

# Periodic table of elements celebrating 150 years in 2019

**KEY**

- Black symbol - solid.
- Red symbol - gas.
- Blue symbol - liquid.
- Outline symbol - synthetically prepared.
- Based upon carbon-12. ( ) indicates most stable or best known isotope.
- Entries marked with daggers refer to the gaseous state at 273 K and 1 atm and are given in units of g/l.

**Atomic Number**      **Atomic Weight (2)**

**Melting Point, K**      **Symbol**

**Name**

1 1.00794 13.81 H Hydrogen	2		3										13 10.811 2365 B Boron	14 12.011 3825* C Carbon	15 14.0067 63.15 N Nitrogen	16 15.9994 54.8 O Oxygen	17 18.99840 53.55 F Fluorine	18 4.00260 0.95 He Helium																				
3 6.941 453.7 Li Lithium	4 9.01218 1560 Be Beryllium	5										13 26.98154 933.5 Al Aluminum	14 28.0855 1683 Si Silicon	15 30.97376 317.3 P Phosphorus	16 32.066 392.2 S Sulfur	17 35.4527 172.17 Cl Chlorine	18 39.948 83.95 Ar Argon																					
11 22.98977 371.0 Na Sodium	12 24.305 922 Mg Magnesium	6										19 39.0983 336.8 K Potassium	20 40.078 1112 Ca Calcium	21 44.9559 1814 Sc Scandium	22 47.87 1935 Ti Titanium	23 50.9415 2163 V Vanadium	24 51.996 2130 Cr Chromium	25 54.9380 1518 Mn Manganese	26 55.845 1808 Fe Iron	27 58.9332 1768 Co Cobalt	28 58.6934 1726 Ni Nickel	29 63.546 1356.6 Cu Copper	30 65.39 692.73 Zn Zinc	31 69.723 302.92 Ga Gallium	32 72.61 1211.5 Ge Germanium	33 74.9216 1090 As Arsenic	34 78.96 494 Se Selenium	35 79.904 265.95 Br Bromine	36 83.80 116 Kr Krypton									
37 85.4678 312.63 Rb Rubidium	38 87.62 1042 Sr Strontium	39 88.9059 1795 Y Yttrium	40 91.224 2128 Zr Zirconium	41 92.9064 2742 Nb Niobium	42 95.94 2896 Mo Molybdenum	43 (98) 2477 Tc Technetium	44 101.07 2610 Ru Ruthenium	45 102.9055 2236 Rh Rhodium	46 106.42 1825 Pd Palladium	47 107.868 1235.08 Ag Silver	48 112.41 594.26 Cd Cadmium	49 114.82 429.78 In Indium	50 118.710 505.12 Sn Tin	51 121.760 903.91 Sb Antimony	52 127.60 722.72 Te Tellurium	53 126.9045 386.7 I Iodine	54 131.29 161.39 Xe Xenon																					
55 132.9054 301.54 Cs Cesium	56 137.33 1002 Ba Barium	7										55 132.9054 301.54 Cs Cesium	56 137.33 1002 Ba Barium	8										72 178.49 2504 Hf Hafnium	73 180.9479 3293 Ta Tantalum	74 183.84 3695 W Tungsten	75 186.207 3455 Re Rhenium	76 190.23 3300 Os Osmium	77 192.22 2720 Ir Iridium	78 195.08 2042.1 Pt Platinum	79 196.9665 1337.58 Au Gold	80 200.59 234.31 Hg Mercury	81 204.383 577 Tl Thallium	82 207.2 600.65 Pb Lead	83 208.9804 544.59 Bi Bismuth	84 (209) 527 Po Polonium	85 (210) 575 At Astatine	86 (222) 202 Rn Radon
87 (223) 300 Fr Francium	88 (226) 973 Ra Radium	9										87 (223) 300 Fr Francium	88 (226) 973 Ra Radium	10										104 (261) Rf Rutherfordium	105 (262) Db Dubnium	106 (263) Sg Seaborgium	107 (262) Bh Bohrium	108 (265) Hs Hassium	109 (266) Mt Meitnerium	110 (281) Ds Darmstadtium	111 (281) Rg Roentgenium	112 (285) Cn Copernicium	113 (286) Nh Nihonium	114 (289) Fl Flerovium	115 (288) Mc Moscovium	116 (293) Lv Livermorium	117 (294) Ts Tennessine	118 (294) Og Oganesson

\* Estimated Values

57 138.9055 1191 La Lanthanum	58 140.12 1071 Ce Cerium	59 140.9077 1204 Pr Praseodymium	60 144.24 1294 Nd Neodymium	61 (145) 1315 Pm Promethium	62 150.36 1347 Sm Samarium	63 151.964 1095 Eu Europium	64 157.25 1585 Gd Gadolinium	65 158.9253 1629 Tb Terbium	66 162.50 1685 Dy Dysprosium	67 164.9303 1747 Ho Holmium	68 167.26 1802 Er Erbium	69 168.9342 1818 Tm Thulium	70 173.04 1092 Yb Ytterbium	71 174.967 1936 Lu Lutetium
89 (277) 1324 Ac Actinium	90 232.0381 2028 Th Thorium	91 231.0359 1845 Pa Protactinium	92 238.029 1408 U Uranium	93 (237) 912 Np Neptunium	94 (244) 913 Pu Plutonium	95 (243) 1449 Am Americium	96 (247) 1620 Cm Curium	97 (247) Bk Berkelium	98 (251) Cf Californium	99 (252) 1130* Es Einsteinium	100 (257) 1800* Fd Fermium	101 (258) 1100* Md Mendelevium	102 (259) 1100* No Nobelium	103 (262) 1900* Lr Lawrencium