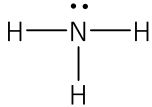
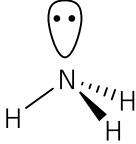
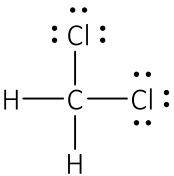
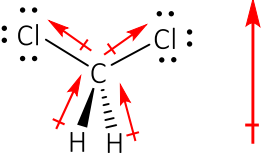
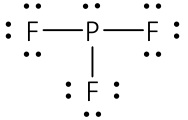
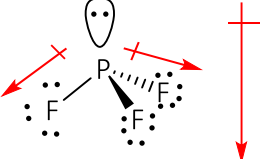


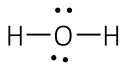
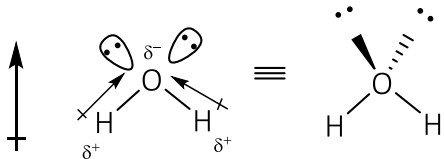
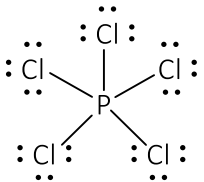
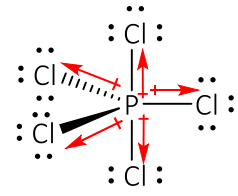
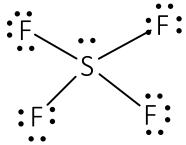
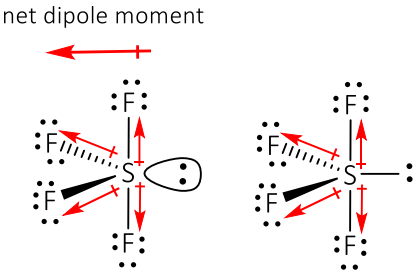
Answer Key for Problem set 2.1

Molecular Shape

(3D model)

Table 4.1

NO.	Molecular formula	Lewis structure	Class	Molecular Shape (show polarity arrow as needed)	Electron group arrangement	Name of Molecular Shape
1	NH ₃		AX ₃ E		Tetrahedral arrangement	Trigonal pyramidal shapes
2	CH ₂ Cl ₂		AX ₄	 <p style="text-align: center;">(polar molecule)</p>	Tetrahedral arrangement	Tetrahedral shape
3	PF ₃		AX ₃ E	 <p style="text-align: center;">(polar molecule)</p>	Tetrahedral arrangement	Trigonal pyramidal shape

NO.	Molecular formula	Lewis structure	Class	Molecular Shape (show polarity arrow as needed)	Electron group arrangement	Name of Molecular Shape
4	H ₂ O		AX ₂ E ₂		Tetrahedral arrangement	Bent shape
5	PCl ₅		AX ₅	 <p>(non-polar molecule)</p>	Trigonal bipyramidal arrangement	Trigonal bipyramidal shape
6	SF ₄		AX ₄ E	 <p>(polar molecule)</p>	Trigonal bipyramidal arrangement	Seesaw shape

NO.	Molecular formula	Lewis structure	Class	Molecular Shape (show polarity arrow as needed)	Electron group arrangement	Name of Molecular Shape
7	ClF_3		AX_3E_2		Trigonal bipyramidal arrangement	T shape
8	SF_6		AX_6		Octahedral arrangement	Octahedral shape
9	IF_5		AX_5E_1		Octahedral arrangement	Square pyramidal shape
10	XeF_4		AX_4E_2		Octahedral arrangement	Square planar shape