



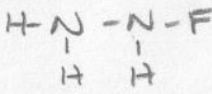
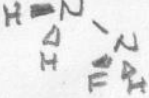
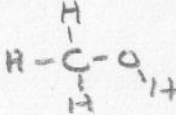
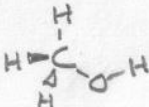
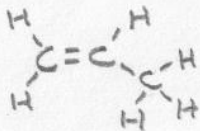
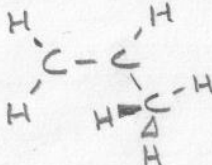
Chemistry 20 – Lesson 12
Stereochemistry activity

/60

4 marks each

Prelab Exercise				Observations			
Molecular Substance	Lewis/Structural Diagram	For Each Central Atom		Predicted Shape Name	Representation for Actual Shape	Actual Shape Name	Polarity
		# LP	# BP				
NI ₃		1	3	trigonal pyramidal		trigonal pyramidal	yes
C ₂ Cl ₄		0	3	trigonal planar		trigonal planar	no
		0	3	trigonal planar		trigonal planar	
CF ₄		0	4	tetrahedral		tetrahedral	no
OCl ₂		2	2	angular		angular	yes
C ₂ F ₂		0	2	linear		linear	yes
		0	2	linear		linear	

Prelab Exercise				Observations			
Molecular Substance	Lewis/Structural Diagram	For Each Central Atom		Predicted Shape Name	Representation for Actual Shape	Actual Shape Name	Polarity
		# LP	# BP				
HOF		2	2	angular		angular	yes
NHF ₂		1	3	trigonal pyramidal		trigonal pyramidal	yes
C ₂ IBr		0	2	linear		linear	yes
		0	2	linear		linear	
C ₂ HF ₃		0	3	trigonal planar		trigonal planar	yes
		0	3	trigonal planar		trigonal planar	
CHClBr ₂		0	4	tetrahedral		tetrahedral	yes
H ₂ O ₂		2	2	angular		angular	yes
		2	2	angular		angular	

Prelab Exercise				Observations			
Molecular Substance	Lewis/Structural Diagram	For Each Central Atom		Predicted Shape Name	Representation for Actual Shape	Actual Shape Name	Polarity
		# LP	# BP				
CO ₂		0	2	linear		linear	no
N ₂ H ₃ F		1	3	trigonal pyramidal		trigonal pyramidal	yes
		1	3	trigonal pyramidal		trigonal pyramidal	
CH ₃ OH		0	4	tetrahedral		tetrahedral	yes
		2	2	angular		angular	
C ₃ H ₆ (noncyclic)		0	3	trigonal planar		trigonal planar	no
		0	3	trigonal planar		trigonal planar	
		0	4	tetrahedral		tetrahedral	