1.3	5f <sup>1</sup>	91	1.5	5f <sup>1</sup>	92	1.38	5f <sup>2</sup>	93	1.36	5f <sup>2</sup>	94	1.28	5f <sup>2</sup>	95		5f <sup>2</sup>	96		5f <sup>2</sup>	97	1.3	5f <sup>2</sup>	98	1.3	5f <sup>2</sup>	99	1.3	5f <sup>2</sup>	100	1.3	5f <sup>2</sup>	101	1.3	5f <sup>2</sup>	102	1.3	5f <sup>2</sup>	103		6d <sup>1</sup>
	Ac			Th			Pa			U			Np			Pu			Am			Cm			Bk			Cf			Es			Fm			Md			No			Lr		
	actinium			thorium			protactinium			uranium			neptunium			plutonium			americium			curium			berkelium			californium			einsteinium			fermium			mendelevium			nobelium			lawrencium		
	(227)			232.04			231.04			238.03			(237)			(244)			(243)			(247)			(247)			(251)			(252)			(257)			(258)			(259)			(266)		

<sup>†</sup>Standard atomic weights (average terrestrial atomic weight) taken from the Commission on Isotopic Abundances and Atomic Weights (<http://www.ciaaw.org/abridged-atomic-weights.htm>). If CIAAW indicates a range for the standard atomic weight of an element, I used the arithmetic mean of the boundaries of the range. Elements with atomic weight in parentheses (e.g., Francium (223)) have no known stable isotopes and it is therefore impossible to provide a standard atomic weight. For these elements, the mass of a representative isotope is provided.

\*Indicates an anomalous (Aufbau rule-breaking) ground state electron configuration.

Inspired by Ivan Griffin's  $\text{\LaTeX}$  Periodic Table.  $\text{\LaTeX}$ code is released under the MIT open source license.

Final product (this Table) is released under creative commons attribution/share-alike copyright terms.  2021. Paul N. Danese

