

ChemGlobe - Periodic Table of Elements

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| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----|-----------|------------|-----------|------------|-----------|-----------|------------|-----------|-----------|-----------|-----------|----------|-----------|-----------|------------|-----------|-------------|---|-----------|-----------|----------|-----------|----|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| | | | | | | | | | | | | | | | | | | Atomic number — 43 (98.91) — Atomic mass (mean relative) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | Symbol — Tc | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | Melting point [°C] — 2140 11.5 — Density [g/cm ³], for gases [g/l] (0°C,1013mbar) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | Boiling point [°C] — 5030 * 1.9 — Electronegativity | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | Radioactive | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | | | | | | | | | | | | | | | | | 18 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1A | | | | | | | | | | | | | | | | | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 1 | | | | | | | | | | | | | | | | | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1.01 | | | | | | | | | | | | | | | | | 4.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | H | | | | | | | | | | | | | | | | | He | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | -259 0.09 | | | | | | | | | | | | | | | | | -269 0.18 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | -253 2.1 | | | | | | | | | | | | | | | | | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 3 | 2 | | | | | | | | | | | | | | | 13 | 14 | 15 | 16 | 17 | 18 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 6.94 | 4 | 9.01 | | | | | | | | | | | | | | | 5 | 6 | 7 | 8 | 9 | 10 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Li | Be | | | | | | | | | | | | | | | B | C | N | O | F | Ne | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 181 0.53 | 1277 1.85 | | | | | | | | | | | | | | | (2030) 2.35 | (3550) 2.2 | -210 1.25 | -219 1.43 | -220 1.7 | -249 0.9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1330 1.0 | 2970 1.5 | | | | | | | | | | | | | | | 2550 2.0 | 4830 2.5 | -196 3.0 | -183 3.5 | -188 4.0 | -246 - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | 11 | 12 | | | | | | | | | | | | | | | 13 | 14 | 15 | 16 | 17 | 18 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 22.99 | 24.31 | | | | | | | | | | | | | | | 26.98 | 28.09 | 30.97 | 32.06 | 35.45 | 39.95 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Na | Mg | | | | | | | | | | | | | | | Al | Si | P | S | Cl | Ar | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 98 0.97 | 650 1.74 | | | | | | | | | | | | | | | 660 2.70 | 1410 2.33 | 44 1.82 | 119 2.07 | -101 3.2 | -189 1.78 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 892 0.9 | 1107 1.2 | | | | | | | | | | | | | | | 2450 1.5 | 2680 1.8 | 280 2.1 | 445 2.5 | -35 3.0 | -183 - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | 19 | 20 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 31 | 32 | 33 | 34 | 35 | 36 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 39.10 | 40.08 | 44.96 | 47.88 | 50.94 | 52.00 | 54.94 | 55.85 | 58.93 | 58.70 | 63.55 | 65.38 | 69.72 | 72.59 | 74.91 | 78.96 | 79.90 | 83.80 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | K | Ca | Sc | Ti | V | Cr | Mn | Fe | Co | Ni | Cu | Zn | Ga | Ge | As | Se | Br | Kr | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 64 0.86 | 838 1.55 | 1539 3.0 | 1668 4.54 | 1900 6.1 | 1875 7.19 | 1245 7.43 | 1536 7.86 | 1495 8.9 | 1453 8.9 | 1083 8.96 | 420 7.13 | 30 5.91 | 1937 5.32 | Subl. 5.72 | 217 4.79 | -7 3.12 | -157 3.7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 760 0.8 | 1440 1.0 | 2730 1.3 | 3260 1.5 | 3450 1.5 | 2200 1.6 | 2097 1.5 | 3000 1.8 | 2900 1.9 | 2730 1.9 | 2595 1.9 | 906 1.6 | 2237 1.6 | 2830 1.8 | - | 685 2.4 | 58 2.8 | -152 - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 85.47 | 87.62 | 88.91 | 91.22 | 92.92 | 95.94 | (98.91) | 101.07 | 102.91 | 106.42 | 107.87 | 112.41 | 114.82 | 118.69 | 121.75 | 127.60 | 126.90 | 131.29 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Rb | Sr | Y | Zr | Nb | Mo | Tc | Ru | Rh | Pd | Ag | Cd | In | Sn | Sb | Te | I | Xe | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 39 1.53 | 768 2.6 | 1509 4.47 | 1852 6.49 | 2468 8.57 | 2610 10.2 | 2140 11.5 | 2500 12.4 | 1966 12.4 | 1552 12.0 | 961 10.5 | 321 8.65 | 156 7.31 | 232 7.30 | 631 6.69 | 450 6.24 | 114 4.94 | -112 5.89 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 688 0.8 | 1380 1.0 | 2927 1.2 | 3580 1.4 | 4927 1.6 | 5560 1.8 | 5030 * 1.9 | 3900 2.2 | 3730 2.2 | 3140 2.2 | 2210 1.9 | 765 1.7 | 2080 1.7 | 2270 1.8 | 1380 1.9 | 990 2.1 | 183 2.5 | -108 - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | 55 | 56 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 132.91 | 137.33 | 174.97 | 178.49 | 180.95 | 183.85 | 186.21 | 190.20 | 192.22 | 195.08 | 196.97 | 200.59 | 204.38 | 207.20 | 208.98 | (209) | (210) | (222) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Cs | Ba | Lu | Hf | Ta | W | Re | Os | Ir | Pt | Au | Hg | Tl | Pb | Bi | Po | At | Rn | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 29 1.90 | 714 3.76 | 1652 9.84 | 2222 13.31 | 2996 16.5 | 3410 19.3 | 3180 21.0 | 3050 22.6 | 2454 22.7 | 1769 21.4 | 1063 19.3 | -38 13.6 | 303 11.85 | 327 11.4 | 271 9.8 | 254 9.3 | (302) - | (-71) 9.73 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 690 0.7 | 1640 0.9 | 3327 1.2 | 5400 1.3 | 5425 1.5 | 5930 1.7 | 5900 1.9 | 5500 2.2 | 4500 2.2 | 3830 2.2 | 2970 2.4 | 357 1.9 | 1457 1.8 | 1725 1.9 | 1560 1.9 | 962 * 2.0 | 337 * 2.2 | -62 * - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | 87 | (223.0) | 103 | 104 | 105 | 106 | 107 | 108 | 109 | 110 | 111 | 112 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | (223.0) | 226.03 | (262.1) | (261.1) | (262.1) | (263.1) | (264.1) | (265.1) | (268) | (269) | (272) | (277) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Fr | Ra | Lr | Rf | Db | Sg | Bh | Hs | Mt | Uun | Uuu | Uub | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | (27) | - | 700 5.0 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 677 * 0.7 | 1140 * 0.9 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| | | | | | | | | | | | | | | | |
|---|-------------|-----------|------------|------------|------------|-------------|------------|----------|--------------|-----------|-----------|-----------|-----------|-----------|-----------|
| 6 | Lanthanoids | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 |
| | | 138.91 | 140.12 | 140.91 | 144.24 | (145) | 150.36 | 151.96 | 157.25 | 158.93 | 162.50 | 164.93 | 167.26 | 168.93 | 173.04 |
| | | La | Ce | Pr | Nd | Pm | Sm | Eu | Gd | Tb | Dy | Ho | Er | Tm | Yb |
| | | 920 6.17 | 795 6.67 | 935 6.77 | 1024 7.00 | (1027) 7.22 | 1072 7.54 | 828 5.26 | 1312 7.89 | 1356 8.27 | 1407 8.54 | 1461 8.80 | 1497 9.05 | 1545 9.33 | 824 6.98 |
| | | 3470 1.1 | 3468 1.1 | 3127 1.1 | 3027 1.2 | 2460 * - | 1790 1.2 | 1439 - | 3000 1.1 | 2800 1.2 | 2600 - | 2600 1.2 | 2900 1.2 | 1727 1.2 | 1196 1.1 |
| | | 89 (227) | 90 232.04 | 91 231.04 | 92 238.03 | 93(237.05) | 94 (244) | 95 (243) | 96 (247) | 97 (247) | 98 (251) | 99 (254) | 100 (257) | 101 (258) | 102 (259) |
| | | Ac | Th | Pa | U | Np | Pu | Am | Cm | Bk | Cf | Es | Fm | Md | No |
| | | 1050 10.1 | 11750 11.7 | (1230 15.4 | 1132 19.07 | 637 19.5 | 640 19.81 | 994 13.7 | (1340) 13.51 | - | - | - | - | - | - |
| | | * 1.1 | 3850 * 1.3 | - | 3818 * 1.4 | 3900 * 1.3 | 3235 * 1.3 | - | * 1.3 | - | - | - | - | - | - |

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ChemGlobe - Periodic table of elements

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Thank you

This printable "ChemGlobe - Periodic Table of the Elements" file is based on the original work of Nick Donati. He gave the source file as a present to the ChemGlobe website. The file was then modified and adjusted to the layout and content of the ChemGlobe website. Nick Donati can be reached by visiting his website at <http://ohmu.ch/>.

Many mistakes on this file have been corrected in the meantime, thanks to error reports.

Thank you very much!

Updates

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