

元素の熱特性早見表



Group 1	Group 2																Group 3										Group 4										Group 5										Group 6										Group 7										Group 8										Group 9										Group 10										Group 11										Group 12										Group 13										Group 14										Group 15										Group 16										Group 17										Group 18	
1 1 1.01 -259.1 H 116.1 -253 1s ¹ 0.0000899 13.60	3 lithium 6.94 4 beryllium 9.01 3.582 180.5 1.825 1278 84.70 Li 432.3 201 Be 1387.0 56 -10 ⁻⁶ 1342 12.3 -10 ⁻⁶ 2477 [He]2s ¹ 0.534 5.39 [He]2s ² 1.848 9.32																11 sodium 22.99 12 magnesium 24.31 1.228 97.7 1.023 650										19 potassium 39.10 20 calcium 40.08 0.757 63.4 0.647 842 0.568 1541										21 scandium 44.96 22 titanium 47.87 0.523 1541										23 vanadium 50.94 24 chromium 52.00 1.857 0.479 1244 0.449 1535										25 manganese 54.94 26 iron 55.85 0.421 1495 0.444 1535										27 cobalt 58.93 28 nickel 58.69 0.385 1455 0.385 1084.6										29 copper 63.55 30 zinc 65.41 0.388 419.5 0.371 419.5										31 gallium 69.72 32 germanium 72.61 0.329 938.3 0.329 938.3										33 arsenic 74.92 34 selenium 78.96 0.321 221 0.226 226										35 bromine 79.90 36 krypton 83.80 -7.3 0.248 -157.4										2 helium 4.00 5.193 -272.2 0.15 He 5.3 -268.9 1s ² 0.0001785 24.59																																																			
2 3 Li 6.94 4 Be 9.01 3.582 180.5 1.825 1278 84.70 Li 432.3 201 Be 1387.0 56 -10 ⁻⁶ 1342 12.3 -10 ⁻⁶ 2477 [He]2s ¹ 0.534 5.39 [He]2s ² 1.848 9.32	3 lithium 6.94 4 beryllium 9.01 3.582 180.5 1.825 1278 84.70 Li 432.3 201 Be 1387.0 56 -10 ⁻⁶ 1342 12.3 -10 ⁻⁶ 2477 [He]2s ¹ 0.534 5.39 [He]2s ² 1.848 9.32																11 sodium 22.99 12 magnesium 24.31 1.228 97.7 1.023 650										19 potassium 39.10 20 calcium 40.08 0.757 63.4 0.647 842 0.568 1541										21 scandium 44.96 22 titanium 47.87 0.523 1541										23 vanadium 50.94 24 chromium 52.00 1.857 0.479 1244 0.449 1535										25 manganese 54.94 26 iron 55.85 0.421 1495 0.444 1535										27 cobalt 58.93 28 nickel 58.69 0.385 1455 0.385 1084.6										29 copper 63.55 30 zinc 65.41 0.388 419.5 0.371 419.5										31 gallium 69.72 32 germanium 72.61 0.329 938.3 0.329 938.3										33 arsenic 74.92 34 selenium 78.96 0.321 221 0.226 226										35 bromine 79.90 36 krypton 83.80 -7.3 0.248 -157.4										2 helium 4.00 5.193 -272.2 0.15 He 5.3 -268.9 1s ² 0.0001785 24.59																																																			
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4 K 39.10 20 Ca 40.08 0.757 63.4 0.647 842 0.568 1541	3 lithium 6.94 4 beryllium 9.01 3.582 180.5 1.825 1278 84.70 Li 432.3 201 Be 1387.0 56 -10 ⁻⁶ 1342 12.3 -10 ⁻⁶ 2477 [He]2s ¹ 0.534 5.39 [He]2s ² 1.848 9.32																11 sodium 22.99 12 magnesium 24.31 1.228 97.7 1.023 650										19 potassium 39.10 20 calcium 40.08 0.757 63.4 0.647 842 0.568 1541										21 scandium 44.96 22 titanium 47.87 0.523 1541										23 vanadium 50.94 24 chromium 52.00 1.857 0.479 1244 0.449 1535										25 manganese 54.94 26 iron 55.85 0.421 1495 0.444 1535										27 cobalt 58.93 28 nickel 58.69 0.385 1455 0.385 1084.6										29 copper 63.55 30 zinc 65.41 0.388 419.5 0.371 419.5										31 gallium 69.72 32 germanium 72.61 0.329 938.3 0.329 938.3										33 arsenic 74.92 34 selenium 78.96 0.321 221 0.226 226										35 bromine 79.90 36 krypton 83.80 -7.3 0.248 -157.4										2 helium 4.00 5.193 -272.2 0.15 He 5.3 -268.9 1s ² 0.0001785 24.59																																																			
5 Rb 85.47 38 Sr 87.62 0.363 39.3 0.301 777 17.2 0.298 1526 0.278 128.2 22.7	3 lithium 6.94 4 beryllium 9.01 3.582 180.5 1.825 1278 84.70 Li 432.3 201 Be 1387.0 56 -10 ⁻⁶ 1342 12.3 -10 ⁻⁶ 2477 [He]2s ¹ 0.534 5.39 [He]2s ² 1.848 9.32																11 sodium 22.99 12 magnesium 24.31 1.228 97.7 1.023 650										19 potassium 39.10 20 calcium 40.08 0.757 63.4 0.647 842 0.568 1541										21 scandium 44.96 22 titanium 47.87 0.523 1541										23 vanadium 50.94 24 chromium 52.00 1.857 0.479 1244 0.449 1535										25 manganese 54.94 26 iron 55.85 0.421 1495 0.444 1535										27 cobalt 58.93 28 nickel 58.69 0.385 1455 0.385 1084.6										29 copper 63.55 30 zinc 65.41 0.388 419.5 0.371 419.5										31 gallium 69.72 32 germanium 72.61 0.329 938.3 0.329 938.3										33 arsenic 74.92 34 selenium 78.96 0.321 221 0.226 226										35 bromine 79.90 36 krypton 83.80 -7.3 0.248 -157.4										2 helium 4.00 5.193 -272.2 0.15 He 5.3 -268.9 1s ² 0.0001785 24.59																																																			
6 Cs 132.91 56 Ba 137.33 0.242 28.5 0.204 727 15.8 18.4 56.4 291 -10 ⁻⁶ 671 19 -10 ⁻⁶ 1640 [Xe]6s ¹ 1.879 3.89 [Xe]6s ² 3.62 5.21	3 lithium 6.94 4 beryllium 9.01 3.582 180.5 1.825 1278 84.70 Li 432.3 201 Be 1387.0 56 -10 ⁻⁶ 1342 12.3 -10 ⁻⁶ 2477 [He]2s ¹ 0.534 5.39 [He]2s ² 1.848 9.32																11 sodium 22.99 12 magnesium 24.31 1.228 97.7 1.023 650										19 potassium 39.10 20 calcium 40.08 0.757 63.4 0.647 842 0.568 1541										21 scandium 44.96 22 titanium 47.87 0.523 1541										23 vanadium 50.94 24 chromium 52.00 1.857 0.479 1244 0.449 1535										25 manganese 54.94 26 iron 55.85 0.421 1495 0.444 1535										27 cobalt 58.93 28 nickel 58.69 0.385 1455 0.385 1084.6										29 copper 63.55 30 zinc 65.41 0.388 419.5 0.371 419.5										31 gallium 69.72 32 germanium 72.61 0.329 938.3 0.329 938.3										33 arsenic 74.92 34 selenium 78.96 0.321 221 0.226 226										35 bromine 79.90 36 krypton 83.80 -7.3 0.248 -157.4										2 helium 4.00 5.193 -272.2 0.15 He 5.3 -268.9 1s ² 0.0001785 24.59																																																			
7 Fr 223.02 88 Ra 226.03 0.24 27 0.094 700 15 Fr 16.4 18.6 Ra 37.0 291 -10 ⁻⁶ 677 - 1737 [Rn]7s ¹ 1.870 - [Rn]7s ² 5.5 5.28	3 lithium 6.94 4 beryllium 9.01 3.582 180.5 1.825 1278 84.70 Li 432.3 201 Be 1387.0 56 -10 ⁻⁶ 1342 12.3 -10 ⁻⁶ 2477 [He]2s ¹ 0.534 5.39 [He]2s ² 1.848 9.32																11 sodium 22.99 12 magnesium 24.31 1.228 97.7 1.023 650										19 potassium 39.10 20 calcium 40.08 0.757 63.4 0.647 842 0.568 1541										21 scandium 44.96 22 titanium 47.87 0.523 1541										23 vanadium 50.94 24 chromium 52.00 1.857 0.479 1244 0.449 1535										25 manganese 54.94 26 iron 55.85 0.421 1495 0.444 1535										27 cobalt 58.93 28 nickel 58.69 0.385 1455 0.385 1084.6										29 copper 63.55 30 zinc 65.41 0.388 419.5 0.371 419.5										31 gallium 69.72 32 germanium 72.61 0.329 938.3 0.329 938.3										33 arsenic 74.92 34 selenium 78.96 0.321 221 0.226 226										35 bromine 79.90 36 krypton 83.80 -7.3 0.248 -157.4										2 helium 4.00 5.193 -272.2 0.15 He 5.3 -268.9 1s ² 0.0001785 24.59																																																			

Alkaline earth metals	Transition metals	Semimetals	Solid elements
Alkali metals	Lanthanides	Inert gases	Liquid elements
Nonmetals	Actinides		Gaseous elements
Halogens	Other metals		Radioactive

Atomic Number	Name	Atomic Mass
Specific Heat (J/(g·K))	Element values generally valid for standard conditions at RT	Melting Point (°C)
Thermal Conductivity (W/(m·K))		Heat of Fusion (J/g)
Expansion Coefficient (K)		Boiling Point (°C)
Electron Configuration		Density (g/cm ³)
		Ionization Energy (eV)

Atomic Number	Name	Atomic Mass
57 lanthanum 138.91	58 cerium 140.12	59 praseodymium 140.91
60 neodymium 144.24	61 promethium 146.92	62 samarium 150.36
63 europium 151.96	64 gadolinium 157.25	65 terbium 158.93
66 dysprosium 162.50	67 holmium 164.93	68 erbium 167.26
69 thulium 168.93	70 ytterbium 173.04	71 lutetium 174.97
72 hafnium 178.49	73 tantalum 180.95	74 tungsten 183.84
75 rhenium 186.21	76 osmium 190.23	77 iridium 192.22
78 platinum 195.08	79 gold 196.97	80 mercury 200.59
81 thallium 204.38	82 lead 207.20	83 bismuth 208.98
84 polonium 209.98	85 astatine 209.99	86 radon 222
87 francium 223.02	88 radium 226.03	
89 actinium 227.03	90 thorium 232.04	91 protactinium 231.04
92 uranium 238.03	93 neptunium 237.05	94 plutonium 244.06
95 americium 243	96 curium 247.07	97 berkelium 247
98 californium 251	99 einsteinium 252	100 fermium 257.10
101 mendelevium 258	102 nobelium 259	103 lawrencium 260.11
104 rutherfordium 261	105 dubnium 262	106 seaborgium 263
107 bohrium 264	108 hassium 265	109 meitnerium 266
110 darmstadtium 267	111 roentgenium 268	112 copernicium 269
113 nihonium 270	114 flerovium 271	115 moscovium 272
116 livermorium 273	117 tennessine 274	118 oganesson 276