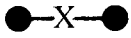
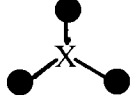
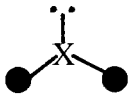
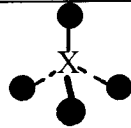
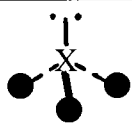
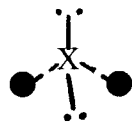
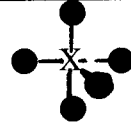
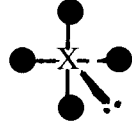
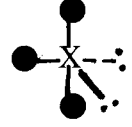
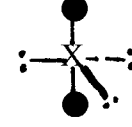
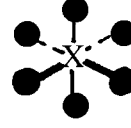
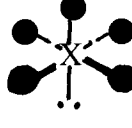
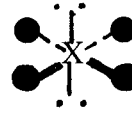


BP + LP (Steric Number)	0 LP's	1 LP	2 LP's	3 LP's	VB Theory Hybrid Orbitals
2	 <p>Linear 180° CO<sub>2</sub>, BeCl<sub>2</sub></p>				sp linear
3	 <p>trigonal planar 120° BF<sub>3</sub>, CO<sub>3</sub><sup>2-</sup></p>	 <p>V-shaped/ bent/ angular SO<sub>2</sub>, NOCl</p>			sp <sup>2</sup> trigonal planar
4	 <p>tetrahedral 109.5° CH<sub>4</sub>, NH<sub>4</sub><sup>+</sup></p>	 <p>trigonal pyramidal NH<sub>3</sub>, H<sub>3</sub>O<sup>+</sup></p>	 <p>V-shaped/ bent/ angular H<sub>2</sub>O, NH<sub>2</sub><sup>-</sup></p>		sp <sup>3</sup> tetrahedral
5	 <p>trigonal bipyramidal 90°, 120°, 180° PCl<sub>5</sub>, AsF<sub>5</sub></p>	 <p>seesaw SF<sub>4</sub>, IF<sub>4</sub><sup>+</sup></p>	 <p>T-shaped ICl<sub>3</sub>, ClF<sub>3</sub></p>	 <p>linear XeF<sub>2</sub>, ICl<sub>2</sub><sup>-</sup></p>	dsp <sup>3</sup> or sp <sup>3</sup> d trigonal bipyramidal
6	 <p>octahedral 90°, 180° SF<sub>6</sub>, PCl<sub>6</sub><sup>-</sup></p>	 <p>square pyramidal BrF<sub>5</sub>, XeOF<sub>4</sub></p>	 <p>square planar XeF<sub>4</sub>, ICl<sub>4</sub><sup>-</sup></p>		d <sup>2</sup> sp <sup>3</sup> or sp <sup>3</sup> d <sup>2</sup> octahedral