

	1	2
	s ¹	s ²
1	1 H Hydrogen 1.008	2 [min. ø] He Helium 4.003
2	3 Li Lithium 6.94	4 Be Beryllium 9.012
3	11 Na Sodium (Natrium) 22.99	12 Mg Magnesium 24.305
4	19 K Potassium (Kalium) 39.098	20 Ca Calcium 40.078
5	37 Rb Rubidium 85.468	38 Sr Strontium 87.62
6	55 Cs Caesium 132.91	56 Ba Barium 137.33
7	87 [max. ø] Fr Francium 223*	88 Ra Radium 226*
8	119 [max. ø] Eka-Fr Eka-Francium 295???	120 Eka-Ra Eka-Radium 299???

Atomic radius trend
The smallest radius is in the completed shell ending a Period
The largest radius is in the singly occupied s sub-shell of a Period
Atoms are larger with each Period.
Helium is the absolute smallest atom, in Period 2 onwards the smallest atom in the Period is in Column 18

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

A Hypothetical Sub-Shell Periodic Table of Elements (2021)
Extended for Elements 119+ including 5g sub-shell. Eka- prefix used per Mendeleev's original schema except for 5g sub-shell. The IUPAC provisional naming used for 5g sub-shell; "Aufbau Principle" used to determine the order of sub-shells

	3d	4d	5d	6d	7d	8d	9d	10d	11d	12d	13d	14d	15d	16d	17d	18d
21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37
Scandium	Titanium	Vanadium	Cr	Mn	Fe	Co	Ni	Cu	Zn	Ga	Ge	As	Se	Br	Kr	2p
44.956	47.867	50.942	51.996	54.938	55.845	58.933	58.693	63.546	65.38	69.723	72.63	74.922	78.971	79.904	83.798	3p
39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	5p
Yttrium	Zirconium	Niobium	Molybdenum	Technetium	Ruthenium	Rhodium	Palladium	Silver	Cadmium	Indium	Tin	Antimony	Tellurium	Iodine	Xenon	6p
88.906	91.224	92.906	95.95	98*	101.07	102.91	106.43	107.87	112.41	114.82	118.71	121.76	127.60	126.9	131.29	7p
71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	8p
Lu	Hf	Ta	W	Re	Os	Ir	Pt	Au	Hg	Tl	Pb	Bi	Po	At	Rn	
174.97	178.49	180.95	183.84	186.21	190.23	192.22	195.08	196.97	200.59	204.38	207.2	208.98	209*	210*	222*	
103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	9p
Lr	Rf	Db	Sg	Bh	Hs	Mt	Ds	Rg	Cn	Nh	Fl	Mc	Lv	Ts	Og	
Lawrencium	Rutherfordium	Dubnium	Seaborgium	Bohrium	Hassium	Mitnerium	Darmstadtium	Roentgenium	Copernicium	Nihonium	Flerovium	Moscovium	Livermorium	Tennesseium	Oganesson	
266*	267*	268*	269*	270*	277*	278*	281*	282*	285*	286*	289*	290*	293*	294*	294*	
153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	
Eka-Lr	Eka-Rf	Eka-Db	Eka-Sg	Eka-Bh	Eka-Hs	Eka-Mt	Eka-Ds	Eka-Rg	Eka-Cn	Eka-Nh	Eka-Fl	Eka-Mc	Eka-Lv	Eka-Ts	Eka-Og	
Eka-Lawrencium	Eka-Rutherfordium	Eka-Dubnium	Eka-Seaborgium	Eka-Bohrium	Eka-Hassium	Eka-Mitnerium	Eka-Darmstadtium	Eka-Roentgenium	Eka-Copernicium	Eka-Nihonium	Eka-Flerovium	Eka-Moscovium	Eka-Livermorium	Eka-Tennesseium	Eka-Oganesson	
???	???	???	???	???	???	???	???	???	???	???	???	???	???	???	???	

	f ¹	f ²	f ³	f ⁴	f ⁵	f ⁶	f ⁷	f ⁸	f ⁹	f ¹⁰	f ¹¹	f ¹²	f ¹³	f ¹⁴
6	57 La Lanthanum 131.91	58 Ce Cerium 140.12	59 Pr Praseodymium 140.91	60 Nd Neodymium 144.24	61 Pm Promethium 145*	62 Sm Samarium 150.36	63 Eu Europium 151.96	64 Gd Gadolinium 157.25	65 Tb Terbium 158.93	66 Dy Dysprosium 162.5	67 Ho Holmium 164.93	68 Er Erbium 167.26	69 Tm Thulium 168.93	70 Yb Ytterbium 173.05
7	89 Ac Actinium 227*	90 Th Thorium 232.04	91 Pa Protactinium 231.04	92 U Uranium 238.03	93 Np Neptunium 237*	94 Pu Plutonium 244*	95 Am Americium 243*	96 Cm Curium 247*	97 Bk Berkelium 247*	98 Cf Californium 251*	99 Es Einsteinium 252*	100 Fm Fermium 257*	101 Md Mendelevium 258*	102 No Nobelium 259*
8	119 Eka-Ac Eka-Actinium ???	120 Eka-Th Eka-Thorium ???	121 Eka-Pa Eka-Protactinium ???	122 Eka-U Eka-Uranium ???	123 Eka-Np Eka-Neptunium ???	124 Eka-Pu Eka-Plutonium ???	125 Eka-Am Eka-Americium ???	126 Eka-Cm Eka-Curium ???	127 Eka-Bk Eka-Berkelium ???	128 Eka-Cf Eka-Californium ???	129 Eka-Es Eka-Einsteinium ???	130 Eka-Fm Eka-Fermium ???	131 Eka-Md Eka-Mendelevium ???	132 Eka-No Eka-Nobelium ???

The g sub-shell presented in this location is hypothetical. The assignment was made following the Aufbau-Principle, however the actual order electrons fill in may be different due to energy overlaps with f and d sub-shells.

	g ¹	g ²	g ³	g ⁴	g ⁵	g ⁶	g ⁷	g ⁸	g ⁹	g ¹⁰	g ¹¹	g ¹²	g ¹³	g ¹⁴	g ¹⁵	g ¹⁶	g ¹⁷	g ¹⁸
8	121 Ubu Unbium ???	122 Ubb Unbibium ???	123 Ubt Unbitrium ???	124 Ubuq Unbiquadium ???	125 Ubp Unbipentium ???	126 Ubh Unbihexium ???	127 Ubs Unbiseptium ???	128 Ubo Unbioctium ???	129 Ubn Unbinennium ???	130 Utn Untrinillium ???	131 Utu Untrinunium ???	132 Utb Untribrium ???	133 Utt Untritrium ???	134 Utuq Untriquadium ???	135 Utp Untripentium ???	136 Uth Untrihexium ???	137 Uts Untriseptium ???	138 Uto Untrioctium ???

Super-Actinide series

How to read the entry for an element	Additional Information
26 Fe = Symbol Iron (Ferrum) 55.845	26 = Atomic Number = number of protons Fe = Symbol Iron = English name (Ferrum) = Latin name if different from English 55.845 = atomic weight (isotopes); 56* = longest lived isotope
	Rows are numbered by Period (completed valence shells corresponding to s and p sub-shells) [s sub-shells have up to 2 electrons(e-); p up to 6e-; d up to 10e-; f up to 14e-; g up to 18e-] F = highest electronegativity and the small diameter due to the incomplete valence octet (s2p5) and small nucleus Fr = lowest electronegativity and largest diameter due to the incomplete valence octet (7s1) and large nucleus