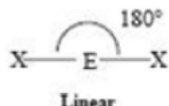
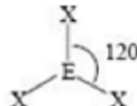
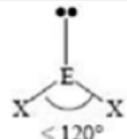
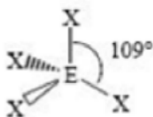
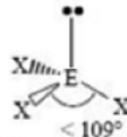


Name _____ Period _____

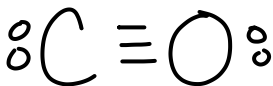
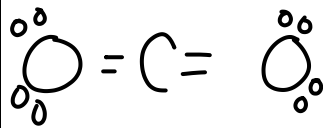
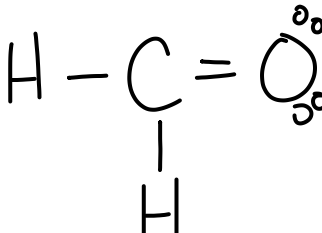
College Prep Chemistry of the Earth

Assignment 5F – Basic VSEPR Theory (*Valence Shell Electron Pair Repulsion*) 20 Points*The basic shapes of molecules are shown below*

VSEPR Geometries					
Steric No.	Basic Geometry 0 lone pair	1 lone pair	2 lone pairs	3 lone pairs	4 lone pairs
2	 Linear				
3	 Trigonal Planar	 Bent or Angular			
4	 Tetrahedral	 Trigonal Pyramid	 Bent or Angular		

For the following molecule structures, determine the number of bonds, electron pairs, molecule symmetry, and structure name

*Use actual atoms with diagram given **Symmetrical or Not Symmetrical

Molecule Formula	CO	CO ₂	CH ₂ O
Dot Structure			
VSEPR Shape Name			
VSEPR Diagram*			
Number e ⁻ Pairs			
Number Bonds			
Symmetry**			

Molecule Formula	CBr_4	NH_3	H_2O
Dot Structure			
VSEPR Shape Name			
VSEPR Diagram*			
Number e^- Pairs			
Number Bonds			
Symmetry**			

Molecule Formula	H_2CCl_2	HNO	SF_2
Dot Structure			
VSEPR Shape Name			
VSEPR Diagram*			
Number e^- Pairs			
Number Bonds			
Symmetry**			