
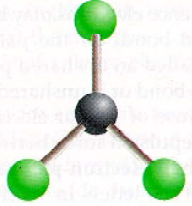
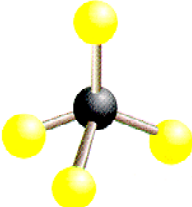
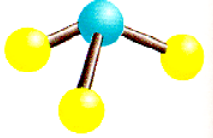



Small Molecule Shapes

Shape (and structural formula example)	# of atoms bonded to central atom	# of unshared pairs of electrons on central atom	Bond angle	Picture	Hybrid Orbital
Linear $:\ddot{\text{O}}=\text{C}=\ddot{\text{O}}:$	1 or 2	0	180°		sp
Trigonal Planar $\begin{array}{c} :\ddot{\text{Cl}}: \\ \\ :\ddot{\text{B}}: \\ / \quad \backslash \\ :\ddot{\text{Cl}}: \quad :\ddot{\text{Cl}}: \end{array}$	3	0	120°		sp^2
Tetrahedral $\begin{array}{c} \text{H} \\ \\ \text{H}-\text{C}-\text{H} \\ \\ \text{H} \end{array}$	4	0	109.5°		sp^3
Pyramidal $\begin{array}{c} \ddot{\text{N}} \\ \\ \text{H}-\text{N}-\text{H} \\ \\ \text{H} \end{array}$	3	1	107°		sp^3
Bent $\begin{array}{c} \ddot{\text{O}} \\ / \quad \backslash \\ \text{H} \quad \text{H} \end{array}$	2	2	105°		sp^3