

Periodic table – common ion charges

Z	Symbol	Element	Category	Common charge(s)
1	H	Hydrogen	nonmetal	+1, -1
2	He	Helium	noble	0
3	Li	Lithium	alkali	+1
4	Be	Beryllium	alkaline	+2
5	B	Boron	metalloid	+3
6	C	Carbon	nonmetal	+4, -4
7	N	Nitrogen	nonmetal	-3
8	O	Oxygen	nonmetal	-2
9	F	Fluorine	halogen	-1
10	Ne	Neon	noble	0
11	Na	Sodium	alkali	+1
12	Mg	Magnesium	alkaline	+2
13	Al	Aluminium	post	+3
14	Si	Silicon	metalloid	+4, -4
15	P	Phosphorus	nonmetal	-3
16	S	Sulfur	nonmetal	-2
17	Cl	Chlorine	halogen	-1
18	Ar	Argon	noble	0
19	K	Potassium	alkali	+1
20	Ca	Calcium	alkaline	+2
21	Sc	Scandium	transition	+3
22	Ti	Titanium	transition	+4, +3
23	V	Vanadium	transition	+5, +3, +4
24	Cr	Chromium	transition	+3, +2, +6
25	Mn	Manganese	transition	+2, +4, +7
26	Fe	Iron	transition	+2, +3
27	Co	Cobalt	transition	+2, +3
28	Ni	Nickel	transition	+2
29	Cu	Copper	transition	+1, +2
30	Zn	Zinc	transition	+2
31	Ga	Gallium	post	+3

Z	Symbol	Element	Category	Common charge(s)
32	Ge	Germanium	metalloid	+4, +2
33	As	Arsenic	metalloid	-3, +3, +5
34	Se	Selenium	nonmetal	-2
35	Br	Bromine	halogen	-1
36	Kr	Krypton	noble	0
37	Rb	Rubidium	alkali	+1
38	Sr	Strontium	alkaline	+2
39	Y	Yttrium	transition	+3
40	Zr	Zirconium	transition	+4
41	Nb	Niobium	transition	+5
42	Mo	Molybdenum	transition	+6, +4
43	Tc	Technetium	transition	+7
44	Ru	Ruthenium	transition	+3, +4
45	Rh	Rhodium	transition	+3
46	Pd	Palladium	transition	+2, +4
47	Ag	Silver	transition	+1
48	Cd	Cadmium	transition	+2
49	In	Indium	post	+3, +1
50	Sn	Tin	post	+2, +4
51	Sb	Antimony	metalloid	+3, +5
52	Te	Tellurium	metalloid	-2
53	I	Iodine	halogen	-1
54	Xe	Xenon	noble	0
55	Cs	Caesium	alkali	+1
56	Ba	Barium	alkaline	+2
57	La	Lanthanum	lanthanide	+3
58	Ce	Cerium	lanthanide	+3, +4
59	Pr	Praseodymium	lanthanide	+3
60	Nd	Neodymium	lanthanide	+3
61	Pm	Promethium	lanthanide	+3
62	Sm	Samarium	lanthanide	+3, +2
63	Eu	Europium	lanthanide	+3, +2
64	Gd	Gadolinium	lanthanide	+3

Z	Symbol	Element	Category	Common charge(s)
65	Tb	Terbium	lanthanide	+3
66	Dy	Dysprosium	lanthanide	+3
67	Ho	Holmium	lanthanide	+3
68	Er	Erbium	lanthanide	+3
69	Tm	Thulium	lanthanide	+3
70	Yb	Ytterbium	lanthanide	+3, +2
71	Lu	Lutetium	lanthanide	+3
72	Hf	Hafnium	transition	+4
73	Ta	Tantalum	transition	+5
74	W	Tungsten	transition	+6
75	Re	Rhenium	transition	+7
76	Os	Osmium	transition	+4, +8
77	Ir	Iridium	transition	+3, +4
78	Pt	Platinum	transition	+2, +4
79	Au	Gold	transition	+1, +3
80	Hg	Mercury	transition	+2, +1
81	Tl	Thallium	post	+1, +3
82	Pb	Lead	post	+2, +4
83	Bi	Bismuth	post	+3
84	Po	Polonium	post	+2, +4
85	At	Astatine	halogen	-1
86	Rn	Radon	noble	0
87	Fr	Francium	alkali	+1
88	Ra	Radium	alkaline	+2
89	Ac	Actinium	actinide	+3
90	Th	Thorium	actinide	+4
91	Pa	Protactinium	actinide	+5
92	U	Uranium	actinide	+6, +4
93	Np	Neptunium	actinide	+5
94	Pu	Plutonium	actinide	+4
95	Am	Americium	actinide	+3
96	Cm	Curium	actinide	+3
97	Bk	Berkelium	actinide	+3

