

A Periodic Table of the Elements for Students

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|-----------------------|---|------------------------|--|--------------------------|---|------------------------|---|-----------------------|---|---------------------------|--|--------------------------|--|--------------------------|--|--------------------------|---|---------------------------|--|------------------------|---|-------------------------|---|------------|---|------------|--|------------|--|------------|--|------------|---|------------|--|
| | | | | | | | | | | 18 VIIIA | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 IA | | | | | | | | | | | | | | | | | | 18 VIIIA | | | | | | | | | | | | | | | | | |
| 1 | H Hydrogen 1.008 g 2.20 1+, 1- (Hydride) 1s ¹ | 2 IIA | | | | | | | | | | | | | | | | 2 | He Helium 4.003 g * 1s ² | | | | | | | | | | | | | | | | |
| 3 | Li Lithium 6.941 g 0.98 1+ | 4 | Be Beryllium 9.012 g 1.57 2+ | | | | | | | | | | | | | | | 5 | B Boron 10.81 g 2.04 * [He]2s ² 2p ¹ | 6 | C Carbon 12.01 g 2.55 * [He]2s ² 2p ² | 7 | N Nitrogen 14.01 g 3.04 3- (Nitride) 3- (Phosphide) [He]2s ² 2p ³ | 8 | O Oxygen 16.00 g 3.44 2- (Oxide) [He]2s ² 2p ⁴ | 9 | F Fluorine 19.00 g 3.98 1- (Fluoride) [He]2s ² 2p ⁵ | 10 | Ne Neon 20.18 g * [He]2s ² 2p ⁶ | | | | | | |
| 11 | Na Sodium 22.99 g 0.93 1+ | 12 | Mg Magnesium 24.31 g 1.31 2+ | 3 IIIB | | 4 IVB | | 5 VB | | 6 VIB | | 7 VII B | | 8 VIIIB | | 9 VIIIB | | 10 VIIIB | | 11 IB | | 12 IIB | | 13 | Al Aluminum 26.98 g 1.61 3+ | 14 | Si Silicon 28.09 g 1.90 * [Ne]3s ² 3p ² | 15 | P Phosphorus 30.97 g 2.19 3- (Arsenide) [Ne]3s ² 3p ³ | 16 | S Sulfur 32.07 g 2.58 2- (Sulfide) [Ne]3s ² 3p ⁴ | 17 | Cl Chlorine 35.45 g 3.16 1- (Chloride) [Ne]3s ² 3p ⁵ | 18 | Ar Argon 39.95 g * [Ne]3s ² 3p ⁶ |
| 19 | K Potassium 39.10 g 0.82 1+ | 20 | Ca Calcium 40.08 g 1.00 2+ | 21 | Sc Scandium 44.96 g 1.36 3+ | 22 | Ti Titanium 47.87 g 1.54 4+ (IV), 3+ (III) [Ar]3d ² 4s ² | 23 | V Vanadium 50.94 g 1.63 3+ (III), 5+ (V) [Ar]3d ³ 4s ² | 24 | Cr Chromium 52.00 g 1.66 3+ (III), 2+ (II) [Ar]3d ⁵ 4s ¹ | 25 | Mn Manganese 54.94 g 1.55 2+ (II), 4+ (IV) [Ar]3d ⁵ 4s ² | 26 | Fe Iron 55.85 g 1.83 3+ (III), 2+ (II) [Ar]3d ⁶ 4s ² | 27 | Co Cobalt 58.93 g 1.88 2+ (II), 3+ (III) [Ar]3d ⁷ 4s ² | 28 | Ni Nickel 58.69 g 1.91 2+ (II), 3+ (III) [Ar]3d ⁸ 4s ² | 29 | Cu Copper 63.55 g 1.90 2+ (II), 1+ (I) [Ar]3d ¹⁰ 4s ¹ | 30 | Zn Zinc 65.38 g 1.65 2+ | 31 | Ga Gallium 69.72 g 1.81 3+ | 32 | Ge Germanium 72.64 g 2.01 4+ | 33 | As Arsenic 74.92 g 2.18 3- (Arsenide) [Ar]3d ¹⁰ 4s ² 4p ³ | 34 | Se Selenium 78.96 g 2.55 2- (Selenide) [Ar]3d ¹⁰ 4s ² 4p ⁴ | 35 | Br Bromine 79.90 g 2.96 1- (Bromide) [Ar]3d ¹⁰ 4s ² 4p ⁵ | 36 | Kr Krypton 83.80 g * [Ar]3d ¹⁰ 4s ² 4p ⁶ |
| 37 | Rb Rubidium 85.47 g 0.82 1+ | 38 | Sr Strontium 87.62 g 0.95 2+ | 39 | Y Yttrium 88.91 g 1.22 3+ | 40 | Zr Zirconium 91.22 g 1.33 4+ | 41 | Nb Niobium 92.91 g 1.6 5+ (V), 3+ (III) [Kr]4d ⁴ 5s ¹ | 42 | Mo Molybdenum 95.96 g 2.16 6+ | 43 | Tc Technetium 98.91 g 1.9 7+ | 44 | Ru Ruthenium 101.07 g 2.2 3+ (III), 4+ (IV) [Kr]4d ⁷ 5s ¹ | 45 | Rh Rhodium 102.91 g 2.28 3+ | 46 | Pd Palladium 106.42 g 2.20 2+ (II), 4+ (IV) [Kr]4d ¹⁰ | 47 | Ag Silver 107.87 g 1.93 1+ | 48 | Cd Cadmium 112.41 g 1.69 2+ | 49 | In Indium 114.82 g 1.78 3+ | 50 | Sn Tin 118.71 g 1.96 4+ (IV), 2+ (II) [Kr]4d ¹⁰ 5s ² 5p ² | 51 | Sb Antimony 121.76 g 2.05 3+ (III), 5+ (V) [Kr]4d ¹⁰ 5s ² 5p ³ | 52 | Te Tellurium 127.60 g 2.1 2- (Telluride) [Kr]4d ¹⁰ 5s ² 5p ⁴ | 53 | I Iodine 126.90 g 2.66 1- (Iodide) [Kr]4d ¹⁰ 5s ² 5p ⁵ | 54 | Xe Xenon 131.29 g 2.6 * [Kr]4d ¹⁰ 5s ² 5p ⁶ |
| 55 | Cs Cesium 132.91 g 0.79 1+ | 56 | Ba Barium 137.33 g 0.89 2+ | 57 | La Lanthanum 138.94 g 1.10 3+ | 72 | Hf Hafnium 178.49 g 1.3 4+ | 73 | Ta Tantalum 180.95 g 1.5 5+ | 74 | W Tungsten 183.84 g 2.36 6+ | 75 | Re Rhenium 186.21 g 1.9 7+ | 76 | Os Osmium 190.23 g 2.2 4+ | 77 | Ir Iridium 192.22 g 2.20 4+ | 78 | Pt Platinum 195.08 g 2.28 4+ (IV), 2+ (II) [Xe]4f ¹⁴ 5d ⁹ 6s ¹ | 79 | Au Gold 196.97 g 2.54 3+ (III), 1+ (I) [Xe]4f ¹⁴ 5d ¹⁰ 6s ¹ | 80 | Hg Mercury 200.59 g 2.00 2+ (II), 1+ (I) [Xe]4f ¹⁴ 5d ¹⁰ 6s ² | 81 | Tl Thallium 204.38 g 2.04 3+ (III), 1+ (I) [Xe]4f ¹⁴ 5d ¹⁰ 6s ² 6p ¹ | 82 | Pb Lead 207.2 g 2.33 2+ (II), 4+ (IV) [Xe]4f ¹⁴ 5d ¹⁰ 6s ² 6p ² | 83 | Bi Bismuth 208.98 g 2.02 3+ (III), 5+ (V) [Xe]4f ¹⁴ 5d ¹⁰ 6s ² 6p ³ | 84 | Po Polonium 208.98 g 2.0 2+ (II), 4+ (IV) [Xe]4f ¹⁴ 5d ¹⁰ 6s ² 6p ⁴ | 85 | At Astatine 209.99 g 2.2 1- (Astatide) [Xe]4f ¹⁴ 5d ¹⁰ 6s ² 6p ⁵ | 86 | Rn Radon 222.02 g * [Xe]4f ¹⁴ 5d ¹⁰ 6s ² 6p ⁶ |
| 87 | Fr Francium 223.02 g 0.7 1+ | 88 | Ra Radium 226.03 g 0.9 2+ | 89 | Ac Actinium 227.03 g 1.1 3+ | 104 | Rf Rutherfordium 261.11 g ? ? | 105 | Db Dubnium 262.11 g ? ? | 106 | Sg Seaborgium 263.12 g ? ? | 107 | Bh Bohrium 262.12 g ? ? | 108 | Hs Hassium (264 g) ? ? | 109 | Mt Meitnerium 266.14 g ? ? | 110 | Ds Darmstadtium (269 g) ? ? | 111 | Rg Roentgenium (272 g) ? ? | 112 | Cp Copernicium (277 g) ? ? | 113 | Uut Ununtrium (284 g) ? ? | 114 | Fl Flerovium (289 g) ? ? | 115 | Uup Ununpentium (288 g) ? ? | 116 | Lv Livermorium (292 g) ? ? | 117 | Uuq Ununseptium (293 g) ? ? | 118 | Uuo Ununoctium (294 g) ? * |
| | | | | Lanthanide Series | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | 58 | Ce Cerium 140.12 g 1.12 3+ [Xe]4f ¹ 5d ¹ 6s ² | 59 | Pr Praseodymium 140.91 g 1.13 3+ [Xe]4f ³ 6s ² | 60 | Nd Neodymium 144.24 g 1.14 3+ [Xe]4f ⁴ 6s ² | 61 | Pm Promethium 144.91 g 1.13 3+ [Xe]4f ⁶ 6s ² | 62 | Sm Samarium 150.36 g 1.17 3+ (III), 2+ (II) [Xe]4f ⁶ 6s ² | 63 | Eu Europium 151.96 g 1.2 3+ (III), 2+ (II) [Xe]4f ⁷ 6s ² | 64 | Gd Gadolinium 157.25 g 1.20 3+ [Xe]4f ⁷ 5d ¹ 6s ² | 65 | Tb Terbium 158.93 g 1.2 3+ [Xe]4f ⁹ 6s ² | 66 | Dy Dysprosium 162.50 g 1.22 3+ [Xe]4f ¹⁰ 6s ² | 67 | Ho Holmium 164.93 g 1.23 3+ [Xe]4f ¹¹ 6s ² | 68 | Er Erbium 167.26 g 1.24 3+ [Xe]4f ¹² 6s ² | 69 | Tm Thulium 168.93 g 1.25 3+ [Xe]4f ¹³ 6s ² | 70 | Yb Ytterbium 173.05 g 1.1 3+ (III), 2+ (II) [Xe]4f ¹⁴ 6s ² | 71 | Lu Lutetium 174.97 g 1.27 3+ [Xe]4f ¹⁴ 5d ¹ 6s ² | | | | |
| | | | | Actinide Series | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | 90 | Th Thorium 232.04 g 1.3 4+ [Rn]6d ² 7s ² | 91 | Pa Protactinium 231.04 g 1.5 5+ (V), 4+ (IV) [Rn]5f ² 6d ¹ 7s ² | 92 | U Uranium 238.03 g 1.38 6+ (VI), 4+ (IV) [Rn]5f ³ 6d ¹ 7s ² | 93 | Np Neptunium 237.05 g 1.36 5+ [Rn]5f ⁴ 6d ¹ 7s ² | 94 | Pu Plutonium 244.06 g 1.28 4+ (IV), 6+ (VI) [Rn]5f ⁶ 7s ² | 95 | Am Americium 243.06 g 1.3 3+ (III), 4+ (IV) [Rn]5f ⁷ 7s ² | 96 | Cm Curium (247 g) 1.3 3+ [Rn]5f ⁷ 6d ¹ 7s ² | 97 | Bk Berkelium 247.07 g 1.3 3+ (III), 4+ (IV) [Rn]5f ⁹ 7s ² | 98 | Cf Californium 251.08 g 1.3 3+ [Rn]5f ¹⁰ 7s ² | 99 | Es Einsteinium 252.03 g 1.3 3+ [Rn]5f ¹¹ 7s ² | 100 | Fm Fermium 257.10 g 1.3 3+ [Rn]5f ¹² 7s ² | 101 | Md Mendelevium 258.01 g 1.3 2+ (II), 3+ (III) [Rn]5f ¹³ 7s ² | 102 | No Nobelium 259.10 g 1.3 2+ (II), 3+ (III) [Rn]5f ¹⁴ 7s ² | 103 | Lr Lawrencium 260.11 g 1.3 3+ [Rn]5f ¹⁴ 6d ¹ 7s ² | | | | |

Reading Left-to-right and top-to-bottom: atomic number, symbol, element name, molar mass, electronegativity, ionic charges and stock system names, and electron configuration. Background colors indicate the filling of an **s-sublevel**, **p-sublevel**, **d-sublevel**, or **f-sublevel** according to the diagonal rule. **Boldfaced electron configurations** indicate deviation from the diagonal rule.

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| | | | | | | | | | | | | | | | | | | | |
|--|--|--|---|--|--|--|---|---|---|--|--|---|--|---|---|--|--|---|---|
| 1 IA | | | | | | | | | | | | | | | | | 18 VIIIA | | |
| 1 H Hydrogen hex 0.0899 g/L 1312 kJ 32 pm -259°C -253°C | Alkaline Earth Metals | | | | | | | | | | | | | | | | 2 He Helium hex 0.179 g/L 2372 kJ 46 pm -272°C -269°C | | |
| 3 Li Lithium bcc 0.534 g/cm ³ 520 kJ 133 pm 181°C 1342°C | 4 Be Beryllium hex 1.85 g/cm ³ 900 kJ 102 pm 1287°C 2468°C | Transition Metals | | | | | | | | | | | | 13 B Boron rho 2.46 g/cm ³ 801 kJ 85 pm 2075°C 4000°C | 14 C Carbon hex 2.26 g/cm ³ 1087 kJ 75 pm * | 15 N Nitrogen hex 1.25 g/L 1402 kJ 71 pm -210°C -196°C | 16 O Oxygen cub 1.43 g/L 1314 kJ 63 pm -219°C -183°C | 17 F Fluorine cub 1.70 g/L 1681 kJ 64 pm -220°C -188°C | 18 Ne Neon fcc 0.900 g/L 2081 kJ 67 pm -249°C -246°C |
| 11 Na Sodium bcc 0.971 g/cm ³ 496 kJ 155 pm 98°C 883°C | 12 Mg Magnesium hex 1.74 g/cm ³ 738 kJ 139 pm 650°C 1090°C | 3 Al Aluminum fcc 2.70 g/cm ³ 660 kJ 126 pm 660°C 2519°C | 4 Si Silicon fcc 2.33 g/cm ³ 787 kJ 116 pm 1414°C 3265°C | 5 P Phosphorus mon 1.82 g/cm ³ 1012 kJ 111 pm 44°C 281°C | 6 S Sulfur ort 1.96 g/cm ³ 1000 kJ 103 pm 115°C 445°C | 7 Cl Chlorine ort 3.21 g/L 1251 kJ 99 pm -102°C -34°C | 8 Ar Argon fcc 1.78 g/L 1521 kJ 96 pm -189°C -186°C | | | | | | | | | | | | |
| 19 K Potassium bcc 0.856 g/cm ³ 419 kJ 196 pm 64°C 759°C | 20 Ca Calcium fcc 1.55 g/cm ³ 590 kJ 171 pm 842°C 1484°C | 21 Sc Scandium hex 2.99 g/cm ³ 633 kJ 148 pm 1541°C 2836°C | 22 Ti Titanium hex 4.51 g/cm ³ 659 kJ 136 pm 1668°C 3287°C | 23 V Vanadium bcc 6.11 g/cm ³ 651 kJ 134 pm 1910°C 3407°C | 24 Cr Chromium bcc 7.14 g/cm ³ 653 kJ 122 pm 1907°C 2671°C | 25 Mn Manganese bcc 7.47 g/cm ³ 717 kJ 119 pm 1246°C 2061°C | 26 Fe Iron bcc 7.87 g/cm ³ 763 kJ 116 pm 1538°C 2861°C | 27 Co Cobalt hex 8.90 g/cm ³ 760 kJ 111 pm 1495°C 2927°C | 28 Ni Nickel fcc 8.91 g/cm ³ 737 kJ 110 pm 1455°C 2913°C | 29 Cu Copper fcc 8.92 g/cm ³ 746 kJ 112 pm 1085°C 2562°C | 30 Zn Zinc hex 7.13 g/cm ³ 906 kJ 118 pm 420°C 907°C | 31 Ga Gallium ort 5.90 g/cm ³ 579 kJ 124 pm 30°C 2204°C | 32 Ge Germanium fcc 5.32 g/cm ³ 762 kJ 121 pm 938°C 2833°C | 33 As Arsenic rho 5.73 g/cm ³ 947 kJ 121 pm * | 34 Se Selenium hex 4.82 g/cm ³ 941 kJ 116 pm 221°C 685°C | 35 Br Bromine ort 3.12 g/cm ³ 1140 kJ 114 pm -7°C 59°C | 36 Kr Krypton fcc 3.75 g/L 1351 kJ 117 pm -157°C -153°C | | |
| 37 Rb Rubidium bcc 1.53 g/cm ³ 403 kJ 210 pm 39°C 688°C | 38 Sr Strontium fcc 2.63 g/cm ³ 550 kJ 185 pm 777°C 1382°C | 39 Y Yttrium hex 4.47 g/cm ³ 600 kJ 163 pm 1526°C 3336°C | 40 Zr Zirconium hex 6.51 g/cm ³ 640 kJ 154 pm 1855°C 4409°C | 41 Nb Niobium bcc 8.57 g/cm ³ 652 kJ 138 pm 2477°C 4744°C | 42 Mo Molybdenum bcc 10.3 g/cm ³ 684 kJ 138 pm 2623°C 4639°C | 43 Tc Technetium hex 11.5 g/cm ³ 702 kJ 128 pm 2157°C 4265°C | 44 Ru Ruthenium hex 12.4 g/cm ³ 719 kJ 125 pm 2334°C 4150°C | 45 Rh Rhodium fcc 12.5 g/cm ³ 719 kJ 125 pm 1964°C 3695°C | 46 Pd Palladium fcc 12.0 g/cm ³ 804 kJ 120 pm 1555°C 2963°C | 47 Ag Silver fcc 10.5 g/cm ³ 731 kJ 128 pm 962°C 2162°C | 48 Cd Cadmium hex 8.65 g/cm ³ 868 kJ 136 pm 321°C 767°C | 49 In Indium tet 7.31 g/cm ³ 558 kJ 142 pm 157°C 2072°C | 50 Sn Tin tet 7.31 g/cm ³ 558 kJ 142 pm 232°C 2602°C | 51 Sb Antimony rho 6.70 g/cm ³ 834 kJ 140 pm 631°C 1587°C | 52 Te Tellurium hex 6.24 g/cm ³ 869 kJ 136 pm 450°C 988°C | 53 I Iodine ort 4.94 g/cm ³ 1008 kJ 133 pm 114°C 184°C | 54 Xe Xenon fcc 5.90 g/L 1170 kJ 131 pm -112°C -108°C | | |
| 55 Cs Cesium bcc 1.88 g/cm ³ 376 kJ 232 pm 28°C 671°C | 56 Ba Barium bcc 3.51 g/cm ³ 503 kJ 196 pm 727°C 1845°C | 57 La Lanthanum hex 6.15 g/cm ³ 538 kJ 180 pm 920°C 3464°C | 72 Hf Hafnium hex 13.3 g/cm ³ 659 kJ 152 pm 2233°C 4603°C | 73 Ta Tantalum bcc 16.7 g/cm ³ 761 kJ 146 pm 3017°C 5458°C | 74 W Tungsten bcc 19.3 g/cm ³ 770 kJ 137 pm 3422°C 5555°C | 75 Re Rhenium hex 21.0 g/cm ³ 760 kJ 131 pm 3186°C 5596°C | 76 Os Osmium hex 22.6 g/cm ³ 840 kJ 129 pm 3033°C 5012°C | 77 Ir Iridium fcc 22.7 g/cm ³ 880 kJ 122 pm 2466°C 4428°C | 78 Pt Platinum fcc 21.1 g/cm ³ 870 kJ 123 pm 1768°C 3825°C | 79 Au Gold fcc 19.3 g/cm ³ 890 kJ 124 pm 1064°C 2856°C | 80 Hg Mercury rho 13.5 g/cm ³ 1007 kJ 133 pm -39°C 357°C | 81 Tl Thallium hex 11.9 g/cm ³ 589 kJ 144 pm 304°C 1473°C | 82 Pb Lead fcc 11.3 g/cm ³ 716 kJ 144 pm 327°C 1749°C | 83 Bi Bismuth rho 9.78 g/cm ³ 703 kJ 151 pm 271°C 1564°C | 84 Po Polonium mon 9.20 g/cm ³ 812 kJ 145 pm 254°C 962°C | 85 At Astatine ? g/cm ³ 890 kJ 147 pm 302°C ?°C | 86 Rn Radon fcc 9.73 g/L 1037 kJ 142 pm -71°C -62°C | | |
| 7 | 87 Fr Francium bcc ? g/cm ³ 380 kJ 223 pm 27°C ?°C | 88 Ra Radium bcc 5.0 g/cm ³ 509 kJ 201 pm 700°C 1737°C | 89 Ac Actinium fcc 10.1 g/cm ³ 499 kJ 186 pm 1050°C 3198°C | 104 Rf Rutherfordium ? g/cm ³ ? kJ 157 pm ?°C ?°C | 105 Db Dubnium ? g/cm ³ ? kJ 149 pm ?°C ?°C | 106 Sg Seaborgium ? g/cm ³ ? kJ 143 pm ?°C ?°C | 107 Bh Bohrium ? g/cm ³ ? kJ 141 pm ?°C ?°C | 108 Hs Hassium ? g/cm ³ ? kJ 134 pm ?°C ?°C | 109 Mt Meitnerium ? g/cm ³ ? kJ 129 pm ?°C ?°C | 110 Ds Darmstadtium ? g/cm ³ ? kJ 128 pm ?°C ?°C | 111 Rg Roentgenium ? g/cm ³ ? kJ 121 pm ?°C ?°C | 112 Cp Copernicium ? g/cm ³ ? kJ 122 pm ?°C ?°C | 113 Uut Ununtrium ? g/cm ³ ? kJ 136 pm ?°C ?°C | 114 Fl Flerovium ? g/cm ³ ? kJ 143 pm ?°C ?°C | 115 Uup Ununpentium ? g/cm ³ ? kJ 162 pm ?°C ?°C | 116 Lv Livermorium ? g/cm ³ ? kJ 165 pm ?°C ?°C | 117 Uus Ununseptium ? g/cm ³ ? kJ ? pm ?°C ?°C | 118 Uuo Ununoctium ? g/cm ³ ? kJ 157 pm ?°C ?°C | |

Left-to-right:

- Hydrogen
- Alkali Metals
- Alkaline Earth Metals
- Transition Metals
- Other Metals
- Metalloids
- Other Non-Metals
- Halogens
- Noble Gases

Inner Transition Metals

| | | | | | | | | | | | | | |
|---|--|---|--|--|---|--|---|--|--|--|---|--|--|
| 58 Ce Cerium fcc 6.69 g/cm ³ 534 kJ 163 pm 795°C 3443°C | 59 Pr Praseodymium hex 6.64 g/cm ³ 527 kJ 176 pm 935°C 3520°C | 60 Nd Neodymium hex 7.01 g/cm ³ 533 kJ 174 pm 1024°C 3074°C | 61 Pm Promethium hex 7.26 g/cm ³ 540 kJ 173 pm 1042°C 3000°C | 62 Sm Samarium rho 7.35 g/cm ³ 545 kJ 172 pm 1072°C 1794°C | 63 Eu Europium bcc 5.24 g/cm ³ 547 kJ 168 pm 856°C 1529°C | 64 Gd Gadolinium hex 7.90 g/cm ³ 593 kJ 169 pm 1312°C 3273°C | 65 Tb Terbium hex 8.22 g/cm ³ 566 kJ 168 pm 1356°C 3230°C | 66 Dy Dysprosium hex 8.55 g/cm ³ 573 kJ 167 pm 1412°C 2567°C | 67 Ho Holmium hex 8.80 g/cm ³ 581 kJ 166 pm 1461°C 2720°C | 68 Er Erbium hex 9.07 g/cm ³ 589 kJ 165 pm 1529°C 2868°C | 69 Tm Thulium hex 9.32 g/cm ³ 597 kJ 164 pm 1545°C 1950°C | 70 Yb Ytterbium fcc 6.57 g/cm ³ 603 kJ 170 pm 824°C 1196°C | 71 Lu Lutetium hex 9.84 g/cm ³ 524 kJ 162 pm 1652°C 3402°C |
| 90 Th Thorium fcc 11.7 g/cm ³ 587 kJ 175 pm 1842°C 4788°C | 91 Pa Protactinium ort 15.4 g/cm ³ 568 kJ 169 pm 1568°C 4027°C | 92 U Uranium ort 19.1 g/cm ³ 598 kJ 170 pm 1132°C 4131°C | 93 Np Neptunium ort 20.5 g/cm ³ 605 kJ 171 pm 639°C 4174°C | 94 Pu Plutonium mon 19.8 g/cm ³ 585 kJ 172 pm 639°C 3228°C | 95 Am Americium hex 13.7 g/cm ³ 578 kJ 166 pm 1176°C 2607°C | 96 Cm Curium ? 13.5 g/cm ³ 581 kJ 166 pm 1340°C 3110°C | 97 Bk Berkelium ? 14.8 g/cm ³ 601 kJ 168 pm 986°C 2627°C | 98 Cf Californium ? 15.1 g/cm ³ 608 kJ 168 pm 900°C 1743°C | 99 Es Einsteinium ? 8.84 g/cm ³ 609 kJ 165 pm 860°C 1269°C | 100 Fm Fermium ? g/cm ³ 627 kJ 167 pm 1527°C ?°C | 101 Md Mendelevium ? g/cm ³ 635 kJ 173 pm 827°C ?°C | 102 No Nobelium ? g/cm ³ 642 kJ 176 pm 877°C ?°C | 103 Lr Lawrencium ? g/cm ³ 470 kJ 161 pm 1627°C ?°C |