



Characteristics of Elements A

Compilation of technical data.
 PAI does not assume any responsibility.

Element	Symbol	Atomic Number	Mass Number	Melting Point (°C)	Boiling Point (°C)
Actinium	Ac	89	(227)	1600†	
Aluminum	Al	13	27	659.7	2057
Americium	Am	95	(243)		
Antimony (Stibium)	Sb	51	121	630.5	1380
Argon	Ar	18	40	- 189.2	- 185.7
Arsenic	As	33	75	sublimes	at 615
Astatine	At	85	(210)		
Barium	Ba	56	138	850	1140
Berkelium	Bk	97	(247)		
Beryllium	Be	4	9	1278±5	2970
Bismuth	Bi	83	209	271.3	1560±5
Boron	B	5	11	2300	2550
Bromine	Br	35	79	- 7.2	58.78
Cadmium	Cd	48	114	320.9	767±2
Calcium	Ca	20	40	842±8	1240
Californium	Cf	98	(249)		
Carbon	C	6	12	>3550	4200
Cerium	Ce	58	140	804	1400
Cesium	Cs	55	133	28.5	670
Chlorine	Cl	17	35	- 103±5	- 34.6
Chromium	Cr	24	52	1890	2480
Cobalt	Co	27	59	1495	2900
Copper	Cu	29	63	1083	2336
Curium	Cm	96	(248)		
Dysprosium	Dy	66	164		
Einsteinium	Es	99	(254)		
Erbium	er	68	166		
Europium	Eu	63	153	1150±50	
Fermium	Fm	100	(252)		
Fluorine	F	9	19	- 223	- 188
Francium	Fr	87	(223)		
Gadolinium	Gd	64	158		
Gallium	Ga	31	69	29.78	1983
Germanium	Ge	32	74	958.5	2700
Gold	Au	79	197	1063	2600
Hafnium	Hf	72	180	1700†	>3200
Helium	He	2	4	- 272	- 268.9
Holmium	Ho	67	165		
Hydrogen	H	1	1	- 259.14	- 252.8
Indium	In	49	115	156.4	2000±10
Iodine	I	53	127	113.7	184.35
Iridium	Ir	77	193	2454	>4800
Iron	Fe	26	56	1535	3000
Krypton	Kr	36	84	- 156.6	- 152.9
Lanthanum	La	57	139	826	
Lawrencium	Lw	103	(257)		
Lead	Pb	82	208	327.43	1620
Lithium	Li	3	7	186	1336±5
Lutetium	Lu	71	175		
Magnesium	Mg	12	24	651	1107
Manganese	Mn	25	55	1260	1900
Mendelevium	Mv	101	(256)		
Mercury	Hg	80	202	- 38.87	356.58
Molybdenum	Mo	42	98	2620±10	4800
Neodymium	Nd	60	142	840	

* Mass number shown is that of the stable isotope most common in nature. Mass numbers shown in parentheses designate the isotope with the longest half-life (slowest rate of radio-active decay) for those elements having no stable isotope.

† Calculated.
 > Greater than.



Characteristics of Elements B

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Element	Symbol	Atomic Number	Mass Number	Melting Point (°C)	Boiling Point (°C)
Neon	Ne	10	20	-248.67	-245.9
Neptunium	Np	93	(237)		
Nickel	Ni	28	58	1455	2900
Niobium	Nb	41	93	2500±50	3700
Nitrogen	N	7	14	-209.86	-195.8
Nobelium	No	102	(253)		
Osmium	Os	76	192	2700	>5300
Oxygen	O	8	16	-218.4	-182.86
Palladium	Pd	46	106	1549.4	2000
Phosphorus	P	15	31		
Platinum	Pt	78	195	1773.5	4300
Plutonium	Pu	94	(242)		
Polonium	Po	84	(209)		
Potassium	K	19	39	63.3	760
Praseodymium	Pr	59	141	940	
Promethium	Pm	61	(145)		
Protactinium	Pa	91	(231)		
Radium	Ra	88	(226)	700	1140
Radon	Rn	86	(222)	-71	-61.8
Rhenium	Re	75	187	3167±60	
Rhodium	Rh	45	103	1966±3	>2500
Rubidium	Rb	37	85	38.5	700
Ruthenium	Ru	44	102	2450	2700
Samarium	Sm	62	152	>1300	
Scandium	Sc	21	45	1200	2400
Selenium	Se	34	80	217	688
Silicon	Si	14	28	1420	2355
Silver	Ag	47	107	960.8	1950
Sodium	Na	11	23	97.5	880
Strontium	Sr	38	88	800	1150
Sulfur	S	16	32		
Tantalum	Ta	73	180	2996±50	c.4100
Technetium	Tc	43	(99)		
Tellurium	Te	52	130	452	1390
Terbium	Tb	65	159	327±5	
Thallium	Tl	81	205	302	1457±10
Thorium	Th	90	232	1845	4500
Thulium	Tm	69	169		
Tin	Sn	50	120	231.89	2270
Titanium	Ti	22	48	1800	>3000
Tungsten (Wolfram)	W	74	184	3370	5900
Uranium	U	92	238	c.1133	
Vanadium	V	23	51	1710	3000
Xenon	Xe	54	132	-112	-107.1
Ytterbium	Yb	70	174	1800	
Yttrium	Y	39	89	1490	2500
Zinc	Zn	30	64	419.47	907
Zirconium	Zr	40	90	1857	>2900

Greek Alphabet

A α Alpha	Δ δ Delta	Η η Eta	Κ κ Kappa	Ν ν Nu	Π π Pi	Τ τ Tau	Χ χ Chi
B β Beta	Ε ε Epsilon	Θ θ Theta	Λ λ Lambda	Ξ ξ Xi	Ρ ρ Rho	Υ υ Upsilon	Ψ ψ Psi
Γ γ Gamma	Ζ ζ Zeta	Ι ι Iota	Μ μ Mu	Ο ο Omicron	Σ σ Sigma	Φ φ Phi	Ω ω Omega

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