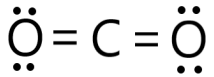
Lewis Structures Part 3: Geometries and Polarity

Name _____ Period ____ Date _____

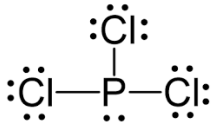
1. Complete the chart below:

Number of Electron Domains	Electron Domain Geometry
2	
3	
	Tetrahedral
	Trigonal Bipyramidal
6	

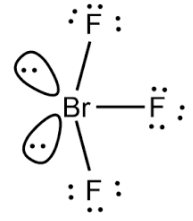
2. Determine the number of electron domains present around the central atom.

a. 

electron domains:_____
EDG _____

b. 

electron domains: _____
EDG _____

c. 

#electron domains: _____
EDG _____

3. Determine the molecular geometry (shape) for a molecule with four bonding electrons and one lone pair around the central atom.

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Draw shape: molecular geometry (shape):

Compound	Total # VE	Lewis Structure with delta notation and EN arrow	AXE Notation	Electron Geometry	Molecular Geometry	Polar or Nonpolar	Angle
NO_3^{-1}							
NF_3							
SO_2							

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ClF_3							
Compound	**Total # VE**	**Lewis Structure with delta notation and EN arrow**	**AXE Notation**	**Electron Geometry**	**Molecular Geometry**	**Polar or Nonpolar**	**Angle**
SF_6							
I_3^{-1}							
PO_4^{-3}							

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SF_4							
Compound	**Total # VE**	**Lewis Structure with delta notation and EN arrow**	**AXE Notation**	**Electron Geometry**	**Molecular Geometry**	**Polar or Nonpolar**	**Angle**
KrF_2							
XeF_4							
ClF_5							

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O_3							