
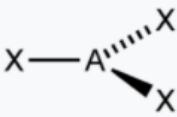
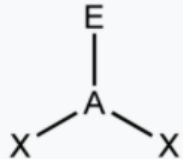
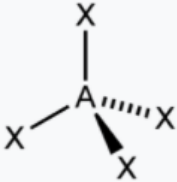









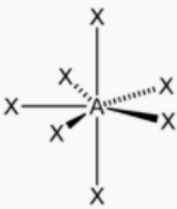
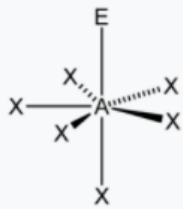
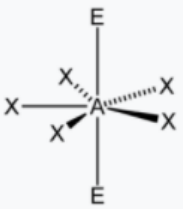

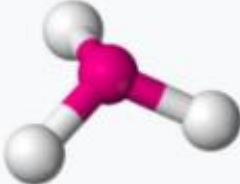



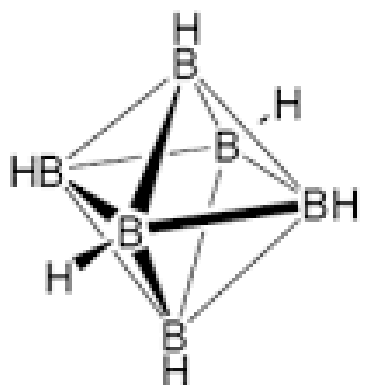


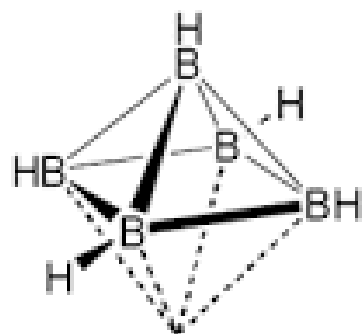
| Steric number | Molecular geometry ^[12] 0 lone pairs | Molecular geometry ^{[2]:413–414} 1 lone pair | Molecular geometry ^{[2]:413–414} 2 lone pairs | Molecular geometry ^{[2]:413–414} 3 lone pairs |
|---------------|--|--|---|--|
| 2 |  Linear (CO ₂) | | | |
| 3 |  Trigonal planar (BCl ₃) |  V-shape (SO ₂) | | |
| 4 |  Tetrahedral (CH ₄) |  Trigonal pyramidal (NH ₃) |  Bent (H ₂ O) | |
| 5 |  Trigonal bipyramidal (PCl ₅) |  Seesaw (SF ₄) |  T-shaped (ClF ₃) |  Linear (I ₃ ⁻) |
| 6 |  Octahedral (SF ₆) |  Square pyramidal (BrF ₅) |  Square planar (XeF ₄) | |
| 7 |  Pentagonal bipyramidal (IF ₇) ^[11] |  Pentagonal pyramidal (XeOF ₅) ^[13] |  Pentagonal planar (XeF ₅ ⁻) ^{[14]:498} | |
| 8 | Square antiprismatic (TaF ₈ ³⁻) ^[11] | | | |

| Molecule type | Shape | Geometry | Examples |
|---------------|--------------------|---|----------------------------------|
| AX_2 | Bent |  | VO_2^+ |
| AX_3 | Trigonal pyramidal |  | CrO_3 |
| AX_4 | Tetrahedral |  | $TiCl_4$ ^{[14]:598–599} |
| AX_5 | Square pyramidal |  | $Ta(CH_3)_5$ ^[30] |
| AX_6 | Trigonal prismatic |  | $W(CH_3)_6$ ^[31] |

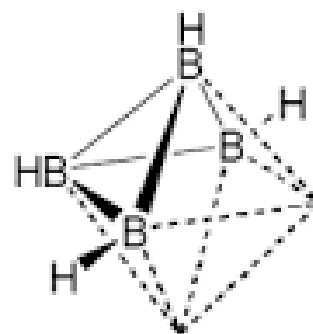
Wade-Mingos-Regeln



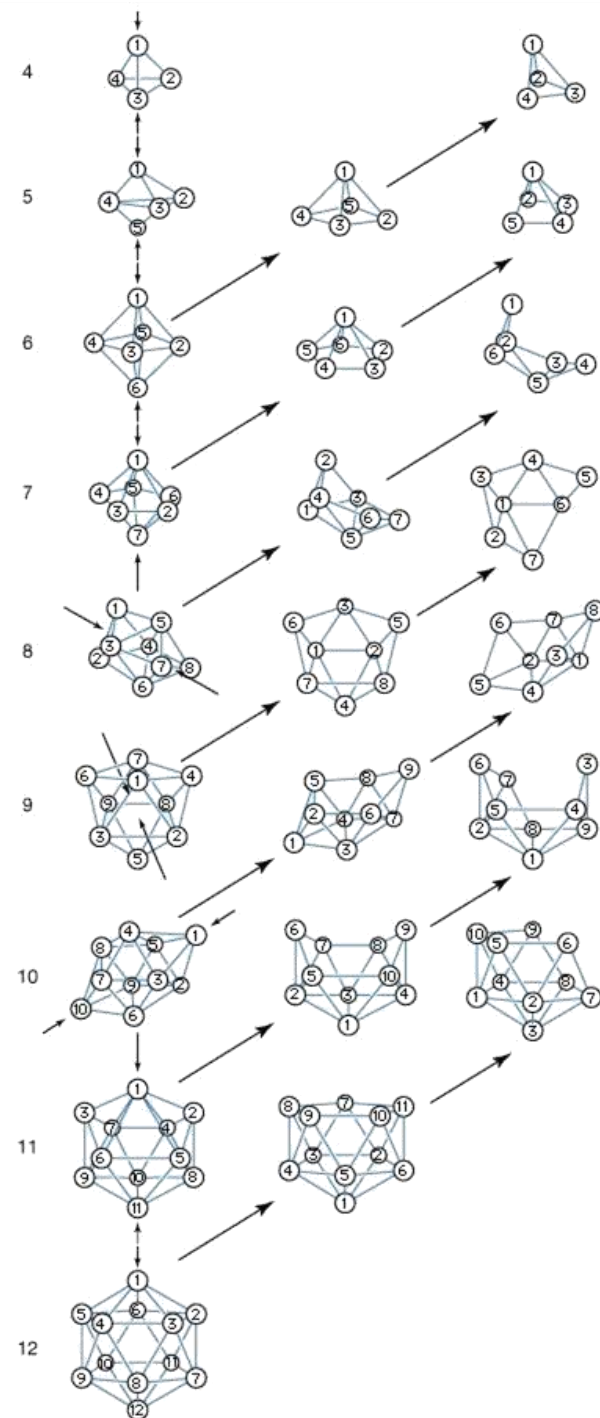
closo structure

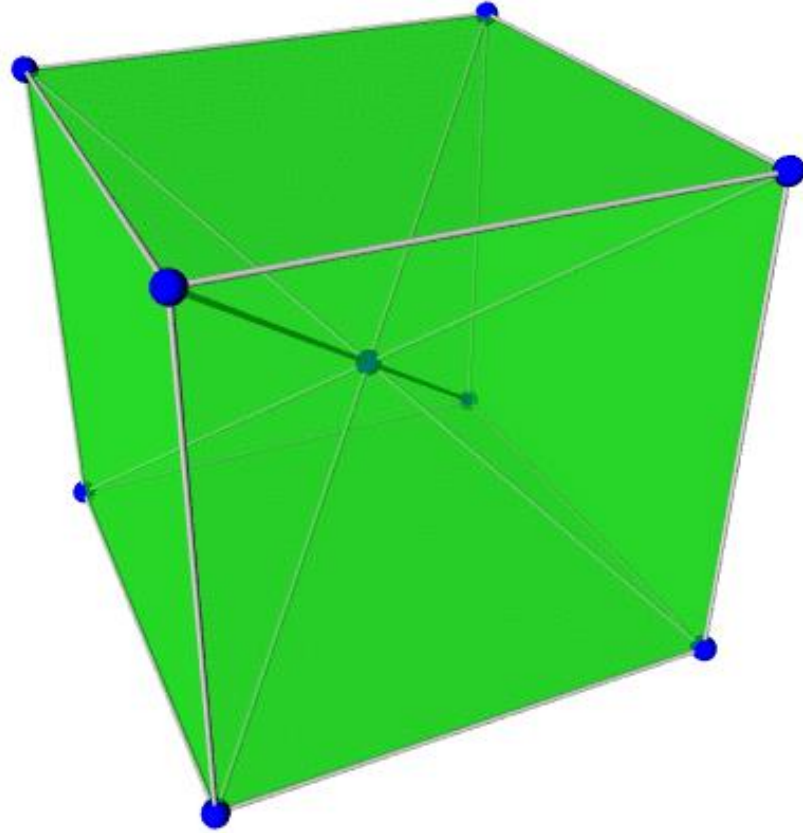


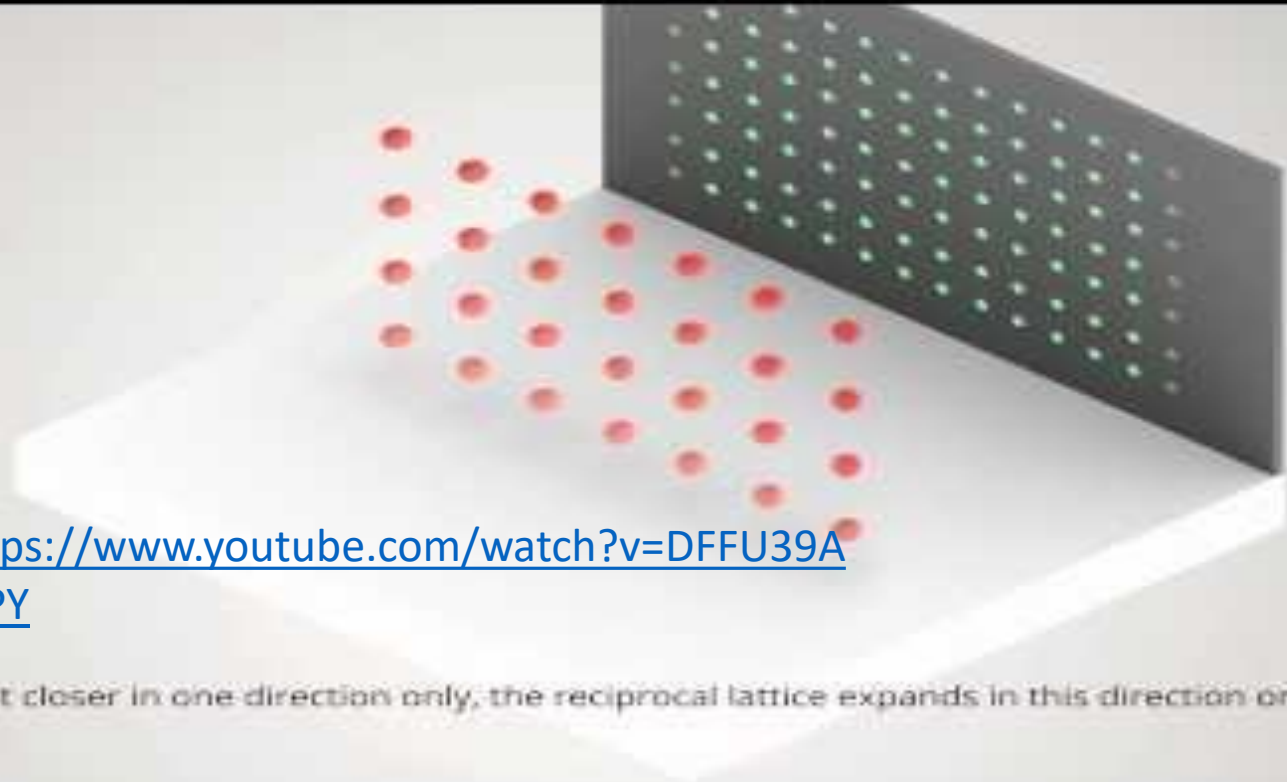
nido structure



arachno structure







<https://www.youtube.com/watch?v=DFFU39A3fPY>

When atoms get closer in one direction only, the reciprocal lattice expands in this direction only.

