

## ELEMENT SYMBOLS, ATOMIC NUMBER, ATOMIC WEIGHT AND GROUP

Symbol	Name	At No.	At. Wt.	Group	Comments
Ac	Actinium	89	(227)	Actinides	Radioactive metal
Ag	Silver	47	107.87	11	Transition metal
Al	Aluminium	13	26.98	13	Light metal
Ar	Argon	18	39.95	18	Inert gas
As	Arsenic	33	74.92	15	Metalloid, toxic
At	Astatine	85	(210)	17	Radioactive metal
Au	Gold	79	196.97	11	Transition metal
B	Boron	5	10.81	13	Metalloid
Ba	Barium	56	137.33	2	Alkaline-earth metal
Be	Beryllium	4	9.012	2	Alkaline-earth metal
Bi	Bismuth	83	208.98	15	Metal
Br	Bromine	35	79.90	17	Halogen, liquid
C	Carbon	6	12.01	14	Non metal
Ca	Calcium	20	40.08	2	Alkaline-earth metal
Cd	Cadmium	48	112.41	12	Transition metal, toxic
Ce	Cerium	58	140.12	Lanthanides	Light rare earth element
Cl	Chlorine	17	35.45	17	Halogen, gas
Co	Cobalt	27	58.93	9	Transition metal
Cr	Chromium	24	52.00	6	Transition metal
Cs	Caesium	55	132.91	1	Alkali metal, liquid above 28° C
Cu	Copper	29	63.55	11	Transition metal
Dy	Dysprosium	66	162.50	Lanthanides	Middle rare earth element
Er	Erbium	68	167.26	Lanthanides	Heavy rare earth element
Eu	Europium	63	151.96	Lanthanides	Middle rare earth element
F	Fluorine	9	19.00	17	Halogen, gas
Fe	Iron	26	55.85	8	Transition metal
Fr	Francium	87	(223)	1	Radioactive metal
Ga	Gallium	31	69.72	13	Metal, liquid above 28° C
Gd	Gadolinium	64	157.25	Lanthanides	Middle rare earth element
Ge	Germanium	32	72.64	14	Metalloid
H	Hydrogen	1	1.008	1	Gas,
He	Helium	2	4.003	18	Inert gas
Hf	Hafnium	72	178.49	4	Titanium group metal
Hg	Mercury	80	200.59	12	Transition metal, liquid, toxic
Ho	Holmium	67	164.93	Lanthanides	Middle rare earth element
I	Iodine	53	126.90	17	Halogen, solid
In	Indium	49	114.82	13	Metal

Ir	Iridium	77	192.22	9	Transition metal, PGE
K	Potassium	19	39.10	1	Alkali metal
Kr	Krypton	36	83.80	18	Inert gas
La	Lanthanum	57	138.91	Lanthanides	Light rare earth element
Li	Lithium	3	6.94	1	Alkali metal
Lu	Lutetium	71	174.97	Lanthanides	Heavy rare earth element
Mg	Magnesium	12	24.31	2	Alkaline-earth metal
Mn	Manganese	25	54.94	7	Transition metal
Mo	Molybdenum	42	95.94	6	Transition metal
N	Nitrogen	7	14.007	15	Gas non metal
Na	Sodium	11	22.99	1	Alkali metal
Nb	Niobium	41	92.91	5	Transition metal
Nd	Neodymium	60	144.24	Lanthanides	Light rare earth element
Ne	Neon	10	20.18	18	Inert gas
Ni	Nickel	28	58.69	10	Transition metal
Np	Neptunium	93	(237)	Actinides	Radioactive metal
O	Oxygen	8	16.00	16	Gas, non metal
Os	Osmium	76	190.23	8	Transition metal, PGE
P	Phosphorus	15	30.97	15	Non metal
Pa	Protactinium	91	231.04	Actinides	Radioactive metal
Pb	Lead	82	207.19	14	Metal, toxic
Pd	Palladium	46	106.42	10	Transition metal, PGE
Pm	Promethium	61	(145)	Lanthanides	Not naturally occurring
Po	Polonium	84	(210)	16	Metalloid
Pr	Praeseodymium	59	140.91	Lanthanides	Light rare earth element
Pt	Platinum	78	195.08	10	Transition metal, PGE
Pu	Plutonium	94	(244)	Actinides	Radioactive metal
Ra	Radium	88	(226)	2	Radioactive metal
Rb	Rubidium	37	85.47	1	Alkali metal
Re	Rhenium	75	186.21	7	Transition metal
Rh	Rhodium	45	102.91	9	Transition metal, PGE
Rn	Radon	86	(220)	18	Radioactive gas
Ru	Ruthenium	44	101.07	8	Transition metal, PGE
S	Sulphur	16	32.065	16	Non metal
Sb	Antimony	51	121.76	15	Metalloid, toxic
Sc	Scandium	21	44.96	3	Light metal
Se	Selenium	34	78.96	16	Non metal, toxic
Si	Silicon	14	28.09	14	Metalloid
Sm	Samarium	62	150.36	Lanthanides	Middle rare earth element
Sn	Tin	50	118.71	14	Metal/metalloid

Sr	Strontium	38	87.62	2	Alkaline-earth metal
Ta	Tantalum	73	180.95	5	Transition metal
Tb	Terbium	65	158.92	Lanthanides	Middle rare earth element
Te	Tellurium	52	127.60	16	Metalloid, toxic
Th	Thorium	90	232.04	Actinides	Radioactive metal
Ti	Titanium	22	47.87	4	Transition metal, TGM
Tl	Thallium	81	204.38	13	Metal, toxic
Tm	Thulium	69	168.93	Lanthanides	Heavy rare earth element
U	Uranium	92	238.03	Actinides	Radioactive metal
V	Vanadium	23	50.94	5	Transition metal
W	Tungsten	74	183.84	6	Transition metal
X	Xenon	54	131.29	18	Inert gas
Y	Yttrium	39	88.91	3	Grouped with REE
Yb	Ytterbium	70	173.04	Lanthanides	Heavy rare earth element
Zn	Zinc	30	65.41	12	Transition metal
Zr	Zirconium	40	91.22	4	Transition metal, TGM

The transition metals have valence electrons in more than one shell and can show multiple oxidation states.

PGE = platinum group element.

TGM = Titanium group metal.