

TABLE 12.4

Arrangements of Electron Pairs and the Resulting Molecular Structures for Two, Three, and Four Electron Pairs

Case	Number of Electron Pairs	Bonds	Electron Pair Arrangement	Partial Lewis Structure	Molecular Structure	Example
1	2	2	 Linear	A — B — A	 Linear	F — Be — F BeF ₂
2	3	3	 Trigonal planar (triangular)		 Trigonal planar (triangular)	 BF ₃
3	4	4	 Tetrahedral		 Tetrahedral	 CH ₄
4	4	3	 Tetrahedral		 Trigonal pyramid	 NH ₃
5	4	2	 Tetrahedral		 Bent or V-shaped	 H ₂ O

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