

periodic table of the elements



Periodensystem der Elemente • Tableau périodique des éléments • Tabla periódica de los elementos

1																	18
1	1 H 1.0079 -259.1 -252.76 2.20 -1, 1 1s ¹	2															2 He 4.0026 -272.2 -268.93 1s ²
3	3 Li 6.941 180.5 1342 0.97 [He] 2s ¹	4	4 Be 9.0122 1287 2471 1.47 [He] 2s ²														
11	11 Na 22.990 97.80 883 1.01 [Ne] 3s ¹	12	12 Mg 24.305 650 1090 1.23 [Ne] 3s ²														
19	19 K 39.098 63.5 759 0.91 [Ar] 4s ¹	20	20 Ca 40.078 842 1484 1.04 [Ar] 4s ²														
37	37 Rb 85.468 39.3 688 0.89 [Kr] 5s ¹	38	38 Sr 87.62 777 1377 0.99 [Kr] 5s ²														
55	55 Cs 132.91 28.44 671 0.86 [Xe] 6s ¹	56	56 Ba 137.33 727 1897 0.97 [Xe] 6s ²														
87	87 Fr *223.02 27 677 0.86 [Rn] 7s ¹	88	88 Ra *226.03 696 1140 0.97 [Rn] 7s ²														

1	102.91 ³			1			
45	1964 ⁴			2			
	3695 ⁵			3			
	1.45 ⁶			4			
0, 1, 2, 3, 4, 5 ⁷				5			
[Kr] 4d ⁵ 5s ¹ ⁸				6			

1	Atomic number	2	Element symbol	3	Relative atomic mass	4	Melting point in °C	5	Boiling point in °C	6	Electronegativity (Allred, Rochow)	7	Oxidation states	8	Electron configuration
1	Número atómico	2	Símbolo del elemento	3	Peso atómico relativo	4	Temperatura de fusión en °C	5	Temperatura d'ebullición en °C	6	Electronegativitat (Allred, Rochow)	7	Niveaux d'oxydation	8	Configuration électronique
1	Ordnungszahl	2	Elementsymbol	3	Relative Atommasse	4	Schmelzpunkt in °C	5	Siedepunkt in °C	6	Elektronenegivität (Allred, Rochow)	7	Oxidationsstufen	8	Elektronenkonfiguration
1	Número atómico	2	Símbolo del elemento	3	Peso atómico relativo	4	Punto de fusión en °C	5	Punto de ebullición en °C	6	Electronegatividad (Allred, Rochow)	7	Niveles de oxidación	8	Configuración electrónica

Nonmetals, Nichtmetalle,
Non-métaux, Metalloides

Halogens, Halogene,
Halógenos, Halógenos

Inert gases, Edelgase,
Gaz inertes, Gases nobles

Alkaline-earth metals, Erdalkalimetalle,
Métaux alcalino-terreux, Metales alcalinotérreos

Alkali metals, Alkalimetalle,
Métaux alcalins, Metales alcalinos

Transition metals, Übergangsmetalle,
Métaux de transition, Metales de transición

Lanthanides, Lanthanoide,
Lanthanides, Lantánidos

Actinides, Actinoide,
Actinides, Actínidos

Other metals, Andere Metalle,
Autres métaux, Otros metales

Semi metals, Halbmetalle,
Metalloides, Semi metales

* most stable isotope, stabilstes
Isotop, isotope le plus stable,
isótopo más estable

13	14	15	16	17	18
5 B 10.811 2075 4000 2.01 [He] 2s ² 2p ¹	6 C 12.011 3550 4827 2.50 [He] 2s ² 2p ²	7 N 14.007 -210 -195.798 3.07 [He] 2s ² 2p ³	8 O 15.999 -218.79 -182.95 3.50 [He] 2s ² 2p ⁴	9 F 18.998 -188.12 -188.12 4.10 [He] 2s ² 2p ⁵	10 Ne 20.1797 -248.609 -246.053 [He] 2s ² 2p ⁶
13 Al 26.982 660.32 2519 1.47 [Ne] 3s ² 3p ¹	14 Si 28.086 1414 3265 1.74 [Ne] 3s ² 3p ²	15 P 30.974 44.15 280.5 2.06 [Ne] 3s ² 3p ³	16 S 32.065 115.21 444.61 2.44 [Ne] 3s ² 3p ⁴	17 Cl 35.453 -101.5 -34.04 2.83 [Ne] 3s ² 3p ⁵	18 Ar 39.948 -189.36 -185.85 [Ne] 3s ² 3p ⁶
31 Ga 69.723 29.76 2204 1.82 [Ar] 3d ¹⁰ 4s ² 4p ¹	32 Ge 72.64 938.25 2833 2.02 [Ar] 3d ¹⁰ 4s ² 4p ²	33 As 74.922 subl. 616 subl. 616 2.20 [Ar] 3d ¹⁰ 4s ² 4p ³	34 Se 78.96 221 685 2.48 [Ar] 3d ¹⁰ 4s ² 4p ⁴	35 Br 79.904 -7.2 58.8 2.74 [Ar] 3d ¹⁰ 4s ² 4p ⁵	36 Kr 83.798 -157.36 -153.34 2, 4 [Ar] 3d ¹⁰ 4s ² 4p ⁶
49 In 114.82 156.6 2072 1.49 [Kr] 4d ¹⁰ 5s ² 5p ¹	50 Sn 118.71 231.93 2602 1.72 [Kr] 4d ¹⁰ 5s ² 5p ²	51 Sb 121.76 630.63 1587 1.82 [Kr] 4d ¹⁰ 5s ² 5p ³	52 Te 127.60 449.51 988 2.01 [Kr] 4d ¹⁰ 5s ² 5p ⁴	53 I 126.90 113.7 184.4 2.21 [Kr] 4d ¹⁰ 5s ² 5p ⁵	54 Xe 131.29 -111.74 -108.09 2, 4, 6 [Kr] 4d ¹⁰ 5s ² 5p ⁶
81 Tl 204.38 304 1473 1.44 [Xe] 4f ¹⁴ 5d ¹⁰ 6s ² 6p ¹	82 Pb 207.2 327.46 1749 1.55 [Xe] 4f ¹⁴ 5d ¹⁰ 6s ² 6p ²	83 Bi 208.98 271.4 1564 1.67 [Xe] 4f ¹⁴ 5d ¹⁰ 6s ² 6p ³	84 Po *208.98 254 962 1.76 [Xe] 4f ¹⁴ 5d ¹⁰ 6s ² 6p ⁴	85 At *209.99 302 336.95 1.96 [Xe] 4f ¹⁴ 5d ¹⁰ 6s ² 6p ⁵	86 Rn *222.02 -71 -61.7 2 [Xe] 4f ¹⁴ 5d ¹⁰ 6s ² 6p ⁶
113 Uut *284 [Rn] 5f ¹⁴ 6d ¹⁰ 7s ² 7p ¹	114 Fl *287 [Rn] 5f ¹⁴ 6d ¹⁰ 7s ² 7p ²	115 Uup *288 [Rn] 5f ¹⁴ 6d ¹⁰ 7s ² 7p ³	116 Lv *291 [Rn] 5f ¹⁴ 6d ¹⁰ 7s ² 7p ⁴	117 Uus *294 [Rn] 5f ¹⁴ 6d ¹⁰ 7s ² 7p ⁵	118 Uuo *294 [Rn] 5f ¹⁴ 6d ¹⁰ 7s ² 7p ⁶

57	58	59	60	61	62	63	64	65	66	67	68	69	70	71
La 138.91 920 3464 1.08 [Xe] 5d ¹ 6s ²	Ce 140.12 799 3443 1.08 [Xe] 4f ¹ 5d ¹ 6s ²	Pr 140.91 931 3520 1.07 [Xe] 4f ³ 6s ²	Nd 144.24 1016 3074 1.07 [Xe] 4f ⁴ 6s ²	Pm *144.91 1042 3000 1.07 [Xe] 4f ⁵ 6s ²	Sm 150.36 1072 1794 1.07 [Xe] 4f ⁶ 6s ²	Eu 151.96 822 1596 1.01 [Xe] 4f ⁷ 6s ²	Gd 157.25 1313 3273 1.11 [Xe] 4f ⁷ 5d ¹ 6s ²	Tb 158.93 1359 3230 1.10 [Xe] 4f ⁹ 6s ²	Dy 162.50 1412 2567 1.10 [Xe] 4f ¹⁰ 6s ²	Ho 164.93 1472 2700 1.10 [Xe] 4f ¹¹ 6s ²	Er 167.26 1529 2868 1.11 [Xe] 4f ¹² 6s ²	Tm 168.93 1545 1950 1.11 [Xe] 4f ¹³ 6s ²	Yb 173.04 824 1196 1.06 [Xe] 4f ¹⁴ 6s ²	Lu 174.97 1663 3402 1.14 [Xe] 4f ¹⁴ 5d ¹ 6s ²
89	90	91	92	93	94	95	96	97	98	99	100	101	102	103
Ac *227.03 1050 3198 1.00 [Rn] 6d ¹ 7s ²	Th *232.04 1750 4788 1.11 [Rn] 6d ² 7s ²	Pa *231.04 1572 4131 1.22 [Rn] 5f ² 6d ¹ 7s ²	U *238.03 1135 4131 1.22 [Rn] 5f ³ 6d ¹ 7s ²	Np *237.05 644 3902 1.22 [Rn] 5f ⁴ 6d ¹ 7s ²	Pu *244.06 640 3228 1.22 [Rn] 5f ⁶ 7s ²	Am *243.06 1176 2011 1.20 [Rn] 5f ⁷ 7s ²	Cm *247.07 1345 [Rn] 5f ⁸ 6d ¹ 7s ²	Bk *247.07 996 [Rn] 5f ⁹ 7s ²	Cf *251.08 900 [Rn] 5f ¹⁰ 7s ²	Es *252.08 860 [Rn] 5f ¹¹ 7s ²	Fm *257.095 1527 [Rn] 5f ¹² 7s ²	Md *258.10 827 [Rn] 5f ¹³ 7s ²	No *259.10 [Rn] 5f ¹⁴ 7s ²	Lr *262.11 [Rn] 5f ¹⁴ 5d ¹ 7p ¹

Lanthanides
Lanthanoide
Lanthanides
Lantánidos

Actinides
Actinoide
Actinides
Actínidos