

| Electronegativity using the Allen scale | | | | | | | | | | | | | | | | | | |
|---|-------------|-------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Group → | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| ↓ Period | | | | | | | | | | | | | | | | | | |
| 1 | H 2.300 | | | | | | | | | | | | | | | | He 4.160 | |
| 2 | Li 0.912 | Be 1.576 | | | | | | | | | | | B 2.051 | C 2.544 | N 3.066 | O 3.610 | F 4.193 | Ne 4.789 |
| 3 | Na 0.869 | Mg 1.293 | | | | | | | | | | | Al 1.613 | Si 1.916 | P 2.253 | S 2.589 | Cl 2.869 | Ar 3.242 |
| 4 | K 0.734 | Ca 1.034 | Sc 1.19 | Ti 1.38 | V 1.53 | Cr 1.65 | Mn 1.75 | Fe 1.80 | Co 1.84 | Ni 1.88 | Cu 1.85 | Zn 1.59 | Ga 1.756 | Ge 1.994 | As 2.211 | Se 2.434 | Br 2.685 | Kr 2.966 |
| 5 | Rb 0.706 | Sr 0.963 | Y 1.12 | Zr 1.32 | Nb 1.41 | Mo 1.47 | Tc 1.51 | Ru 1.54 | Rh 1.56 | Pd 1.59 | Ag 1.87 | Cd 1.52 | In 1.656 | Sn 1.824 | Sb 1.984 | Te 2.158 | I 2.359 | Xe 2.582 |
| 6 | Cs 0.659 | Ba 0.881 | Lu 1.09 | Hf 1.16 | Ta 1.34 | W 1.47 | Re 1.60 | Os 1.65 | Ir 1.68 | Pt 1.72 | Au 1.92 | Hg 1.76 | Tl 1.789 | Pb 1.854 | Bi 2.01 | Po 2.19 | At 2.39 | Rn 2.60 |
| 7 | Fr 0.67 | Ra 0.89 | | | | | | | | | | | | | | | | |

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

Packing Possibilities Assuming Anion is Larger Than Cation^a

| anion's lattice | cation's hole | Coordination Number (max) | | $r_{\text{cation}}/r_{\text{anion}}$ | base stoichiometry ^b | other stoichiometries ^c |
|--------------------|---------------|------------------------------|-------|--------------------------------------|------------------------------------|---------------------------------------|
| | | cation | anion | | | |
| simple cubic | cubic | 8 | 8 | 0.732 – 0.999 | 1:1 | 1:2, 1:4 |
| face- centered | octahedral | 6 | 6 | 0.414 – 0.732 | 1:1 | 1:2, 2:3, 1:3 |
| face- centered | tetrahedral | 4 | 8 | 0.225 – 0.414 | 2:1 | 1:1, 1:2, 3:2 |

^a when cations are larger than anions, simply reverse their roles in the table

^b ratio is cation:anion assuming all holes are filled

^c assuming that some fraction of the holes remain unfilled