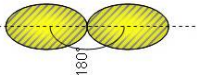
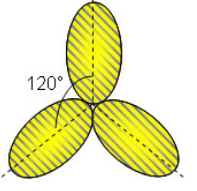
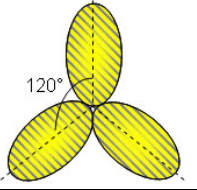
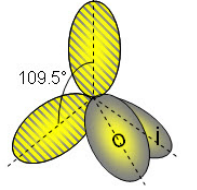
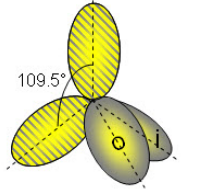
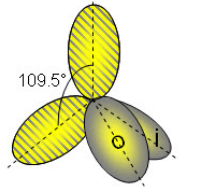


Electron Group Arrangements and Molecular Structures Around a Central Atom

<i>No. of Electron Groups</i>	<i>Three-dimensional Electron Groups/ angles</i>	<i>Electron Geometry (EG) Classification</i>	<i>General Structure Note: A line may represent double or triple bond!</i>	<i>Molecular Shape (MS) Classification</i>	<i>Example</i>
2		Linear	$A \text{ --- } B \text{ --- } A$	Linear	BeF ₂
3		Triangular (trigonal planar)	$\begin{array}{c} A \\ \\ B \\ / \quad \backslash \\ A \quad A \end{array}$	Triangular (trigonal planar)	BF ₃
3		Triangular (trigonal planar)	$\begin{array}{c} \cdot\cdot \\ B \\ / \quad \backslash \\ A \quad A \end{array}$	Bent (120°)	SO ₂
4		Tetrahedral	$\begin{array}{c} A \\ \\ B \\ / \quad \backslash \\ A \quad A \\ \backslash \\ A \end{array}$	Tetrahedral	CCl ₄
4		Tetrahedral	$\begin{array}{c} A \\ \\ B \\ / \quad \backslash \\ A \quad \cdot\cdot \\ \cdot\cdot \end{array}$	Bent (109.5°)	H ₂ O
4		Tetrahedral	$\begin{array}{c} \cdot\cdot \\ B \\ / \quad \backslash \\ A \quad A \\ \backslash \\ A \end{array}$	Trigonal Pyramid	NH ₃