

Atomic Weights of the Elements (Based on ¹²C)

Values in parentheses are used for radioactive elements whose atomic weights cannot be quoted precisely without knowledge of the origin of the elements; the value given is the atomic mass number of the isotope of that element of longest known half-life.

Name	Symbol	Atomic Number	Atomic Weight	Footnotes	Name	Symbol	Atomic Number	Atomic Weight	Footnotes
Actinium	Ac	89	277.0277	z	Mendelevium	Md	101	(258)	
Aluminum	Al	13	26.98154		Mercury	Hg	80	200.59	
Americium	Am	95	(243)		Molybdenum	Mo	42	95.94	
Antimony	Sb	51	121.75		Neodymium	Nd	69	144.24	x
Argon	Ar	18	39.948	w,x	Neon	Ne	10	20.179	y
Arsenic	As	33	74.9216		Neptunium	Np	93	237.0482	z
Astatine	At	85	(210)		Nickel	Ni	28	58.69	
Barium	Ba	56	137.33	x	Niobium	Nb	41	92.9064	
Berkelium	Bk	97	(247)		Nitrogen	N	7	14.0067	
Beryllium	Be	4	9.01218		Nobelium	No	102	(259)	
Bismuth	Bi	83	208.9804		Osmium	Os	76	190.2	x
Bohrium	Bh	107	(262)		Oxygen	O	8	15.9994	w
Boron	B	5	10.81	w,y	Palladium	Pd	46	106.42	x
Bromine	Br	35	79.904		Phosphorus	P	15	30.97376	
Cadmium	Cd	48	112.41	x	Platinum	Pt	78	195.08	
Calcium	Ca	20	40.08	x	Plutonium	Pu	94	(244)	
Californium	Cf	98	(251)		Polonium	Po	84	(209)	
Carbon	C	6	12.011	w	Potassium	K	19	39.0983	
Cerium	Ce	58	140.12	x	Praseodymium	Pr	59	140.9077	
Cesium	Cs	55	132.9054		Promethium	Pm	61	(145)	
Chlorine	Cl	17	34.453		Protactinium	Pa	91	231.0359	z
Chromium	Cr	24	51.996		Radium	Ra	88	226.0254	x,z
Cobalt	Co	27	58.9332		Radon	Rn	86	(222)	
Copper	Cu	29	63.546	w	Rhenium	Re	75	186.207	
Curium	Cm	97	(247)		Rhodium	Rh	45	102.9055	
Dubnium	Db	105	(262)		Rubidium	Rb	37	85.4678	x
Dysprosium	Dy	66	162.50		Ruthenium	Ru	44	101.07	x
Einsteinium	Es	99	(252)		Rutherfordium	Rf	104	(261)	
Erbium	Er	68	167.26		Samarium	Sm	62	150.36	x
Europium	Eu	63	151.96	x	Scandium	Sc	21	44.9559	
Fermium	Fm	100	(257)		Seaborgium	Sg	106	(263)	
Fluorine	F	9	18.998403		Selenium	Se	34	78.96	
Francium	Fr	87	(223)		Silicon	Si	14	28.0855	
Gadolinium	Gd	64	157.25	x	Silver	Ag	47	107.868	x
Gallium	Ga	31	69.72		Sodium	Na	11	22.98977	
Germanium	Ge	32	72.59		Strontium	Sr	38	87.62	x
Gold	Au	79	196.9665		Sulfur	S	16	32.06	w
Hafnium	Hf	72	178.49		Tantalum	Ta	73	180.9479	
Hassium	Hs	108	(265)		Technetium	Tc	43	(98)	
Helium	He	2	4.00260	x	Tellurium	Te	52	127.60	x
Holmium	Ho	67	164.9304		Terbium	Tb	65	158.9254	
Hydrogen	H	1	1.0079	w	Thallium	Tl	81	204.383	
Indium	In	49	114.82	x	Thorium	Th	90	232.0381	x,z
Iodine	I	53	126.9045		Thulium	Tm	69	168.9342	
Iridium	Ir	77	192.22		Tin	Sn	50	118.71	
Iron	Fe	26	55.847		Titanium	Ti	22	47.88	
Krypton	Kr	36	83.80	x,y	Tungsten	W	74	183.85	
Lanthanum	La	57	138.9055	x	Uranium	U	92	238.029	x,y
Lawrencium	Lr	103	(260)		Vanadium	V	23	50.9415	
Lead	Pb	82	207.2	w,x	Xenon	Xe	54	131.29	x,y
Lithium	Li	3	6.941	w,x,y	Ytterbium	Yb	70	173.04	
Lutetium	Lu	71	174.967		Yttrium	Y	39	88.9059	
Magnesium	Mg	12	24.305	x	Zinc	Zn	30	65.39	
Manganese	Mn	25	54.9380		Zirconium	Zr	40	91.224	x
Meitnerium	Mt	109	(266)						

w Element for which known variations in isotopic composition in normal terrestrial material prevent a more precise atomic weight being given; values should be applicable to any "normal" material.

x Element for which geological specimens are known in which the element has an anomalous isotopic composition, such that the difference between the atomic weight of the element in such specimens and that given in the table may exceed considerably the implied uncertainty.

y Element for which substantial variations from the value given can occur in commercially available material because of inadvertent undisclosed change of isotopic composition.

z Element for which the value is that of the radioisotope of longest half-life

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The Periodic Table of Elements

Atomic weights are shown above the symbols; atomic numbers, below.

Metals

Transition Metals

Inner Transition Metals

17

15

12

9

6

3

1

1.008

14.007

26.982

47.88

91.224

137.33

223

H

C

Al

Ti

Zr

Ba

Fr

1

6

13

22

40

72

87

He

N

Si

V

Nb

Y

Ra

2

7

12

21

38

56

88

Li

O

Al

Cr

Mo

Rb

Ra

3

14

13

22

40

72

87

Be

F

Si

Mn

Tc

Ru

Ra

4

15

12

21

38

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B

Ne

Al

Fe

Rh

Rh

Ra

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C

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