

### VSEPR TABLE and STRUCTURE

Molecular Type	# of Electron Pairs	# of single bonding electron pairs	# of unshared electron pairs	Name/Angle	Example	Lewis	3-D Structure
AX <sub>2</sub>	2	2	0	linear (180°)	BeH <sub>2</sub>		
AX <sub>3</sub> <sup>2-</sup>	3	3	0	trigonal planar (120°)	BCl <sub>3</sub>		
AX <sub>2</sub> E	3	2	1	Non-Linear	SO <sub>2</sub>		
AX <sub>4</sub>	4	4	0	tetrahedral (109.5°)	CH <sub>4</sub>		
AX <sub>3</sub> E	4	3	1	trigonal pyramidal	NH <sub>3</sub>		
AX <sub>2</sub> E <sub>2</sub>	4	2	2	Non-Linear 104.5°	H <sub>2</sub> O		
AX <sub>5</sub> <sup>-</sup>	5	5	0	Trigonal bipyramidal (90°, 120°)			
AX <sub>4</sub> E	5	4	1	see-saw			
AX <sub>3</sub> E <sub>2</sub>	5	3	2	T-shaped			
AX <sub>2</sub> E <sub>3</sub> <sup>-</sup>	5	2	3	Linear			
AX <sub>6</sub> <sup>-</sup>	6	6	0	Octahedral	SF <sub>6</sub>		
AX <sub>5</sub> E	6	5	1	Square pyramidal	BrF <sub>5</sub>		
AX <sub>4</sub> E <sub>2</sub>	6	4	2	square planar	XeF <sub>4</sub>		