

# Electronegativities of the elements (data page)

## Electronegativity (Pauling scale)

Periodic table of electronegativity by Pauling scale																			
→ Atomic radius decreases → Ionization energy increases → Electronegativity increases →																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
<b>Group</b> →																			
↓ <b>Period</b>																			
<b>1</b>	H 2.20																He		
<b>2</b>	Li 0.98	Be 1.57											B 2.04	C 2.55	N 3.04	O 3.44	F 3.98	Ne	
<b>3</b>	Na 0.93	Mg 1.31											Al 1.61	Si 1.90	P 2.19	S 2.58	Cl 3.16	Ar	
<b>4</b>	K 0.82	Ca 1.00	Sc 1.36	Ti 1.54	V 1.63	Cr 1.66	Mn 1.55	Fe 1.83	Co 1.88	Ni 1.91	Cu 1.90	Zn 1.65	Ga 1.81	Ge 2.01	As 2.18	Se 2.55	Br 2.96	Kr 3.00	
<b>5</b>	Rb 0.82	Sr 0.95	Y 1.22	Zr 1.33	Nb 1.6	Mo 2.16	Tc 1.9	Ru 2.2	Rh 2.28	Pd 2.20	Ag 1.93	Cd 1.69	In 1.78	Sn 1.96	Sb 2.05	Te 2.1	I 2.66	Xe 2.60	
<b>6</b>	Cs 0.79	Ba 0.89	*	Lu 1.27	Hf 1.3	Ta 1.5	W 2.36	Re 1.9	Os 2.2	Ir 2.20	Pt 2.28	Au 2.54	Hg 2.00	Tl 1.62	Pb 1.87	Bi 2.02	Po 2.0	At 2.2	Rn 2.2
<b>7</b>	Fr >0.79	Ra [0.9]	**	Lr 1.3 <sup>[en 2]</sup>	Rf	Db	Sg	Bh	Hs	Mt	Ds	Rg	Cn	Nh	Fl	Mc	Lv	Ts	Og
			*	La 1.1	Ce 1.12	Pr 1.13	Nd 1.14	Pm –	Sm 1.17	Eu –	Gd 1.2	Tb 1.1	Dy 1.22	Ho 1.23	Er 1.24	Tm 1.25	Yb –		
			**	Ac 1.1	Th 1.3	Pa 1.5	U 1.38	Np 1.36	Pu 1.28	Am 1.13	Cm 1.28	Bk 1.3	Cf 1.3	Es 1.3	Fm 1.3	Md 1.3	No 1.3		

See also: [Electronegativities of the elements \(data page\)](#)

There are no reliable sources for Pm, Eu and Yb other than the range of 1.1–1.2; see Pauling, Linus (1960). *The Nature of the Chemical Bond*. 3rd ed., Cornell University Press, p. 93.

- The electronegativity of francium was chosen by Pauling as 0.7, close to that of caesium (also assessed 0.7 at that point). The base value of hydrogen was later increased by 0.10 and caesium's electronegativity was later refined to 0.79; however, no refinements have been made for francium as no experiment has been conducted. However, francium is expected and, to a small extent, observed to be more electronegative than caesium. See [francium](#) for details.
- See Brown, Geoffrey (2012). *The Inaccessible Earth: An integrated view to its structure and composition*. Springer Science & Business Media. p. 88. ISBN 9789401115162.