

AtomicNo	Symbol	Group	Group old	Period	Name	Mass
1	H	1	I A	1	hydrogen	1.008
2	He	18	VIII A	1	helium	4.003
3	Li	1	I A	2	lithium	6.968
4	Be	2	II A	2	beryllium	9.012
5	B	13	III A	2	boron	10.81
6	C	14	IV A	2	carbon	12.01
7	N	15	V A	2	nitrogen	14.01
8	O	16	VI A	2	oxygen	16.00
9	F	17	VII A	2	fluorine	19.00
10	Ne	18	VIII A	2	neon	20.18
11	Na	1	I A	3	sodium	22.99
12	Mg	2	II A	3	magnesium	24.31
13	Al	13	III A	3	aluminum	26.98
14	Si	14	IV A	3	silicon	28.09
15	P	15	V A	3	phosphorus	30.97
16	S	16	VI A	3	sulfur	32.07
17	Cl	17	VII A	3	chlorine	35.45
18	Ar	18	VIII A	3	argon	39.95
19	K	1	I A	4	potassium	39.10
20	Ca	2	II A	4	calcium	40.08
21	Sc	3	III B	4	scandium	44.96
22	Ti	4	IV B	4	titanium	47.87
23	V	5	V B	4	vanadium	50.94
24	Cr	6	VI B	4	chromium	52.00
25	Mn	7	VII B	4	manganese	54.94
26	Fe	8	VIII B	4	iron	55.85
27	Co	9	VIII B	4	cobalt	58.93
28	Ni	10	VIII B	4	nickel	58.69
29	Cu	11	I B	4	copper	63.55
30	Zn	12	II B	4	zinc	65.38
31	Ga	13	III A	4	gallium	69.72
32	Ge	14	IV A	4	germanium	72.63
33	As	15	V A	4	arsenic	74.92
34	Se	16	VI A	4	selenium	78.97

35	Br	17	VII A	4	bromine	79.90
36	Kr	18	VIII A	4	krypton	83.80
37	Rb	1	I A	5	rubidium	85.47
38	Sr	2	II A	5	strontium	87.62
39	Y	3	III B	5	yttrium	88.91
40	Zr	4	IV B	5	zirconium	91.22
41	Nb	5	VI B	5	niobium	92.91
42	Mo	6	VI B	5	molybdenum	95.95
43	Tc	7	VII B	5	technetium	98
44	Ru	8	VIII B	5	ruthenium	101.1
45	Rh	9	VIII B	5	rhodium	102.9
46	Pd	10	VIII B	5	palladium	106.4
47	Ag	11	I B	5	silver	107.9
48	Cd	12	II B	5	cadmium	112.4
49	In	13	III A	5	indium	114.8
50	Sn	14	IV A	5	tin	118.7
51	Sb	15	V A	5	antimony	121.8
52	Te	16	VI A	5	tellurium	127.6
53	I	17	VII A	5	iodine	126.9
54	Xe	18	VIII A	5	xenon	131.3
55	Cs	1	I A	6	cesium	132.9
56	Ba	2	II A	6	barium	137.3
57	La	lanthanides	III B	6	lanthanum	138.9
58	Ce	lanthanides	lanthanides	6	cerium	140.1
59	Pr	lanthanides	lanthanides	6	praseodymium	140.9
60	Nd	lanthanides	lanthanides	6	neodymium	144.2
61	Pm	lanthanides	lanthanides	6	promethium	145
62	Sm	lanthanides	lanthanides	6	samarium	150.4
63	Eu	lanthanides	lanthanides	6	euporium	152.0

64	Gd	lanthanides	lanthanides	6	gadolinium	157.3
65	Tb	lanthanides	lanthanides	6	terbium	158.9
66	Dy	lanthanides	lanthanides	6	dysprosium	162.5
67	Ho	lanthanides	lanthanides	6	holmium	164.9
68	Er	lanthanides	lanthanides	6	erbium	167.3
69	Tm	lanthanides	lanthanides	6	thulium	168.9
70	Yb	lanthanides	lanthanides	6	ytterbium	173.1
71	Lu	3	lanthanides	6	lutetium	175.0
72	Hf	4	IV B	6	hafnium	178.5
73	Ta	5	V B	6	tantalum	180.9
74	W	6	VI B	6	tungsten	183.8
75	Re	7	VII B	6	rhenium	186.2
76	Os	8	VIII B	6	osmium	190.2
77	Ir	9	VIII B	6	iridium	192.2
78	Pt	10	VIII B	6	platinum	195.1
79	Au	11	I B	6	gold	197.0
80	Hg	12	II B	6	mercury	200.6
81	Tl	13	III A	6	thallium	204.4
82	Pb	14	IV A	6	lead	207.2
83	Bi	15	V A	6	bismuth	209.0
84	Po	16	VI A	6	polonium	209
85	At	17	VII A	6	astatine	210
86	Rn	18	VIII A	6	radon	222
87	Fr	1	I A	7	francium	223
88	Ra	2	II A	7	radium	226
89	Ac	actinides	III B	7	actinium	227
90	Th	actinides	actinides	7	thorium	232.0
91	Pa	actinides	actinides	7	protactinium	231.0
92	U	actinides	actinides	7	uranium	238.0
93	Np	actinides	actinides	7	neptunium	237

94	Pu	actinides	actinides	7	plutonium	244
95	Am	actinides	actinides	7	americium	243
96	Cm	actinides	actinides	7	curium	247
97	Bk	actinides	actinides	7	berkelium	247
98	Cf	actinides	actinides	7	californium	251
99	Es	actinides	actinides	7	einsteinium	252
100	Fm	actinides	actinides	7	fermium	257
101	Md	actinides	actinides	7	mendelevium	258
102	No	actinides	actinides	7	nobelium	259
103	Lr	3	actinides	7	lawrencium	262
104	Rf	4	IV B	7	rutherfordium	267
105	Db	5	V B	7	dubnium	268
106	Sg	6	VI B	7	seaborgium	271
107	Bh	7	VII B	7	bohrium	272
108	Hs	8	VIII B	7	hassium	270
109	Mt	9	VIII B	7	meitnerium	276
110	Ds	10	VIII B	7	darmstadtium	281
111	Rg	11	I B	7	roentgenium	280
112	Cn	12	II B	7	copernicium	285
113	Nh	13	III A	7	nihonium	284
114	Fl	14	IV A	7	flerovium	289
115	Mc	15	V A	7	moscovium	288
116	Lv	16	VI A	7	livermorium	293
117	Ts	17	VII A	7	tennessine	292

118	Og	18	VIII A	7	oganesson	294
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