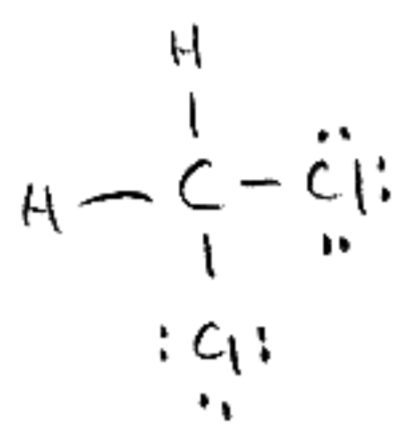
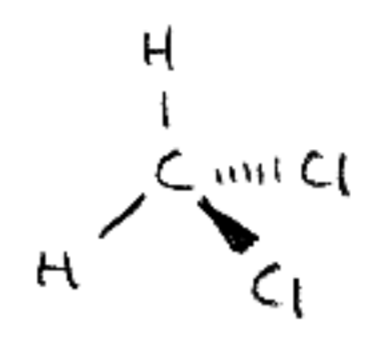


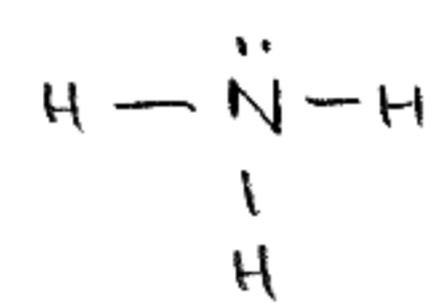
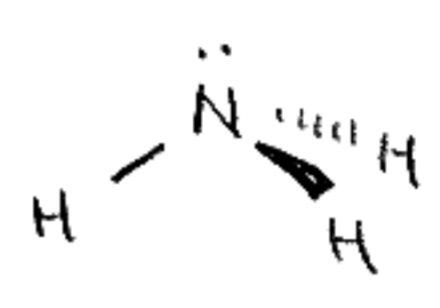
Name KEY Lab Partner This is an individual assignment

Lab Report: Lewis Structures and VSEPR

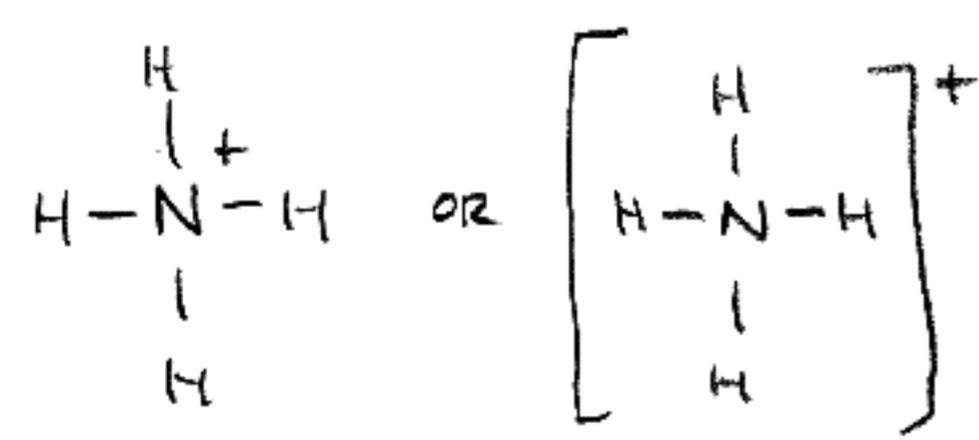
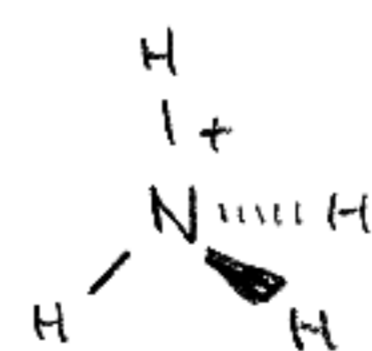
CH₂Cl₂ Name: DICHLOROMETHANE (OR METHYLENE CHLORIDE)

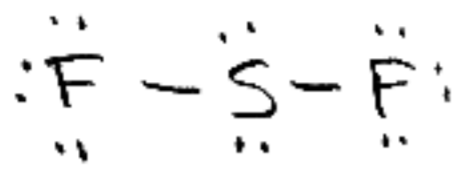
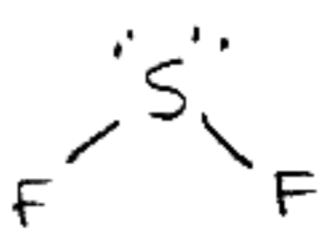
Lewis Structure 	3D Drawing 		
Hybridization of Central Atom(s)	SP ³	Molecular Shape	TETRAHEDRAL
Bond Angles	~109.5°	Polarity	YES

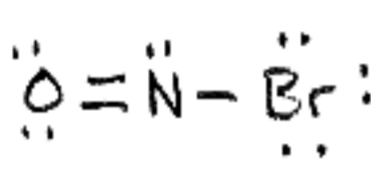
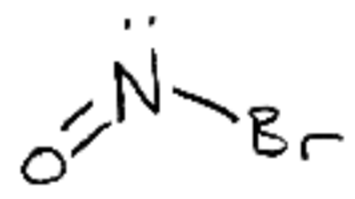
NH₃ Name: AMMONIA

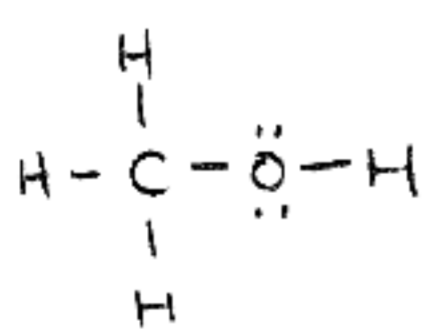
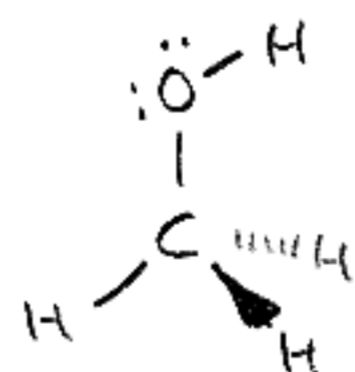
Lewis Structure 	3D Drawing 		
Hybridization of Central Atom(s)	SP ³	Molecular Shape	TRIGONAL PYRAMIDAL
Bond Angles	<109.5° (~107.9°)	Polarity	YES

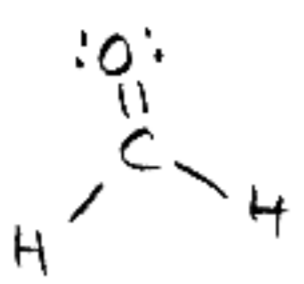
NH₄⁺ Name: AMMONIUM ION
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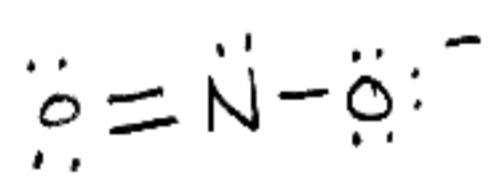
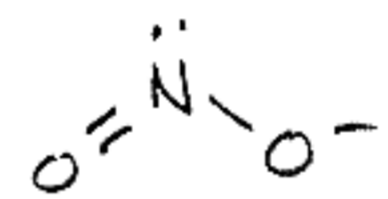
Lewis Structure 	3D Drawing 		
Hybridization of Central Atom(s)	SP ³	Molecular Shape	TETRAHEDRAL
Bond Angles	109.5°	Polarity	NO

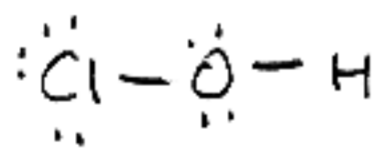
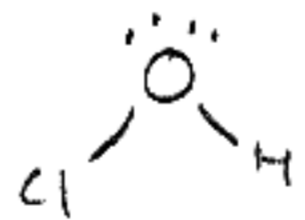
SF₂ Name: SULFUR DIFLUORIDE			
Lewis Structure		3D Drawing	
			
Hybridization of Central Atom(s)	SP ³	Molecular Shape	BENT
Bond Angles	<109.5°	Polarity	YES

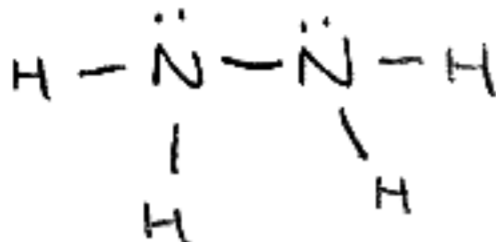
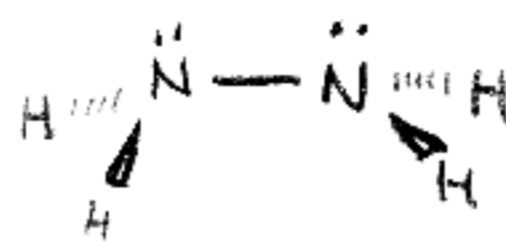
NOBr Name: nitrosyl bromide			
Lewis Structure		3D Drawing	
			
Hybridization of Central Atom(s)	SP ²	Molecular Shape	BENT
Bond Angles	~120°	Polarity	YES

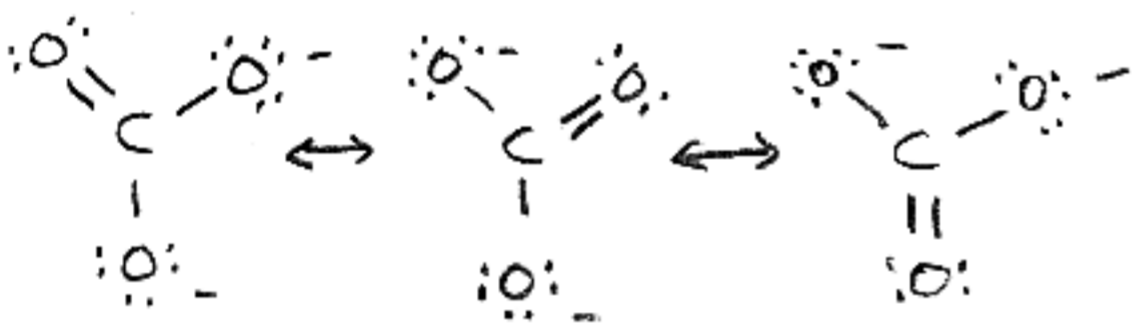
CH₃OH Name: METHANOL			
Lewis Structure		3D Drawing	
			
Hybridization of Central Atom(s)	C: SP ³ O: SP ³	Molecular Shape	N/A
Bond Angles	~109.5°, COH < 109.5°	Polarity	YES

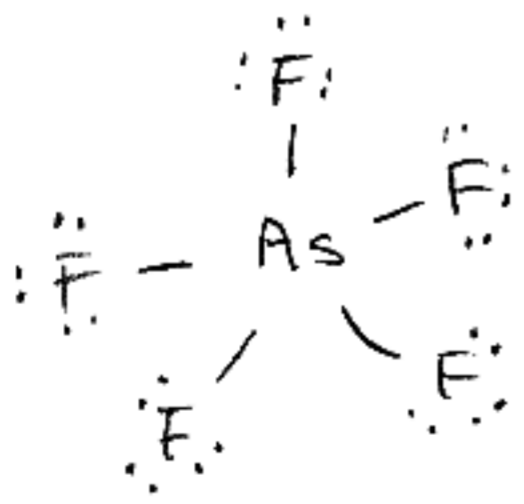
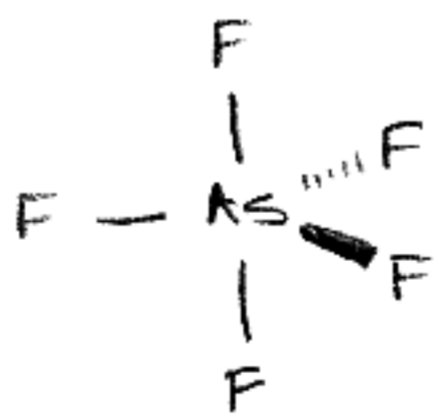
CH₂O Name: FORMALDEHYDE (OR METHANAL)			
Lewis Structure		3D Drawing	
		SAME	
Hybridization of Central Atom(s)	SP ²	Molecular Shape	TRIGONAL PLANAR
Bond Angles	~120°	Polarity	YES

NO₂⁻ Name: NITRITE ION			
Lewis Structure		3D Drawing	
			
Hybridization of Central Atom(s)	SP ²	Molecular Shape	BENT
Bond Angles	<120°	Polarity	YES

HClO Name: IN WATER - HYPOCHLOROUS ACID, SOLID - HYDROGEN HYPOCHLORITE			
Lewis Structure		3D Drawing	
			
Hybridization of Central Atom(s)	SP ³	Molecular Shape	BENT
Bond Angles	<109.5°	Polarity	YES

N₂H₄ Name: <i>hydrazine</i>			
Lewis Structure		3D Drawing	
			
Hybridization of Central Atom(s)	SP ³	Molecular Shape	N/A
Bond Angles	< 109.5°	Polarity	YES

CO₃²⁻ Name: <i>CARBONATE ION</i>			
Lewis Structure		3D Drawing	
		SAME	
Hybridization of Central Atom(s)	SP ²	Molecular Shape	TRIGONAL PLANAR
Bond Angles	120°	Polarity	NO

AsF₅ Name: <i>ARSENIC PENTAFLUORIDE</i>			
Lewis Structure		3D Drawing	
			
Hybridization of Central Atom(s)	SP ³ d	Molecular Shape	TRIGONAL BIPYRAMIDAL
Bond Angles	90°, 120°	Polarity	NO

SF₄ Name: SULFUR TETRAFLUORIDE			
Lewis Structure		3D Drawing	
Hybridization of Central Atom(s)	SP ³ d	Molecular Shape	SEE-SAW
Bond Angles	< 90°, < 120°	Polarity	YES

XeF₂ Name: XENON DIFLUORIDE			
Lewis Structure		3D Drawing	
Hybridization of Central Atom(s)	SP ³ d	Molecular Shape	LINEAR
Bond Angles	180°	Polarity	NO

XeF₄ Name: XENON TETRAFLUORIDE			
Lewis Structure		3D Drawing	
Hybridization of Central Atom(s)	SP ³ d ²	Molecular Shape	SQUARE PLANAR
Bond Angles	90°, 180°	Polarity	NO

BiCl₅²⁻ Name: <i>pentachlorobismuthate (III) ion</i>			
Lewis Structure		3D Drawing	
Hybridization of Central Atom(s)	sp^3d^2	Molecular Shape	SQUARE PYRAMIDAL
Bond Angles	$< 90^\circ$	Polarity	YES

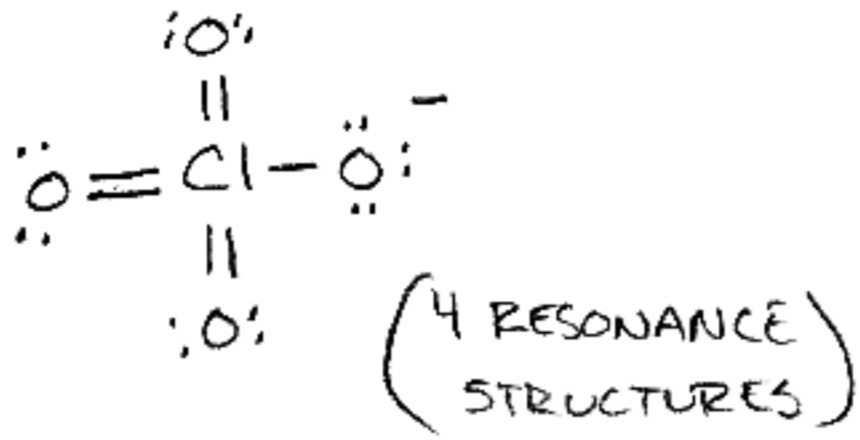
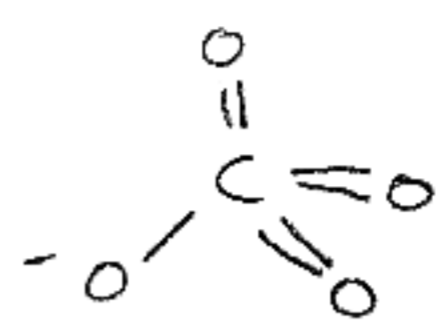
BrF₃ Name: <i>BROMINE TRIFLUORIDE</i>			
Lewis Structure		3D Drawing	
		<p style="text-align: center;">SAME</p>	
Hybridization of Central Atom(s)	sp^3d	Molecular Shape	T-SHAPED
Bond Angles	$< 90^\circ$	Polarity	YES

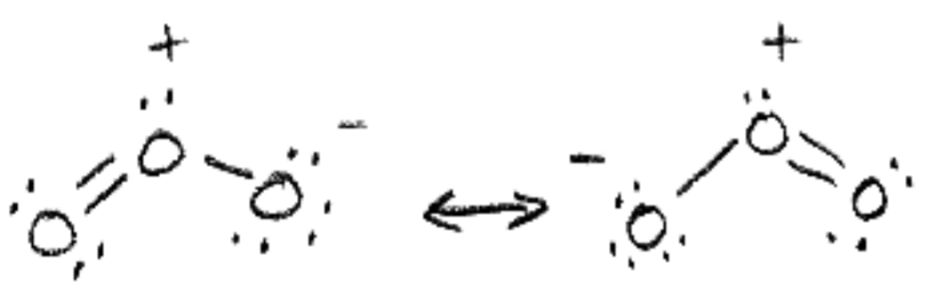
BrF₅ Name: <i>BROMINE PENTAFLUORIDE</i>			
Lewis Structure		3D Drawing	
Hybridization of Central Atom(s)	sp^3d	Molecular Shape	SQUARE PYRAMIDAL
Bond Angles	$< 90^\circ$	Polarity	YES

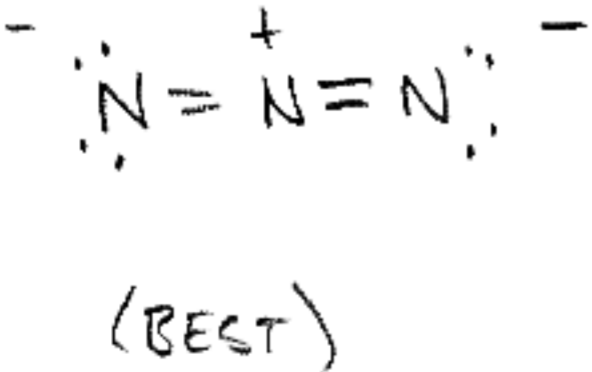
SF₆ Name: <i>SULFUR HEXAFLUORIDE</i>			
Lewis Structure		3D Drawing	
Hybridization of Central Atom(s)	<i>SP³d²</i>	Molecular Shape	<i>OCTAHEDRAL</i>
Bond Angles	<i>ALL 90°</i>	Polarity	<i>NO</i>

C₂N₂ Name: <i>cyanogen</i>			
Lewis Structure		3D Drawing	
Hybridization of Central Atom(s)	<i>SP</i>	Molecular Shape	<i>LINEAR</i>
Bond Angles	<i>180°</i>	Polarity	<i>NO</i>

I₃⁻ Name: <i>triiodide ion</i>			
Lewis Structure		3D Drawing	
Hybridization of Central Atom(s)	<i>SP³d</i>	Molecular Shape	<i>LINEAR</i>
Bond Angles	<i>180°</i>	Polarity	<i>NO</i>

ClO₄⁻ Name: PERCHLORATE ION			
Lewis Structure		3D Drawing	
			
Hybridization of Central Atom(s)	COMPLICATED	Molecular Shape	TETRAHEDRAL
Bond Angles	109.5°	Polarity	NO

O₃ Name: OZONE			
Lewis Structure		3D Drawing	
		SAME	
Hybridization of Central Atom(s)	SP ²	Molecular Shape	BENT
Bond Angles	< 120°	Polarity	YES

N₃⁻ Name: AZIDE ION			
Lewis Structure		3D Drawing	
		SAME	
Hybridization of Central Atom(s)	SP	Molecular Shape	LINEAR
Bond Angles	180°	Polarity	NO