

## Chapter 9 AP Chemistry: VSEPR Lab

Formula	Compound Name	Bonding Domains	Non Bonding Domains	Lewis Structure	Type of Hybridization and Geometrical Name	Polar? (Y/N)	Model Made?
CH <sub>4</sub>							
NH <sub>3</sub>							
H <sub>2</sub> O							
CO <sub>2</sub>							
SO <sub>3</sub>							
SO <sub>3</sub> <sup>2-</sup>							
H <sub>2</sub> CO							

Formula	Compound Name	Bonding Domains	Non Bonding Domains	Lewis Structure	Type of Hybridization and Geometrical Name	Polar? (Y/N)	Model made?
HCN							
BrF <sub>3</sub>							
I <sub>3</sub> <sup>-</sup>							
C <sub>2</sub> H <sub>4</sub>							
XeF <sub>2</sub>							
SO <sub>4</sub> <sup>2-</sup>							
NO <sub>2</sub>							



**Postlab Questions:**

1. Give the geometrical name for each of the following number of electron domains:

a) 2 bonding pairs and 0 nonbonding pairs \_\_\_\_\_

b) 3 bonding pairs and 0 nonbonding pairs \_\_\_\_\_

c) 2 bonding pairs and 1 nonbonding pairs \_\_\_\_\_

d) 4 bonding pairs and 1 nonbonding pairs \_\_\_\_\_

e) 5 bonding pairs and 0 nonbonding pairs \_\_\_\_\_

f) 3 bonding pairs and 1 nonbonding pairs \_\_\_\_\_

g) 2 bonding pairs and 2 nonbonding pairs \_\_\_\_\_

h) 2 bonding pairs and 3 nonbonding pairs \_\_\_\_\_

i) 3 bonding pairs and 2 nonbonding pairs \_\_\_\_\_