

Z	Sym	Element
-999	!a	!a
1	H	Hydrogen
2	He	Helium
3	Li	Lithium
4	Be	Beryllium
5	B	Boron
6	C	Carbon
7	N	Nitrogen
8	O	Oxygen
9	F	Fluorine
10	Ne	Neon
11	Na	Sodium
12	Mg	Magnesium
13	Al	Aluminium
14	Si	Silicon
15	P	Phosphorus
16	S	Sulfur
17	Cl	Chlorine
18	Ar	Argon
19	K	Potassium
20	Ca	Calcium
21	Sc	Scandium
22	Ti	Titanium
23	V	Vanadium
24	Cr	Chromium
25	Mn	Manganese
26	Fe	Iron
27	Co	Cobalt
28	Ni	Nickel
29	Cu	Copper
30	Zn	Zinc
31	Ga	Gallium
32	Ge	Germanium
33	As	Arsenic
34	Se	Selenium
35	Br	Bromine
36	Kr	Krypton
37	Rb	Rubidium
38	Sr	Strontium
39	Y	Yttrium

40	Zr	Zirconium
41	Nb	Niobium
42	Mo	Molybdenum
43	Tc	Technetium
44	Ru	Ruthenium
45	Rh	Rhodium
46	Pd	Palladium
47	Ag	Silver
48	Cd	Cadmium
49	In	Indium
50	Sn	Tin
51	Sb	Antimony
52	Te	Tellurium
53	I	Iodine
54	Xe	Xenon
55	Cs	Caesium
56	Ba	Barium
57	La	Lanthanum
58	Ce	Cerium
59	Pr	Praseodymium
60	Nd	Neodymium
61	Pm	Promethium
62	Sm	Samarium
63	Eu	Europium
64	Gd	Gadolinium
65	Tb	Terbium
66	Dy	Dysprosium
67	Ho	Holmium
68	Er	Erbium
69	Tm	Thulium
70	Yb	Ytterbium
71	Lu	Lutetium
72	Hf	Hafnium
73	Ta	Tantalum
74	W	Tungsten
75	Re	Rhenium
76	Os	Osmium
77	Ir	Iridium
78	Pt	Platinum
79	Au	Gold
80	Hg	Mercury
81	Tl	Thallium
82	Pb	Lead
83	Bi	Bismuth
84	Po	Polonium

85	At	Astatine
86	Rn	Radon
87	Fr	Francium
88	Ra	Radium
89	Ac	Actinium
90	Th	Thorium
91	Pa	Protactinium
92	U	Uranium
93	Np	Neptunium
94	Pu	Plutonium
95	Am	Americium
96	Cm	Curium
97	Bk	Berkelium
98	Cf	Californium
99	Es	Einsteinium
100	Fm	Fermium
101	Md	Mendelevium
102	No	Nobelium
103	Lr	Lawrencium
104	Rf	Rutherfordium
105	Db	Dubnium
106	Sg	Seaborgium
107	Bh	Bohrium
108	Hs	Hassium
109	Mt	Meitnerium
110	Ds	Darmstadtium
111	Rg	Roentgenium
112	Cn	Copernicium
113	Uut	Ununtrium
114	Fl	Flerovium
115	Uup	Ununpentium
116	Lv	Livermorium
117	Uus	Ununseptium
118	Uuo	Ununoctium

Origin of name

[1]

[the Greek 'hydro' and 'genes' meaning water-forming](#)

the Greek, 'helios' meaning *sun*

the Greek 'lithos' meaning *stone*

the Greek name for beryl, 'beryllo'

[the Arabic 'buraq', which was the name for borax](#)

[the Latin 'carbo', meaning charcoal](#)

the Greek 'nitron' and 'genes' meaning *nitre-forming*

the Greek 'oxy' and 'genes' meaning *acid-forming*

the Latin 'fluere', meaning *to flow*

the Greek 'neos', meaning *new*

the English word *soda* (*natrium* in Latin)^[2]

Magnesia, a district of Eastern Thessaly in Greece

the Latin name for alum, 'alumen' meaning *bitter salt*

the Latin 'silex' or 'silicis', meaning *flint*

the Greek 'phosphoros', meaning *bringer of light*

Either from the Sanskrit 'sulvere', or the Latin 'sulfurium', both names for sulfur^[2]

the Greek 'chloros', meaning *greenish yellow*

the Greek, 'argos', meaning *idle*

[the English word potash \(kalium in Latin\)\[2\]](#)

the Latin 'calx' meaning *lime*

[Scandinavia \(with the Latin name Scandia\)](#)

[Titans, the sons of the Earth goddess of Greek mythology](#)

Vanadis, the old Norse name for the Scandinavian goddess Freyja

the Greek 'chroma', meaning *colour*

Either the Latin 'magnes', meaning *magnet* or from the *black magnesium oxide*, 'magnesia nigra'

[the Anglo-Saxon name iren \(ferrum in Latin\)](#)

[the German word 'kobald', meaning goblin](#)

the shortened of the German 'kupfernickel' meaning either *devil's copper* or *St. Nicholas's copper*

[the Old English name coper in turn derived from the Latin 'Cyprium aes', meaning a metal from Cyprus](#)

[the German, 'zinc', which may in turn be derived from the Persian word 'sing', meaning stone](#)

[France \(with the Latin name Gallia\)](#)

[Germany \(with the Latin name Germania\)](#)

[the Greek name 'arsenikon' for the yellow pigment orpiment](#)

[Moon \(with the Greek name selene\)](#)

the Greek 'bromos' meaning *stench*

the Greek 'kryptos', meaning *hidden*

the Latin 'rubidius', meaning *deepest red*

Strontian, a small town in Scotland

Ytterby, Sweden

the Arabic 'zargun', meaning *gold coloured*

Niobe, daughter of king Tantalus from Greek mythology

the Greek 'molybdos' meaning *lead*

the Greek 'tekhnetos' meaning *artificial*

[Russia \(with the Latin name Ruthenia\)](#)

the Greek 'rhodon', meaning *rose coloured*

[Athena \(Pallas Athena\), the goddess of wisdom from Greek mythology](#)

the Anglo-Saxon name *siolfur* (*argentum* in Latin)^[2]

the Latin name for the mineral calmine, 'cadmia'

the Latin 'indicum', meaning *violet* or *indigo*

the Anglo-Saxon word *tin* (*stannum* in Latin, meaning *hard*)

the Greek 'anti - monos', meaning *not alone* (*stibium* in Latin)

Earth, the third planet on solar system (with the Latin word *tellus*)

the Greek 'iodes' meaning *violet*

the Greek 'xenos' meaning *stranger*

the Latin 'caesius', meaning *sky blue*

the Greek 'barys', meaning *heavy*

the Greek 'lanthanein', meaning *to lie hidden*

Ceres, the Roman God of agriculture

the Greek 'prasios didymos' meaning *green twin*

the Greek 'neos didymos' meaning *new twin*

[Prometheus of Greek mythology who stole fire from the Gods and gave it to humans](#)

[Samaraskite, the name of the mineral from which it was first isolated](#)

[Europe](#)

[Johan Gadolin, chemist, physicist and mineralogist](#)

Ytterby, Sweden

the Greek 'dysprositos', meaning *hard to get*

[Stockholm, Sweden \(with the Latin name Holmia\)](#)

Ytterby, Sweden

[Thule, the ancient name for Scandinavia](#)

Ytterby, Sweden

[Paris, France \(with the Roman name Lutetia\)](#)

[Copenhagen, Denmark \(with the Latin name Hafnia\)](#)

[King Tantalus, father of Niobe from Greek mythology](#)

[the Swedish 'tung sten' meaning heavy stone \(W is wolfram, the old name of the tungsten mineral wolframite\)\[2\]](#)

Rhine, a river that flows from Grisons in the eastern Swiss Alps to the North Sea coast in the Netherlands (with the Latin name *Rhenia*)

the Greek 'osme', meaning *smell*

[Iris, the Greek goddess of the rainbow](#)

[the Spanish 'platina', meaning little silver](#)

[the Anglo-Saxon word gold, from Latin geolo, meaning yellow \(aurum in Latin, meaning glow of sunrise\)\[2\]](#)

Mercury, the first planet in the Solar System

the Greek 'thallos', meaning *a green twig*

[the Anglo-Saxon lead \(plumbum in Latin\)\[2\]](#)

the German 'Bisemutum' a corruption of 'Weisse Masse' meaning *white mass*

Poland, the native country of Marie Curie, who first isolated the element

the Greek 'astatos', meaning *unstable*

From *radium*, as it was first detected as an emission from radium during radioactive decay

France

the Latin 'radius', meaning *ray*

the Greek 'actinos', meaning *a ray*

[Thor, the Scandinavian god of war](#)

the Greek 'protos', meaning *first*, as a prefix to the element actinium, which is produced through the radioactive decay of protactinium

[Uranus, the seventh planet in the Solar System](#)

[Neptune, the eighth planet in the Solar System](#)

[Pluto, a dwarf planet in the Solar System](#)

[Americas, the continent where the element was first synthesized](#)

Pierre Curie, a physicist, and Marie Curie, a physicist and chemist

[Berkeley, California, USA, where the element was first synthesized](#)

[State of California, USA, where the element was first synthesized](#)

[Albert Einstein, physicist](#)

[Enrico Fermi, physicist](#)

[Dmitri Mendeleev, chemist and inventor](#)

[Alfred Nobel, chemist, engineer, innovator, and armaments manufacturer](#)

[Ernest O. Lawrence, physicist](#)

[Ernest Rutherford, chemist and physicist](#)

[Dubna, Russia](#)

[Glenn T. Seaborg, scientist](#)

[Niels Bohr, physicist](#)

[Hesse, Germany, where the element was first synthesized](#)

[Lise Meitner, physicist](#)

[Darmstadt, Germany, where the element was first synthesized](#)

[Wilhelm Conrad Röntgen, physicist](#)

[Nicolaus Copernicus, astronomer](#)

IUPAC systematic element name

[Georgy Flyorov, physicist](#)

IUPAC systematic element name

Lawrence Livermore National Laboratory, within the city of Livermore, California, USA, which collaborated with JINR on the discovery of the element

IUPAC systematic element name

IUPAC systematic element name

<u>Group</u>	<u>Period</u>	<u>Density</u> g / cm ³	<u>Melt</u> K	<u>Boil</u> K
-999	-999	-999	-999	-999
1	1	0	14.18	20.28
18	1	0	0.96	4.22
1	2	0.53	453.85	1615
2	2	1.85	1560.15	2742
13	2	2.34	2573.15	4200
14	2	2.27	3915 (sublimates)	3915 (sublimates)
15	2	0	63.29	77.36
16	2	0	50.5	90.2
17	2	0	53.63	85.03
18	2	0	24.7	27.07
1	3	0.97	371.15	1156
2	3	1.74	923.15	1363
13	3	2.7	933.4	2792
14	3	2.33	1683.15	3538
15	3	1.82	317.25	553
16	3	2.07	388.51	717.8
17	3	0	172.31	239.11
18	3	0	83.96	87.3
1	4	0.86	336.5	1032
2	4	1.54	1112.15	1757
3	4	2.99	1812.15	3109
4	4	4.54	1933.15	3560
5	4	6.11	2175.15	3680
6	4	7.15	2130.15	2944
7	4	7.44	1519.15	2334
8	4	7.87	1808.15	3134
9	4	8.86	1768.15	3200
10	4	8.91	1726.15	3186
11	4	8.96	1357.75	2835
12	4	7.13	692.88	1180
13	4	5.91	302.91	2477
14	4	5.32	1211.45	3106
15	4	5.78	1090.16	887
16	4	4.81	494.15	958
17	4	3.12	266.05	332
18	4	0	115.93	119.93
1	5	1.53	312.79	961
2	5	2.64	1042.15	1655
3	5	4.47	1799.15	3609

4	5	6.51	2125.15	4682
5	5	8.57	2741.15	5017
6	5	10.22	2890.15	4912
7	5	11.5	2473.15	5150
8	5	12.37	2523.15	4423
9	5	12.41	2239.15	3968
10	5	12.02	1825.15	3236
11	5	10.5	1234.15	2435
12	5	8.69	594.33	1040
13	5	7.31	429.91	2345
14	5	7.29	505.21	2875
15	5	6.69	904.05	1860
16	5	6.23	722.8	1261
17	5	4.93	386.65	457.4
18	5	0.01	161.45	165.03
1	6	1.87	301.7	944
2	6	3.59	1002.15	2170
	6	6.15	1193.15	3737
	6	6.77	1071.15	3716
	6	6.77	1204.15	3793
	6	7.01	1289.15	3347
	6	7.26	1204.15	3273
	6	7.52	1345.15	2067
	6	5.24	1095.15	1802
	6	7.9	1585.15	3546
	6	8.23	1630.15	3503
	6	8.55	1680.15	2840
	6	8.8	1743.15	2993
	6	9.07	1795.15	3503
	6	9.32	1818.15	2223
	6	6.97	1097.15	1469
3	6	9.84	1936.15	3675
4	6	13.31	2500.15	4876
5	6	16.65	3269.15	5731
6	6	19.25	3680.15	5828
7	6	21.02	3453.15	5869
8	6	22.61	3300.15	5285
9	6	22.56	2716.15	4701
10	6	21.46	2045.15	4098
11	6	19.28	1337.73	3129
12	6	13.53	234.43	630
13	6	11.85	577.15	1746
14	6	11.34	600.75	2022
15	6	9.81	544.67	1837
16	6	9.32	527.15	1235

17	6	7	575.15	610
18	6	0.01	202.15	211.3
1	7	1.87	300.15	950
2	7	5.5	973.15	2010
	7	10.07	1323.15	3471
	7	11.72	2028.15	5061
	7	15.37	1873.15	4300
	7	18.95	1405.15	4404
	7	20.45	913.15	4273
	7	19.84	913.15	3501
	7	13.69	1267.15	2880
	7	13.51	1340.15	3383
	7	14.79	1259.15	983
	7	15.1	1925.15	1173
	7	13.5	1133.15 –	
	7–		1800 –	
	7–		1100 –	
	7–		1100 –	
3	7–		1900 –	
4	7–	–	–	
5	7–	–	–	
6	7–	–	–	
7	7–	–	–	
8	7–	–	–	
9	7–	–	–	
10	7–	–	–	
11	7–	–	–	
12	7–	–	–	
13	7–	–	–	
14	7–	–	–	
15	7–	–	–	
16	7–	–	–	
17	7–	–	–	
18	7–	–	–	