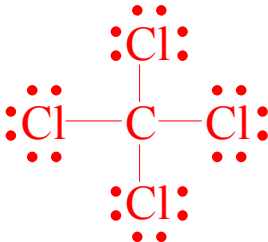
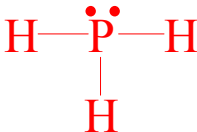
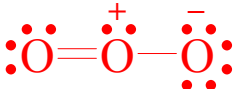
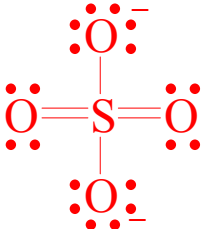
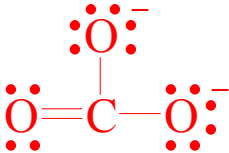
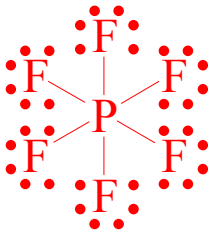
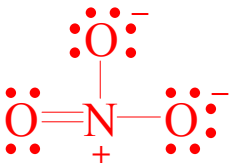
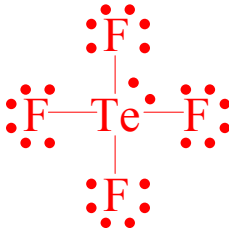


Chapter 8 Lewis Structures, Electron & Molecular Geometry Worksheet #2

Formula	Best Lewis Structure	Electron Geometry	Molecular Geometry
CCl ₄		Tetrahedral	Tetrahedral
PH ₃		Tetrahedral	Trigonal pyramidal
O ₃		Trigonal planar	Bent (120°)
SO ₄ ²⁻		Tetrahedral	Tetrahedral
CO ₃ ²⁻		Trigonal planar	Trigonal planar

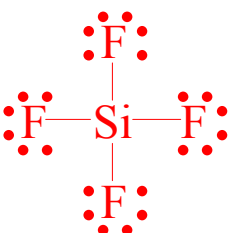
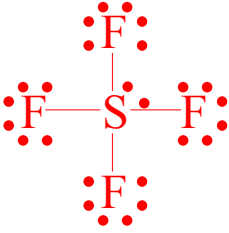
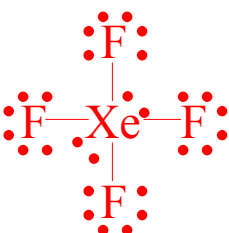
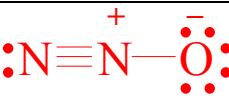
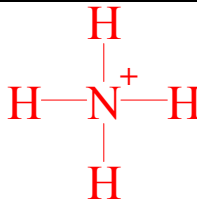
Chapter 8 Lewis Structures, Electron & Molecular Geometry Worksheet #2

Formula	Best Lewis Structure	Electron Geometry	Molecular Geometry
PF_6^-		Octahedral	Octahedral
NO_3^-		Trigonal planar	Trigonal planar
TeF_4		Trigonal bipyramidal	See-saw
ICl_2^-		Trigonal bipyramidal	Linear

Chapter 8 Lewis Structures, Electron & Molecular Geometry Worksheet #2

Formula	Best Lewis Structure	Electron Geometry	Molecular Geometry
H ₂ CO	$ \begin{array}{c} \text{:O:} \\ \\ \text{H}-\text{C}-\text{H} \end{array} $	Trigonal planar	Trigonal planar
H ₂ O ₂	$ \text{H}-\ddot{\text{O}}-\ddot{\text{O}}-\text{H} $	Tetrahedral at each O	Bent at each (109.5°)
C ₂ H ₄	$ \begin{array}{cc} \text{H} & \text{H} \\ & \\ \text{H}-\text{C} & = & \text{C}-\text{H} \end{array} $	Trigonal planar at each C	Trigonal planar at each C
N ₂	$ \text{:N}\equiv\text{N:} $	Linear	Linear

Chapter 8 Lewis Structures, Electron & Molecular Geometry Worksheet #2

Formula	Best Lewis Structure	Electron Geometry	Molecular Geometry
SiF ₄		Tetrahedral	Tetrahedral
SF ₄		Trigonal bipyramidal	See-saw
XeF ₄		Octahedral	Square planar
N ₂ O		Linear	Linear
NH ₄ ⁺		Tetrahedral	Tetrahedral