

PERIODIC TABLE OF THE ELEMENTS

Based on the electronic structure of atoms

Janet (1929), Tarantola (2000), etc.

																1	2																
																H	He																
																3	4																
																Li	Be																
																5	6	7	8	9	10	11	12										
																B	C	N	O	F	Ne	Na	Mg										
																13	14	15	16	17	18	19	20										
																Al	Si	P	S	Cl	A	K	Ca										
																21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38
																Sc	Ti	V	Cr	Mn	Fe	Co	Ni	Cu	Zn	Ga	Ge	As	Se	Br	Kr	Rb	Sr
																39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56
																Y	Zr	Nb	Mo	Tc	Ru	Rh	Pd	Ag	Cd	In	Sn	Sb	Te	I	Xe	Cs	Ba
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		
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	Fr	Ra		
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	119	120		
Ac	Th	Pa	U	Np	Pu	Am	Cm	Bk	Cf	Es	Fm	Md	No	Lr	Rf	Db	Sg	Bh	Hs	Mt	Uun	Uuu	Uub	Xx	Xx	Xx	Xx	Xx	Xx	Xx			
138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	

																1s		
																2s		
																2p		3s
																3p		4s
																3d		5s
																4d		6s
																4f		7s
																5d		8s
																5f		6s
																6d		7s
																7p		8s

This table results from a simple filling of the natural classification of the energy levels of the atoms.

It allows a direct reading of the electronic structure.

As an example, for element (S,16) we have $1s^2 2s^2 2p^6 3s^2 3p^4$.

As some energy levels are quite close, some elements may have one or two electrons "misplaced".

These exceptional elements are: Cr, Cu, Nb, Mo, Ru, Rh, Pd, Ag, La, Gd, Pt, Au, Ac, Th, Pa, U and Cm.