

TABLA PERIÓDICA DE LOS ELEMENTOS

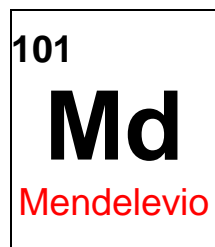
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	H 1766																	He 1868
2	Li 1817	Be 1798											B 1808	C ***	N 1772	O 1774	F 1886	Ne 1898
3	Na 1807	Mg 1808											Al 1827	Si 1824	P 1669	S ****	Cl 1774	Ar 1894
4	K 1807	Ca 1808	Sc 1879	Ti 1791	V 1801	Cr 1797	Mn 1774	Fe -3000	Co 1735	Ni 1751	Cu -9000	Zn 1746	Ga 1875	Ge 1886	As 1250?	Se 1817	Br 1826	Kr 1898
5	Rb 1861	Sr 1808	Y 1843	Zr 1789	Nb 1801	Mo 1781	Tc 1937	Ru 1844	Rh 1803	Pd 1803	Ag -3000	Cd 1817	In 1863	Sn -3000	Sb 1492?	Te 1782	I 1811	Xe 1898
6	Cs 1860	Ba 1808	Lu 1907	* Hf 1923	Ta 1802	W 1783	Re 1925	Os 1803	Ir 1803	Pt 1748	Au -5000	Hg -2000	Tl 1861	Pb -3000	Bi 1450?	Po 1898	At 1940	Rn 1900
7	Fr 1939	Ra 1898	103 * Lr 1961	104 * Rf 1964	105 Db 1967	106 Sg 1974	107 Bh 1981	108 Hs 1984	109 Mt 1982	110 Ds 1994	111 Rg 1994	112 Uub 1996	113 Uut	114 Uuq 1998	115 Uup	116 Uuh 1999	117 Uus	118 Uuo 1999

101 Md 1955

* 57 La 1839	58 Ce 1803	59 Pr 1885	60 Nd 1885	61 Pm 1945	62 Sm 1879	63 Eu 1901	64 Gd 1880	65 Tb 1843	66 Dy 1886	67 Ho 1878	68 Er 1842	69 Tm 1879	70 Yb 1878
* 89 Ac 1899	90 Th 1828	91 Pa 1913	92 U 1789	93 Np 1940	94 Pu 1940	95 Am 1944	96 Cm 1944	97 Bk 1949	98 Cf 1950	99 Es 1952	100 Fm 1952	101 Md 1955	102 No 1958

TABLA PERIÓDICA DE LOS ELEMENTOS

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	H Hidrógeno																	He Helio
2	Li Litio	Be Berilio											B Boro	C Carbono	N Nitrógeno	O Oxígeno	F Flúor	Ne Neón
3	Na Sodio	Mg Magnesio											Al Aluminio	Si Silicio	P Fósforo	S Azufre	Cl Cloro	Ar Argón
4	K Potasio	Ca Calcio	Sc Escandio	Ti Titanio	V Vanadio	Cr Cromo	Mn Manganese	Fe Hierro	Co Cobalto	Ni Níquel	Cu Cobre	Zn Cinc	Ga Galio	Ge Germanio	As Arsénico	Se Selenio	Br Bromo	Kr Criptón
5	Rb Rubidio	Sr Estroncio	Y Itrio	Zr Circonio	Nb Niobio	Mo Molibdeno	Tc Tecnecio	Ru Rutenio	Rh Rodio	Pd Paladio	Ag Plata	Cd Cadmio	In Indio	Sn Estaño	Sb Antimonio	Te Teluro	I Yodo	Xe Xenón
6	Cs Cesio	Ba Bario	Lu Lutecio	Hf Hafnio	Ta Tántalo	W Wolframio	Re Renio	Os Osmio	Ir Iridio	Pt Platino	Au Oro	Hg Mercurio	Tl Talio	Pb Plomo	Bi Bismuto	Po Polonio	At Astató	Rn Radón
7	Fr Francio	Ra Radio	Lr Laurencio	Rf Rutherfordio	Db Dubnio	Sg Seaborgio	Bh Bohrio	Hs Hassio	Mt Meitnerio	Ds Darmstadtio	Rg Roentgenio	Uub	Uut	Uuq	Uup	Uuh	Uus	Uuo



* 57 La Lantano	58 Ce Cerio	59 Pr Praseodimio	60 Nd Neodimio	61 Pm Prometio	62 Sm Samario	63 Eu Europio	64 Gd Gadolinio	65 Tb Terbio	66 Dy Disprosio	67 Ho Holmio	68 Er Erbio	69 Tm Tulio	70 Yb Iterbio
* 89 Ac Actinio	90 Th Torio	91 Pa Protactinio	92 U Uranio	93 Np Neptunio	94 Pu Plutonio	95 Am Americio	96 Cm Curio	97 Bk Berquellio	98 Cf Californio	99 Es Einstenio	100 Fm Fermio	101 Md Mendelevio	102 No Nobelio

CONFIGURACIONES ELECTRÓNICAS

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
1	$1s^1$																		$1s^2$
2	$1s^2$ $2s^1$	$1s^2$ $2s^2$												$1s^2$ $2s^2p^1$	$1s^2$ $2s^2p^2$	$1s^2$ $2s^2p^3$	$1s^2$ $2s^2p^4$	$1s^2$ $2s^2p^5$	$1s^2$ $2s^2p^6$
3	$1s^2$ $2s^2p^6$ $3s^1$	$1s^2$ $2s^2p^6$ $3s^2$												$1s^2$ $2s^2p^6$ $3s^2p^1$	$1s^2$ $2s^2p^6$ $3s^2p^2$	$1s^2$ $2s^2p^6$ $3s^2p^3$	$1s^2$ $2s^2p^6$ $3s^2p^4$	$1s^2$ $2s^2p^6$ $3s^2p^5$	$1s^2$ $2s^2p^6$ $3s^2p^6$
4	$1s^2$ $2s^2p^6$ $3s^2p^6$ $4s^1$	$1s^2$ $2s^2p^6$ $3s^2p^6$ $4s^2$	$1s^2$ $2s^2p^6$ $3s^2p^6d^1$ $4s^2$	$1s^2$ $2s^2p^6$ $3s^2p^6d^2$ $4s^2$	$1s^2$ $2s^2p^6$ $3s^2p^6d^3$ $4s^2$	$1s^2$ $2s^2p^6$ $3s^2p^6d^4$ $4s^2$	$1s^2$ $2s^2p^6$ $3s^2p^6d^5$ $4s^2$	$1s^2$ $2s^2p^6$ $3s^2p^6d^6$ $4s^2$	$1s^2$ $2s^2p^6$ $3s^2p^6d^7$ $4s^2$	$1s^2$ $2s^2p^6$ $3s^2p^6d^8$ $4s^2$	$1s^2$ $2s^2p^6$ $3s^2p^6d^9$ $4s^2$	$1s^2$ $2s^2p^6$ $3s^2p^6d^{10}$ $4s^2$	$1s^2$ $2s^2p^6$ $3s^2p^6d^{10}$ $4s^2p^1$	$1s^2$ $2s^2p^6$ $3s^2p^6d^{10}$ $4s^2p^2$	$1s^2$ $2s^2p^6$ $3s^2p^6d^{10}$ $4s^2p^3$	$1s^2$ $2s^2p^6$ $3s^2p^6d^{10}$ $4s^2p^4$	$1s^2$ $2s^2p^6$ $3s^2p^6d^{10}$ $4s^2p^5$	$1s^2$ $2s^2p^6$ $3s^2p^6d^{10}$ $4s^2p^6$	
5	Kr $5s^1$	Kr $5s^2$	Kr $4d^1$ $5s^2$	Kr $4d^2$ $5s^2$	Kr $4d^3$ $5s^2$	Kr $4d^4$ $5s^2$	Kr $4d^5$ $5s^2$	Kr $4d^6$ $5s^2$	Kr $4d^7$ $5s^2$	Kr $4d^8$ $5s^2$	Kr $4d^9$ $5s^2$	Kr $4d^{10}$ $5s^2$	Kr $4d^{10}$ $5s^2p^1$	Kr $4d^{10}$ $5s^2p^2$	Kr $4d^{10}$ $5s^2p^3$	Kr $4d^{10}$ $5s^2p^4$	Kr $4d^{10}$ $5s^2p^5$	Kr $4d^{10}$ $5s^2p^6$	
6	Xe $6s^1$	Xe $6s^2$	Xe $4f^{14}$ $5d^1$ $6s^2$	Xe $4f^{14}$ $5d^2$ $6s^2$	Xe $4f^{14}$ $5d^3$ $6s^2$	Xe $4f^{14}$ $5d^4$ $6s^2$	Xe $4f^{14}$ $5d^5$ $6s^2$	Xe $4f^{14}$ $5d^6$ $6s^2$	Xe $4f^{14}$ $5d^7$ $6s^2$	Xe $4f^{14}$ $5d^8$ $6s^2$	Xe $4f^{14}$ $5d^9$ $6s^2$	Xe $4f^{14}$ $5d^{10}$ $6s^2$	Xe $4f^{14}$ $5d^{10}$ $6s^2p^1$	Xe $4f^{14}$ $5d^{10}$ $6s^2p^2$	Xe $4f^{14}$ $5d^{10}$ $6s^2p^3$	Xe $4f^{14}$ $5d^{10}$ $6s^2p^4$	Xe $4f^{14}$ $5d^{10}$ $6s^2p^5$	Xe $4f^{14}$ $5d^{10}$ $6s^2p^6$	
7	Rn $7s^1$	Rn $7s^2$	Rn $5f^{14}$ $6d^1$ $7s^2$	Rn $5f^{14}$ $6d^2$ $7s^2$	Rn $5f^{14}$ $6d^3$ $7s^2$	Rn $5f^{14}$ $6d^4$ $7s^2$	Rn $5f^{14}$ $6d^5$ $7s^2$	Rn $5f^{14}$ $6d^6$ $7s^2$	Rn $5f^{14}$ $6d^7$ $7s^2$	Rn $5f^{14}$ $6d^8$ $7s^2$	Rn $5f^{14}$ $6d^9$ $7s^2$	Rn $5f^{14}$ $6d^{10}$ $7s^2$	Rn $5f^{14}$ $6d^{10}$ $7s^2p^1$	Rn $5f^{14}$ $6d^{10}$ $7s^2p^2$	Rn $5f^{14}$ $6d^{10}$ $7s^2p^3$	Rn $5f^{14}$ $6d^{10}$ $7s^2p^4$	Rn $5f^{14}$ $6d^{10}$ $7s^2p^5$	Rn $5f^{14}$ $6d^{10}$ $7s^2p^6$	

*	Xe $4f^1$ $6s^2$	Xe $4f^2$ $6s^2$	Xe $4f^3$ $6s^2$	Xe $4f^4$ $6s^2$	Xe $4f^5$ $6s^2$	Xe $4f^6$ $6s^2$	Xe $4f^7$ $6s^2$	Xe $4f^8$ $6s^2$	Xe $4f^9$ $6s^2$	Xe $4f^{10}$ $6s^2$	Xe $4f^{11}$ $6s^2$	Xe $4f^{12}$ $6s^2$	Xe $4f^{13}$ $6s^2$	Xe $4f^{14}$ $6s^2$
*	Rn $5f^1$ $7s^2$	Rn $5f^2$ $7s^2$	Rn $5f^3$ $7s^2$	Rn $5f^4$ $7s^2$	Rn $5f^5$ $7s^2$	Rn $5f^6$ $7s^2$	Rn $5f^7$ $7s^2$	Rn $5f^8$ $7s^2$	Rn $5f^9$ $7s^2$	Rn $5f^{10}$ $7s^2$	Rn $5f^{11}$ $7s^2$	Rn $5f^{12}$ $7s^2$	Rn $5f^{13}$ $7s^2$	Rn $5f^{14}$ $7s^2$

CONFIGURACIONES ELECTRÓNICAS

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	$1s^1$																	$1s^2$
2	$He\ 2s^1$	$He\ 2s^2$											$He\ 2s^2p^1$	$He\ 2s^2p^2$	$He\ 2s^2p^3$	$He\ 2s^2p^4$	$He\ 2s^2p^5$	$He\ 2s^2p^6$
3	$Ne\ 3s^1$	$Ne\ 3s^2$											$Ne\ 3s^2p^1$	$Ne\ 3s^2p^2$	$Ne\ 3s^2p^3$	$Ne\ 3s^2p^4$	$Ne\ 3s^2p^5$	$Ne\ 3s^2p^6$
4	$Ar\ 4s^1$	$Ar\ 4s^2$	$Ar\ 3d^1 4s^2$	$Ar\ 3d^2 4s^2$	$Ar\ 3d^3 4s^2$	$Ar\ 3d^4 4s^2$	$Ar\ 3d^5 4s^2$	$Ar\ 3d^6 4s^2$	$Ar\ 3d^7 4s^2$	$Ar\ 3d^8 4s^2$	$Ar\ 3d^9 4s^2$	$Ar\ 3d^{10} 4s^2$	$Ar\ 3d^{10} 4s^2p^1$	$Ar\ 3d^{10} 4s^2p^2$	$Ar\ 3d^{10} 4s^2p^3$	$Ar\ 3d^{10} 4s^2p^4$	$Ar\ 3d^{10} 4s^2p^5$	$Ar\ 3d^{10} 4s^2p^6$
5	$Kr\ 5s^1$	$Kr\ 5s^2$	$Kr\ 4d^1 5s^2$	$Kr\ 4d^2 5s^2$	$Kr\ 4d^3 5s^2$	$Kr\ 4d^4 5s^2$	$Kr\ 4d^5 5s^2$	$Kr\ 4d^6 5s^2$	$Kr\ 4d^7 5s^2$	$Kr\ 4d^8 5s^2$	$Kr\ 4d^9 5s^2$	$Kr\ 4d^{10} 5s^2$	$Kr\ 4d^{10} 5s^2p^1$	$Kr\ 4d^{10} 5s^2p^2$	$Kr\ 4d^{10} 5s^2p^3$	$Kr\ 4d^{10} 5s^2p^4$	$Kr\ 4d^{10} 5s^2p^5$	$Kr\ 4d^{10} 5s^2p^6$
6	$Xe\ 6s^1$	$Xe\ 6s^2$	$Xe\ 4f^{14} 5d^1 6s^2$	$Xe\ 4f^{14} 5d^2 6s^2$	$Xe\ 4f^{14} 5d^3 6s^2$	$Xe\ 4f^{14} 5d^4 6s^2$	$Xe\ 4f^{14} 5d^5 6s^2$	$Xe\ 4f^{14} 5d^6 6s^2$	$Xe\ 4f^{14} 5d^7 6s^2$	$Xe\ 4f^{14} 5d^8 6s^2$	$Xe\ 4f^{14} 5d^9 6s^2$	$Xe\ 4f^{14} 5d^{10} 6s^2$	$Xe\ 4f^{14} 5d^{10} 6s^2p^1$	$Xe\ 4f^{14} 5d^{10} 6s^2p^2$	$Xe\ 4f^{14} 5d^{10} 6s^2p^3$	$Xe\ 4f^{14} 5d^{10} 6s^2p^4$	$Xe\ 4f^{14} 5d^{10} 6s^2p^5$	$Xe\ 4f^{14} 5d^{10} 6s^2p^6$
7	$Rn\ 7s^1$	$Rn\ 7s^2$	$Rn\ 5f^{14} 6d^1 7s^2$	$Rn\ 5f^{14} 6d^2 7s^2$	$Rn\ 5f^{14} 6d^3 7s^2$	$Rn\ 5f^{14} 6d^4 7s^2$	$Rn\ 5f^{14} 6d^5 7s^2$	$Rn\ 5f^{14} 6d^6 7s^2$	$Rn\ 5f^{14} 6d^7 7s^2$	$Rn\ 5f^{14} 6d^8 7s^2$	$Rn\ 5f^{14} 6d^9 7s^2$	$Rn\ 5f^{14} 6d^{10} 7s^2$	$Rn\ 5f^{14} 6d^{10} 7s^2p^1$	$Rn\ 5f^{14} 6d^{10} 7s^2p^2$	$Rn\ 5f^{14} 6d^{10} 7s^2p^3$	$Rn\ 5f^{14} 6d^{10} 7s^2p^4$	$Rn\ 5f^{14} 6d^{10} 7s^2p^5$	$Rn\ 5f^{14} 6d^{10} 7s^2p^6$

*	$Xe\ 4f^1 6s^2$	$Xe\ 4f^2 6s^2$	$Xe\ 4f^3 6s^2$	$Xe\ 4f^4 6s^2$	$Xe\ 4f^5 6s^2$	$Xe\ 4f^6 6s^2$	$Xe\ 4f^7 6s^2$	$Xe\ 4f^8 6s^2$	$Xe\ 4f^9 6s^2$	$Xe\ 4f^{10} 6s^2$	$Xe\ 4f^{11} 6s^2$	$Xe\ 4f^{12} 6s^2$	$Xe\ 4f^{13} 6s^2$	$Xe\ 4f^{14} 6s^2$
*	$Rn\ 5f^1 7s^2$	$Rn\ 5f^2 7s^2$	$Rn\ 5f^3 7s^2$	$Rn\ 5f^4 7s^2$	$Rn\ 5f^5 7s^2$	$Rn\ 5f^6 7s^2$	$Rn\ 5f^7 7s^2$	$Rn\ 5f^8 7s^2$	$Rn\ 5f^9 7s^2$	$Rn\ 5f^{10} 7s^2$	$Rn\ 5f^{11} 7s^2$	$Rn\ 5f^{12} 7s^2$	$Rn\ 5f^{13} 7s^2$	$Rn\ 5f^{14} 7s^2$

CONFIGURACIONES ELECTRÓNICAS

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
1	$1s^1$																		$1s^2$
2	$1s^2$ $2s^1$	$1s^2$ $2s^2$												$1s^2$ $2s^2 p^1$	$1s^2$ $2s^2 p^2$	$1s^2$ $2s^2 p^3$	$1s^2$ $2s^2 p^4$	$1s^2$ $2s^2 p^5$	$1s^2$ $2s^2 p^6$
3	$1s^2$ $2s^2 p^6$ $3s^1$	$1s^2$ $2s^2 p^6$ $3s^2$												$1s^2$ $2s^2 p^6$ $3s^2 p^1$	$1s^2$ $2s^2 p^6$ $3s^2 p^2$	$1s^2$ $2s^2 p^6$ $3s^2 p^3$	$1s^2$ $2s^2 p^6$ $3s^2 p^4$	$1s^2$ $2s^2 p^6$ $3s^2 p^5$	$1s^2$ $2s^2 p^6$ $3s^2 p^6$
4	$1s^2$ $2s^2 p^6$ $3s^2 p^6$ $4s^1$	$1s^2$ $2s^2 p^6$ $3s^2 p^6$ $4s^2$	$1s^2$ $2s^2 p^6$ $3s^2 p^6 d^1$ $4s^2$	$1s^2$ $2s^2 p^6$ $3s^2 p^6 d^2$ $4s^2$	$1s^2$ $2s^2 p^6$ $3s^2 p^6 d^3$ $4s^2$	$1s^2$ $2s^2 p^6$ $3s^2 p^6 d^4$ $4s^2$	$1s^2$ $2s^2 p^6$ $3s^2 p^6 d^5$ $4s^2$	$1s^2$ $2s^2 p^6$ $3s^2 p^6 d^6$ $4s^2$	$1s^2$ $2s^2 p^6$ $3s^2 p^6 d^7$ $4s^2$	$1s^2$ $2s^2 p^6$ $3s^2 p^6 d^8$ $4s^2$	$1s^2$ $2s^2 p^6$ $3s^2 p^6 d^9$ $4s^2$	$1s^2$ $2s^2 p^6$ $3s^2 p^6 d^{10}$ $4s^2$	$1s^2$ $2s^2 p^6$ $3s^2 p^6 d^{10}$ $4s^2 p^1$	$1s^2$ $2s^2 p^6$ $3s^2 p^6 d^{10}$ $4s^2 p^2$	$1s^2$ $2s^2 p^6$ $3s^2 p^6 d^{10}$ $4s^2 p^3$	$1s^2$ $2s^2 p^6$ $3s^2 p^6 d^{10}$ $4s^2 p^4$	$1s^2$ $2s^2 p^6$ $3s^2 p^6 d^{10}$ $4s^2 p^5$	$1s^2$ $2s^2 p^6$ $3s^2 p^6 d^{10}$ $4s^2 p^6$	
5	Kr $5s^1$	Kr $5s^2$	Kr $4d^1$ $5s^2$	Kr $4d^2$ $5s^2$	Kr $4d^3$ $5s^2$	Kr $4d^4$ $5s^2$	Kr $4d^5$ $5s^2$	Kr $4d^6$ $5s^2$	Kr $4d^7$ $5s^2$	Kr $4d^8$ $5s^2$	Kr $4d^9$ $5s^2$	Kr $4d^{10}$ $5s^2$	Kr $4d^{10}$ $5s^2 p^1$	Kr $4d^{10}$ $5s^2 p^2$	Kr $4d^{10}$ $5s^2 p^3$	Kr $4d^{10}$ $5s^2 p^4$	Kr $4d^{10}$ $5s^2 p^5$	Kr $4d^{10}$ $5s^2 p^6$	
6	Xe $6s^1$	Xe $6s^2$	Xe $4f^{14}$ $5d^1$ $6s^2$	Xe $4f^{14}$ $5d^2$ $6s^2$	Xe $4f^{14}$ $5d^3$ $6s^2$	Xe $4f^{14}$ $5d^4$ $6s^2$	Xe $4f^{14}$ $5d^5$ $6s^2$	Xe $4f^{14}$ $5d^6$ $6s^2$	Xe $4f^{14}$ $5d^7$ $6s^2$	Xe $4f^{14}$ $5d^8$ $6s^2$	Xe $4f^{14}$ $5d^9$ $6s^2$	Xe $4f^{14}$ $5d^{10}$ $6s^2$	Xe $4f^{14}$ $5d^{10}$ $6s^2 p^1$	Xe $4f^{14}$ $5d^{10}$ $6s^2 p^2$	Xe $4f^{14}$ $5d^{10}$ $6s^2 p^3$	Xe $4f^{14}$ $5d^{10}$ $6s^2 p^4$	Xe $4f^{14}$ $5d^{10}$ $6s^2 p^5$	Xe $4f^{14}$ $5d^{10}$ $6s^2 p^6$	
7	Rn $7s^1$	Rn $7s^2$	Rn $5f^{14}$ $6d^1$ $7s^2$	Rn $5f^{14}$ $6d^2$ $7s^2$	Rn $5f^{14}$ $6d^3$ $7s^2$	Rn $5f^{14}$ $6d^4$ $7s^2$	Rn $5f^{14}$ $6d^5$ $7s^2$	Rn $5f^{14}$ $6d^6$ $7s^2$	Rn $5f^{14}$ $6d^7$ $7s^2$	Rn $5f^{14}$ $6d^8$ $7s^2$	Rn $5f^{14}$ $6d^9$ $7s^2$	Rn $5f^{14}$ $6d^{10}$ $7s^2$	Rn $5f^{14}$ $6d^{10}$ $7s^2 p^1$	Rn $5f^{14}$ $6d^{10}$ $7s^2 p^2$	Rn $5f^{14}$ $6d^{10}$ $7s^2 p^3$	Rn $5f^{14}$ $6d^{10}$ $7s^2 p^4$	Rn $5f^{14}$ $6d^{10}$ $7s^2 p^5$	Rn $5f^{14}$ $6d^{10}$ $7s^2 p^6$	

*	Xe $4f^1$ $6s^2$	Xe $4f^2$ $6s^2$	Xe $4f^3$ $6s^2$	Xe $4f^4$ $6s^2$	Xe $4f^5$ $6s^2$	Xe $4f^6$ $6s^2$	Xe $4f^7$ $6s^2$	Xe $4f^8$ $6s^2$	Xe $4f^9$ $6s^2$	Xe $4f^{10}$ $6s^2$	Xe $4f^{11}$ $6s^2$	Xe $4f^{12}$ $6s^2$	Xe $4f^{13}$ $6s^2$	Xe $4f^{14}$ $6s^2$
*	Rn $5f^1$ $7s^2$	Rn $5f^2$ $7s^2$	Rn $5f^3$ $7s^2$	Rn $5f^4$ $7s^2$	Rn $5f^5$ $7s^2$	Rn $5f^6$ $7s^2$	Rn $5f^7$ $7s^2$	Rn $5f^8$ $7s^2$	Rn $5f^9$ $7s^2$	Rn $5f^{10}$ $7s^2$	Rn $5f^{11}$ $7s^2$	Rn $5f^{12}$ $7s^2$	Rn $5f^{13}$ $7s^2$	Rn $5f^{14}$ $7s^2$

CONFIGURACIONES ELECTRÓNICAS

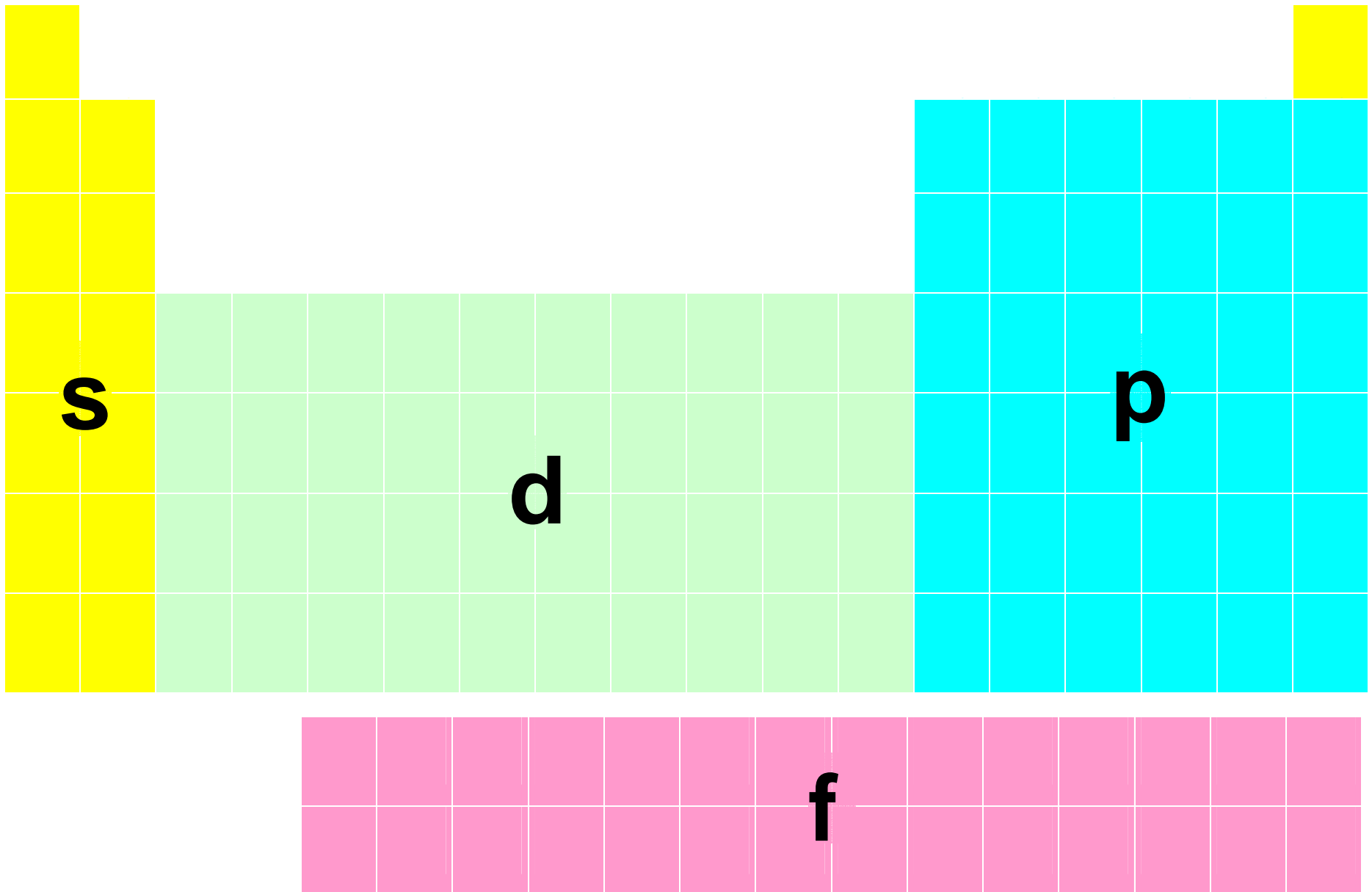


TABLA PERIÓDICA DE LOS ELEMENTOS

ESTADO A 298 K

LÍQUIDO

GAS

SÓLIDO

ARTIFICIAL

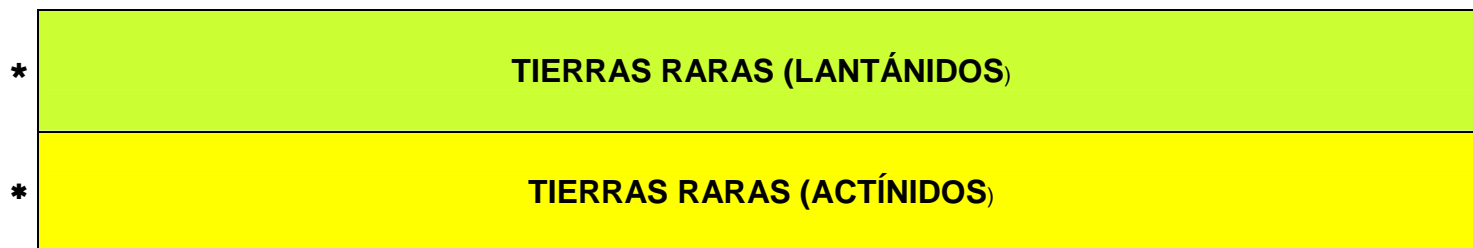
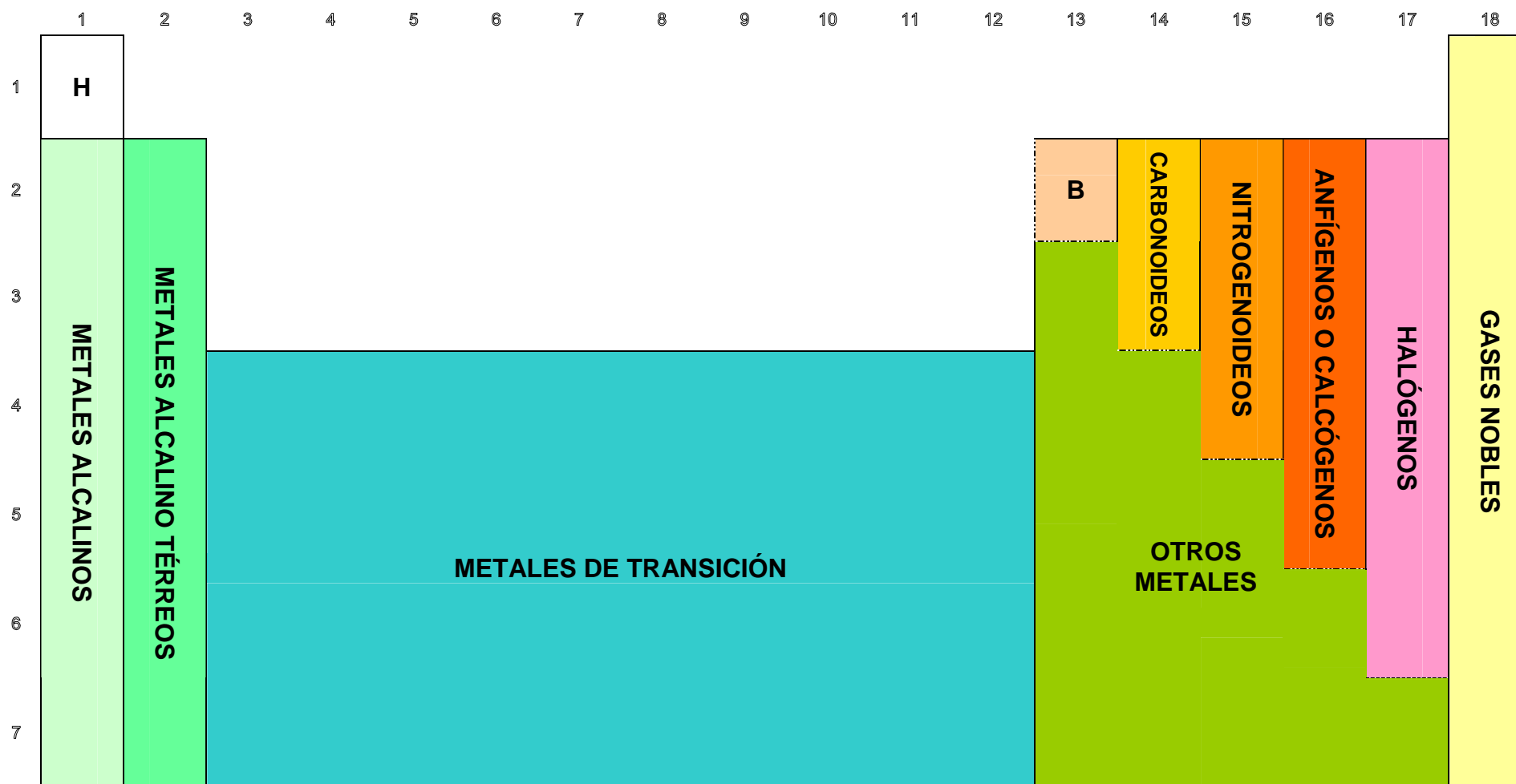
A color-coded periodic table showing the state of elements at 298 K. The legend indicates: LIQUIDO (pink), GAS (blue), SÓLIDO (yellow), and ARTIFICIAL (green). The table is divided into two main sections: the main body and the lanthanide/actinide series at the bottom. The main body has 7 rows and 18 columns. The lanthanide series has 2 rows and 14 columns. The actinide series has 2 rows and 14 columns. The states are distributed as follows: Hydrogen (1st row, 1st column) is blue (gas). Helium (1st row, 18th column) is blue (gas). Lithium and Beryllium (2nd row, 1st and 2nd columns) are yellow (solid). Boron, Carbon, Nitrogen, and Oxygen (2nd row, 3rd to 6th columns) are yellow (solid). Fluorine and Neon (2nd row, 7th and 8th columns) are blue (gas). Sodium, Magnesium, Aluminum, Silicon, Phosphorus, Sulfur, Chlorine, and Argon (3rd row, 1st to 18th columns) are yellow (solid). Potassium, Calcium, Scandium, Titanium, Vanadium, Chromium, Manganese, Iron, Cobalt, Nickel, and Copper (4th row, 1st to 18th columns) are yellow (solid). Zinc, Gallium, Germanium, Arsenic, Selenium, Bromine, and Krypton (5th row, 1st to 18th columns) are yellow (solid). Rubidium, Strontium, Yttrium, Zirconium, Niobium, Molybdenum, Technetium, Ruthenium, Rhodium, Palladium, Silver, Cadmium, Indium, and Xenon (6th row, 1st to 18th columns) are yellow (solid). Tin, Antimony, Tellurium, and Iodine (7th row, 1st to 18th columns) are yellow (solid). Barium, Lanthanum, Cerium, Praseodymium, Neodymium, Promethium, Samarium, Europium, Gadolinium, Terbium, Dysprosium, Holmium, Erbium, Thulium, and Lead (8th row, 1st to 18th columns) are yellow (solid). Bismuth, Polonium, Astatine, and Radon (9th row, 1st to 18th columns) are yellow (solid). Francium, Radium, Actinium, Thorium, Protactinium, Uranium, Neptunium, and Plutonium (10th row, 1st to 18th columns) are yellow (solid). Americium, Curium, Berkelium, Californium, Einsteinium, Fermium, Mendelevium, and Tennessine (11th row, 1st to 18th columns) are yellow (solid). Oganesson (11th row, 18th column) is pink (liquid). All elements in the lanthanide series (12th row, 2nd to 15th columns) and actinide series (13th row, 2nd to 15th columns) are green (artificial).

NÚMEROS DE OXIDACIÓN

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	H +1																	He
2	Li +1	Be +2											B ±3	C +2, ±4	N ±1, ±2, ±3 +4, +5	O -1, -2	F -1	Ne
3	Na +1	Mg +2											Al +3	Si +2, ±4	P ±3, +5	S ±2, +4, +6	Cl ±1 +3, +5, +7	Ar
4	K +1	Ca +2	Sc +3	Ti +2, +3, +4	V +2, +3	Cr +2, +3	Mn +2, +3 +4, +6, +7	Fe +2, +3	Co +2, +3	Ni +2, +3	Cu +1, +2	Zn +2	Ga +1, +3	Ge +2, +4	As ±3, +5	Se -2, +4, +6	Br ±1 +3, +5, +7	Kr
5	Rb +1	Sr +2	Y +3	Zr +3, +4	Nb +2, +3	Mo +2, +3	Tc +4, +5 +6, +7	Ru +2, +3 +4, +5, +6	Rh +2, +3 +4, +5, +6	Pd +2, +4	Ag +1	Cd +2	In +1, +3	Sn +2, +4	Sb ±3, +5	Te ±2, +4, +6	I ±1 +3, +5, +7	Xe
6	Cs +1	Ba +2	Lu	Hf +3, +4	Ta	W +2, +3 +4, +6, +7	Re +2, +3 +4, +5, +6	Os +2, +3 +4, +5, +6	Ir +2, +3 +4, +5, +6	Pt +2, +4	Au +1, +3	Hg +1, +2	Tl +1, +3	Pb +2, +4	Bi +3, +5	Po ±2, +4, +6	At ±1, +5	Rn
7	Fr +1	Ra +2	Lr	Rf +3, +4	Db	Sg	Bh	Hs	Mt	Ds	Rg	Uub	Uut	Uuq	Uup	Uuh	Uus	Uuo

*	La +3	Ce	Pr	Nd	Pm	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb
*	Ac +3	Th	Pa	U	Np	Pu	Am	Cm	Bk	Cf	Es	Fm	Md	No

NOMBRE DE LOS GRUPOS



NÚMEROS DE OXIDACIÓN

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	H ±1																	He
2	Li +1	Be +2											B ±3	C +2, ±4	N ±1, ±2, ±3 +4, +5	O** -1, -2	F -1	Ne
3	Na +1	Mg +2											Al +3	Si +2, ±4	P ±3, +5	S ±2, +4, +6	Cl ±1 +3, +5, +7	Ar
4	K +1	Ca +2				Cr* +2, +3 (+6)	Mn* +2, +3 (+4, +6, +7)	Fe +2, +3	Co +2, +3	Ni +2, +3	Cu +1, +2	Zn 2			As ±3, +5	Se -2, +4, +6	Br ±1 +3, +5, +7	Kr
5	Rb +1	Sr +2									Ag +1	Cd +2		Sn +2, +4	Sb ±3, +5	Te ±2, +4, +6	I ±1 +3, +5, +7	Xe
6	Cs +1	Ba +2								Pt +2, +4	Au +1, +3	Hg +1, +2		Pb +2, +4				Rn
7	Fr +1	Ra +2																

* Los números de oxidación que aparecen entre paréntesis son con los que actúan cuando forman compuestos ternarios, actuando como no metales.

** El oxígeno solo funciona con el número de oxidación -1 en los peróxidos.

*** Los no metales, cuando se combinan con el hidrógeno, actúan con el número de oxidación negativo, igual que cuando forman sales binarias.

SISTEMA PERIÓDICO DE LOS ELEMENTOS

GRUPOS

← 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 →

↑
P
E
R
I
O
D
O
S
↓

1
2
3
4
5
6
7

A
L
C
A
L
I
N
O
S

METALES

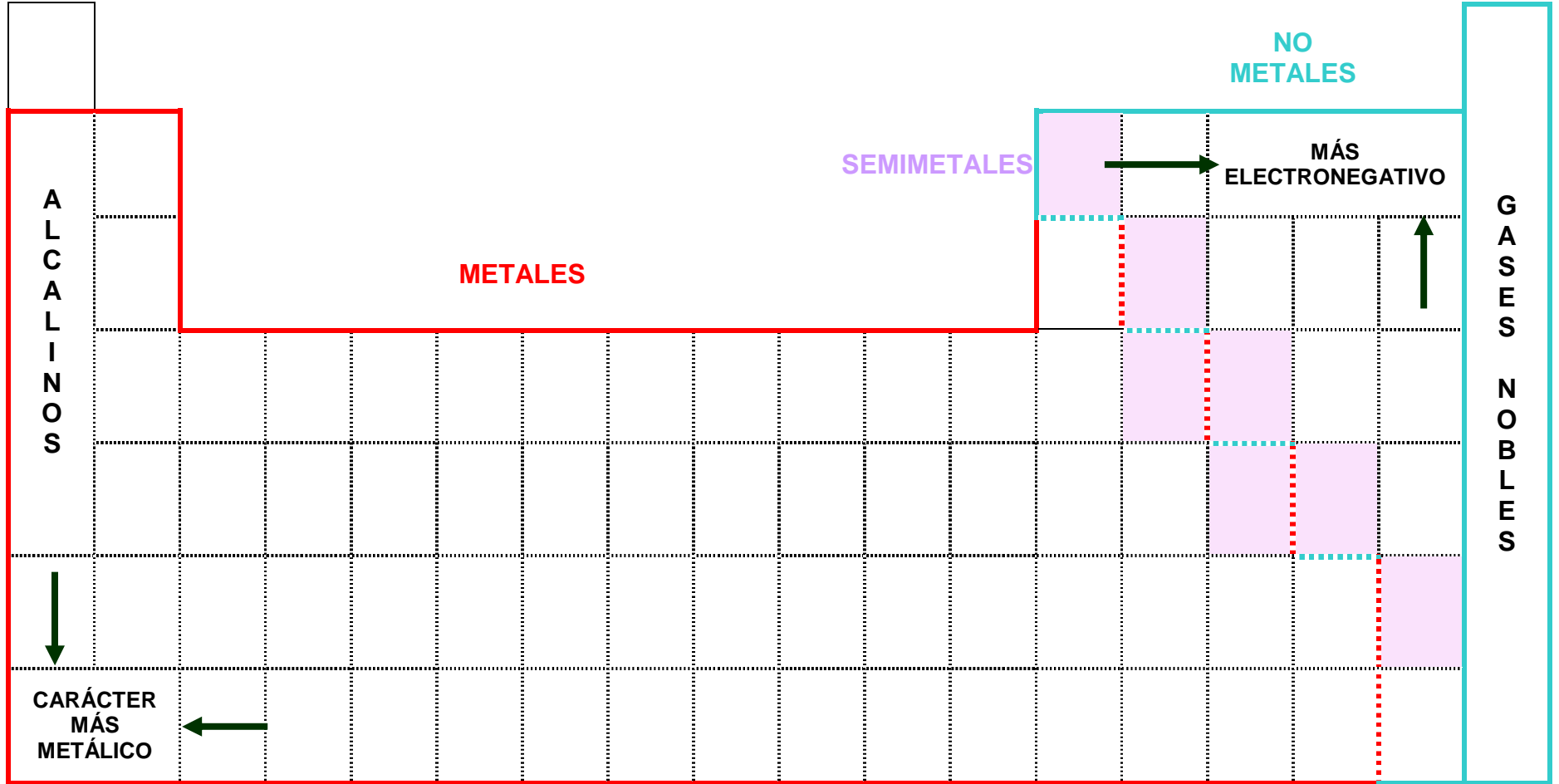
SEMIMETALES

NO
METALES

MÁS
ELECTRONEGATIVO

G
A
S
E
S
N
O
B
L
E
S

CARÁCTER
MÁS
METÁLICO



NÚMEROS ATÓMICOS

1																	2														
3	4											5	6	7	8	9	10														
11	12											13	14	15	16	17	18														
19	20											21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36				
37	38											39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54				
55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86
87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118

SÍMBOLOS

1	H																	He														
2	Li	Be											B	C	N	O	F	Ne														
3	Na	Mg											Al	Si	P	S	Cl	Ar														
4	K	Ca											Sc	Ti	V	Cr	Mn	Fe	Co	Ni	Cu	Zn	Ga	Ge	As	Se	Br	Kr				
5	Rb	Sr											Y	Zr	Nb	Mo	Tc	Ru	Rh	Pd	Ag	Cd	In	Sn	Sb	Te	I	Xe				
6	Cs	Ba	La	Ce	Pr	Nd	Pm	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Hf	Ta	W	Re	Os	Ir	Pt	Au	Hg	Tl	Pb	Bi	Po	At	Rn
7	Fr	Ra	Ac	Th	Pa	U	Np	Pu	Am	Cm	Bk	Cf	Es	Fm	Md	No	Lr	Rf	Db	Sg	Bh	Hs	M	Ds	Rg	Uub	Uut	Uuq	Uup	Uuh	Uus	Uuo

CONFIGURACIONES ELECTRÓNICAS

1	1s ¹																	1s ²														
2	2s ¹	2s ²											2p ¹	2p ²	2p ³	2p ⁴	2p ⁵	2p ⁶														
3	3s ¹	3s ²											3p ¹	3p ²	3p ³	3p ⁴	3p ⁵	3p ⁶														
4	4s ¹	4s ²											3d ¹	3d ²	3d ³	3d ⁴	3d ⁵	3d ⁶	3d ⁷	3d ⁸	3d ⁹	3d ¹⁰	4p ¹	4p ²	4p ³	4p ⁴	4p ⁵	4p ⁶				
5	5s ¹	5s ²											4d ¹	4d ²	4d ³	4d ⁴	4d ⁵	4d ⁶	4d ⁷	4d ⁸	4d ⁹	4d ¹⁰	5p ¹	5p ²	5p ³	5p ⁴	5p ⁵	5p ⁶				
6	6s ¹	6s ²	4f ¹	4f ²	4f ³	4f ⁴	4f ⁵	4f ⁶	4f ⁷	4f ⁸	4f ⁹	4f ¹⁰	4f ¹¹	4f ¹²	4f ¹³	4f ¹⁴	5d ¹	5d ²	5d ³	5d ⁴	5d ⁵	5d ⁶	5d ⁷	5d ⁸	5d ⁹	5d ¹⁰	6p ¹	6p ²	6p ³	6p ⁴	6p ⁵	6p ⁶
7	7s ¹	7s ²	5f ¹	5f ²	5f ³	5f ⁴	5f ⁵	5f ⁶	5f ⁷	5f ⁸	5f ⁹	5f ¹⁰	5f ¹¹	5f ¹²	5f ¹³	5f ¹⁴	6d ¹	6d ²	6d ³	6d ⁴	6d ⁵	6d ⁶	6d ⁷	6d ⁸	6d ⁹	6d ¹⁰	7p ¹	7p ²	7p ³	7p ⁴	7p ⁵	7p ⁶