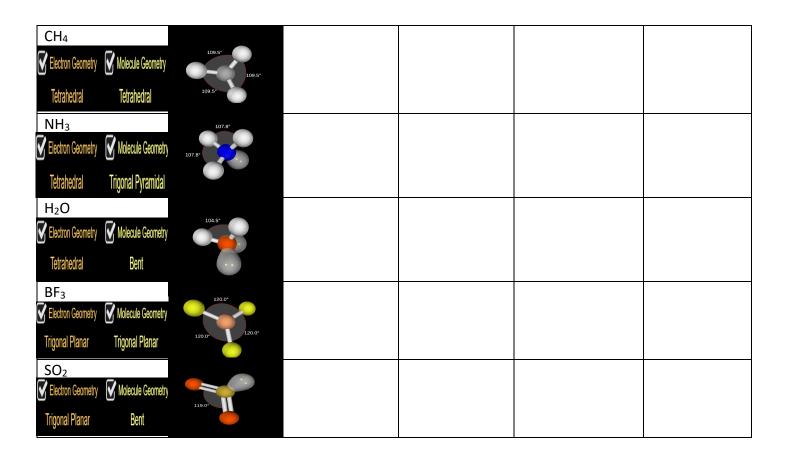
Table 1: Drawing Lewis structure and determining electron & Bonding domains

Number of Domains Around Central Atom	Electron Geometry (No Ione pairs)	1 Lone Pair	2 Lone Pairs	3 Lone Pairs	4 Lone Pairs
2 Linear	Molecule Geometry Linear	Molecule Geometry Bent	Motocute Geometry Bernt  109.5*	Molecules Geometry Linear	Molecule Geometry Linear
3 Trigonal Planar	Molecule Geometry Trigonal Planar	Molecule Geometry Bent 120 0*	109.5°  Molecule Geometry Bent	Molecule Geometry Linear	ikaor  Molecule Geometry Linear
4 Tetrahedral	Molecule Geometry Tetrahedral  109.5*  109.5*	W Molecule Coomety Trigonal Pyramidal 109 5* 109 5*	Moticula Geometry  Bent  100.51	Molecule Commity Linear	1960°  Molecule Geometry Linear
5 Trigonal Bipyramidal	120.0° Trigonal Bipyramidal	90 0"   90.0"   90.0"	T-daped	Molecule Geometry Linear  1/10/5*	Molecule Commelty Linear
6 Octahedral	90.0° Stahedral	90.0° 90.0° 90.0° 90.0° 90.0° W Molecule Coometry Square Pyramidal	Molecule Geometry Square Planar 90.0°	Minical Generaly T-shaped	Malecule Geometry Linear

Table 2: Drawing Lewis structure and determining electron & Bonding domains

Formula of	Lewis	<b>Bond Angles</b>	# Of bonding e	# Of non-	# Of total
compound	Structure		groups (central	bonding e-	electron
			atom)	groups (central	groups
				atom)	(central
					atom)



3. VSEPR Theory is introduced here using the PhET "Molecule Shapes Interactive Simulation" (<a href="https://phet.colorado.edu/en/simulation/molecule-shapes">https://phet.colorado.edu/en/simulation/molecule-shapes</a>). Students should have devices with internet access (preferably through cell phones) for this is a guided activity that introduces students to valence shell electronic pair repulsion theory (VSEPR). It is a group/computer-based activity that takes a few minutes. Students will work in groups and complete the activity sheet.

Table 3: Drawing 3D Model with correct bond angles

Formula of the molecule	3D Model with correct bond angles		
CH₄	109.5°		
NH <sub>3</sub>	109.5°		
H <sub>2</sub> O	109.5*		
BF <sub>3</sub>	120.0° 120.0°		
SO <sub>2</sub>	120.0°		

4. The worksheet completed by the students will be reviewed by the faculty with the help of PhET simulations software.