SN	Number of lone pairs	Molecular shape	Example	SN	Number of lone pairs	Molecular shape	Example
3	0	linear	BeH <sub>2</sub> , CO <sub>2</sub> SO <sub>3</sub> , BF <sub>3</sub>	5	1	sawhorse	SF <sub>4</sub>
3	1	trigonal planar	SO <sub>2</sub> , O <sub>3</sub>	5	2	T-shaped	$\mathrm{ClF}_3$
4	0	angular	CH <sub>4</sub> , CF <sub>4</sub> , SO <sub>4</sub> <sup>2-</sup>	5	3	linear	XeF <sub>2</sub> , I <sub>3</sub> , IF <sub>2</sub>
4	1	trigonal pyramidal	$\mathrm{NH_3},\mathrm{PF_3},\ \mathrm{AsCl_3}$	6	0	octahedral	SF <sub>6</sub> , PF <sub>6</sub> , SiF <sub>6</sub> <sup>2</sup>
4	2	angular	H <sub>2</sub> O, H <sub>2</sub> S, SF <sub>2</sub>	6	1	square pyramidal	IF <sub>5</sub> , BrF <sub>5</sub>
5	0	trigonal bipyramidal	PF <sub>5</sub> , PCl <sub>5</sub> , AsF <sub>5</sub>	6	2	square planar	XeF <sub>4</sub> , IF <sub>4</sub>

from **Chemical Principles 3<sup>rd</sup> Ed**, by Dickerson, Gray, Haight, figure 11-3 (Benjamin, 1979)