

Data Sheet

Name _____

Section _____

1. Two groups of electrons on the central atom. Show Lewis structure and sketch on left.

electronic
geometryhybrid-
izationmolecular
geometry

polar?



2. Three groups of electrons on the central atom. Show Lewis structure and sketch on left.

electronic
geometryhybrid-
izationmolecular
geometry

polar?



Data Sheet
(continued)Name _____
Section _____

3. Four groups of electrons on the central atom. Show Lewis structure and sketch on left.

	electronic geometry	hybrid- ization	molecular geometry	polar?
CCl_4				

 HClO_4 PH_3 H_2O

4. Five groups of electrons on the central atom. Show Lewis structure and sketch on left.

	electronic geometry	hybrid- ization	molecular geometry	polar?
PCl_5				

 SF_4 ClF_3 XeF_2

Data Sheet
(continued)**Name** _____
Section _____

5. Six groups of electrons on the central atom. Show Lewis structure and sketch on left.

	electronic geometry	hybrid- ization	molecular geometry	polar?
SF ₆				
IF ₅				
XeF ₄				

Data Sheet
(continued)

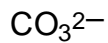
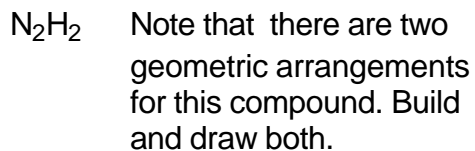
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B. Model Building - Part II. Work in partners.

In this section the number of groups of electrons is not given; you must figure out what it is from the Lewis diagram. Then follow the directions as given in Part I of section B.

electronic geometry	hybrid- ization	molecular geometry	polar?
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Data Sheet
(continued)**Name** _____**Section** _____

B.Model Building - Part II. continued.

electronic
geometryhybrid-
izationmolecular
geometry

polar?



H_2CO_2 There are two "central"
atoms in this molecule.
Show the geometry around
each.



A species assigned
by your instructor