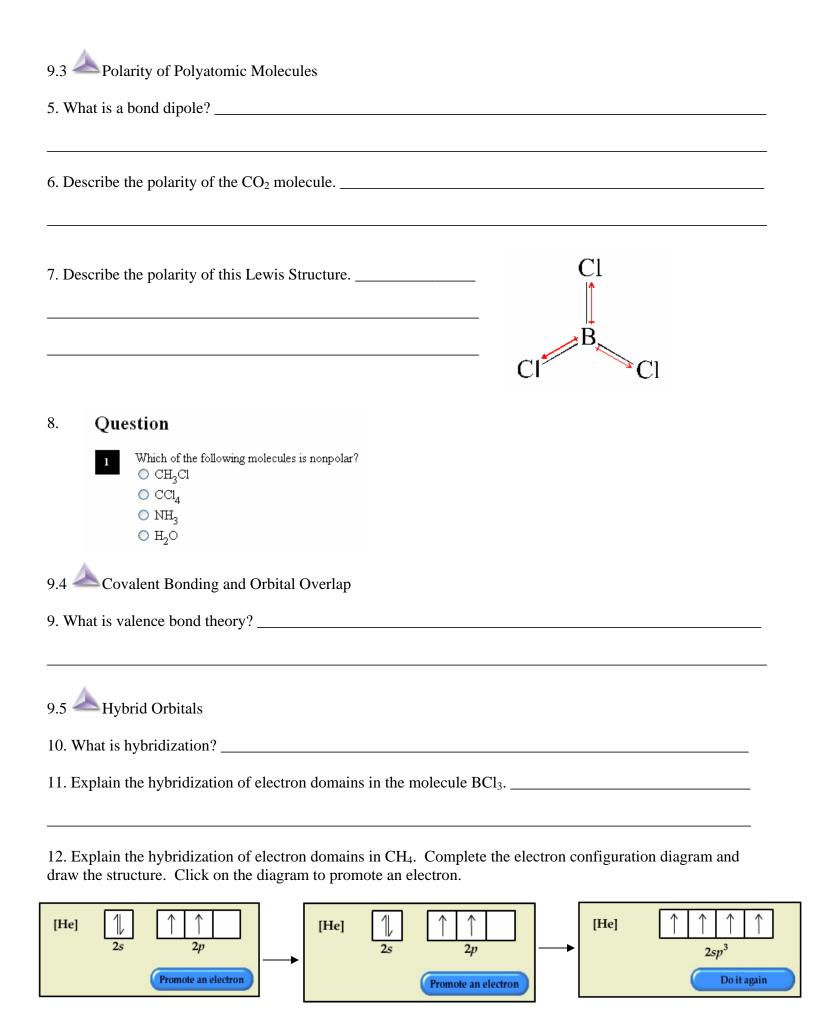
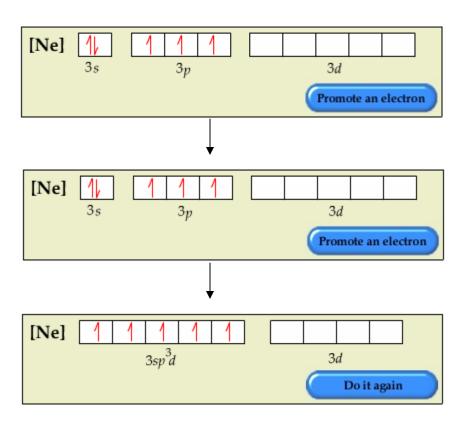
Name	AP Chemistry
Chapter 9 CD lab	
<b>Directions:</b> Use the information obtained from sections in the chapter 9 CD questions.	to answer the following
9.1 A Molecular Shapes	
1. What is the VSEPR model?	
9.2 The VSEPR Model	
2. What is the VSEPR model based on?	
3. To determine the molecular geometry (or <i>shape</i> ) of a molecule or polyatomic ion procedure. Write the procedure.	, we follow a four-step
a)	
b)	
c)	
d)	
4. Answer the questions in the section and place your answers below;	
Questions	
What is the shape of the ammonium ion?	
o square planar	
trigonal pyramidal     tetrahedral	
O octahedral	
What is the shape of the ICl <sub>3</sub> molecule?	
O T-shaped	
O trigonal planar	
<ul><li>trigonal pyramidal</li><li>bent</li></ul>	



Draw methane			

13. Draw the hybridization of electron configuration for PCl<sub>5</sub>



- 14. Watch the video and answer the following questions.
  - a) What do you get when you mix an s orbital and a p<sub>x</sub> orbital?
  - b) What do you get when you mix an s orbital and a p<sub>x</sub> and p<sub>y</sub> orbitals?
  - c) What do you get when you mix an s orbital with all three p orbitals?
  - d) What molecular geometry is formed when the hybridization in question c is formed? \_\_\_\_\_

15.	Questions	
	What is the hybridization of the orbitals on carbon in carbon dioxide?  sp  sp <sup>2</sup> sp <sup>3</sup>	
	$\bigcirc sp^3d$	
	What would be the hybridization of nitrogen in the ammonium ion?  sp sp² sp³ sp³ sp³d	
9.6	Multiple Bonds	
16.	Use information from the introduction and conside	r the molecule C <sub>2</sub> H <sub>4</sub> .
;	a) What is a sigma bond?	
1	b) What is a pi bond?	
	a. What does a pi bond consist of?	
17.	What makes up a double bond?	
18. '	What make up a triple bond?	
Got	to the companion website and use the following log	yon and password
		on and pass word
Log	on: moleary1717	
Pass	sword: William	
Try	HW 1 and 2 and send e-mail your results to: m	oleary@forestville.wnyric.org