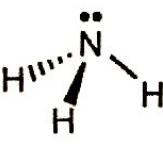
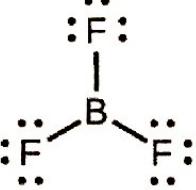
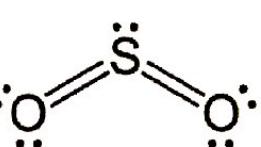
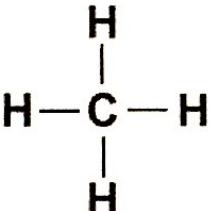
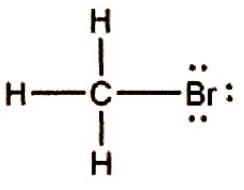
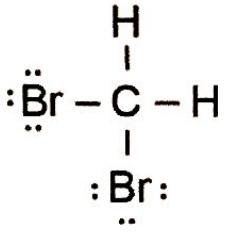
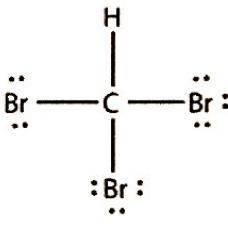
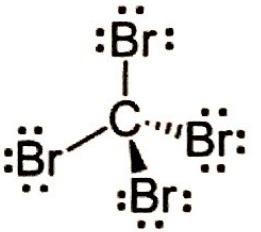


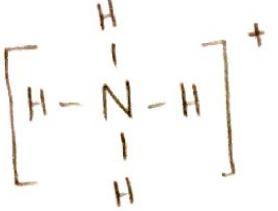
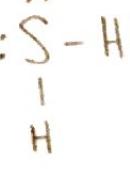
35
Let's Practice!

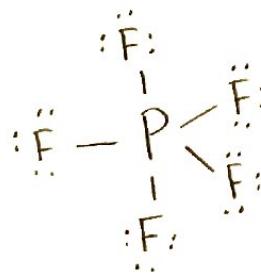
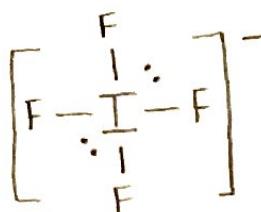
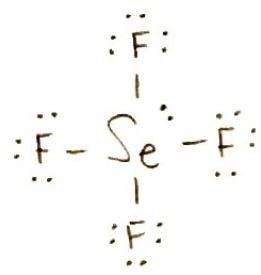
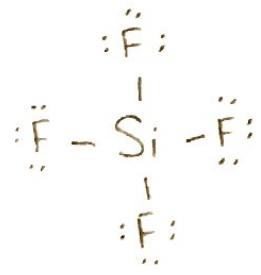
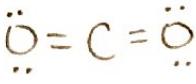
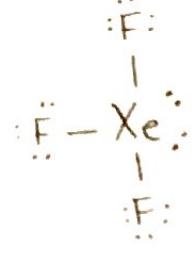
Given the Lewis dot structures below, determine if the molecule is polar or non-polar.

1) 	2) 	3) 	4) 
Is the molecule: <input checked="" type="checkbox"/> polar or <input type="checkbox"/> non-polar?	Is the molecule: <input type="checkbox"/> polar or <input checked="" type="checkbox"/> non-polar?	Is the molecule: <input checked="" type="checkbox"/> polar or <input type="checkbox"/> non-polar?	Is the molecule: <input type="checkbox"/> polar or <input checked="" type="checkbox"/> non-polar?
5) 	6) 	7) 	8) 
Is the molecule: <input checked="" type="checkbox"/> polar or <input type="checkbox"/> non-polar?	Is the molecule: <input checked="" type="checkbox"/> polar or <input type="checkbox"/> non-polar?	Is the molecule: <input checked="" type="checkbox"/> polar or <input type="checkbox"/> non-polar?	Is the molecule: <input type="checkbox"/> polar or <input checked="" type="checkbox"/> non-polar?

And... Even More Practice!

For each of the compounds given below, identify its VSEPR shape, bond angle(s), the hybridization of its central atom, and its molecular polarity.

CO	NH ₄ ⁺	H ₂ S
Lewis structure: 	Lewis structure: 	Lewis structure: 
Molecular geometry: <u>linear</u> Bond angle(s): <u>180°</u> Central Atom Hybridization <u>sp</u> Polar or not? <u>polar</u>	Molecular geometry: <u>tetrahedral</u> Bond angle(s): <u>109°</u> Central Atom Hybridization <u>sp³</u> Polar or not? <u>non-polar</u>	Molecular geometry: <u>bent</u> Bond angle(s): <u>~105°</u> Central Atom Hybridization <u>sp³</u> Polar or not? <u>polar</u>

PF_5	IF_4^-	SeF_4
Lewis structure: 	Lewis structure: 	Lewis structure: 
Molecular geometry: trigonal bipyramidal Bond angle(s): $90^\circ, 120^\circ$ Central Atom Hybridization sp^3d Polar or not? non-polar	Molecular geometry: square planar Bond angle(s): 90° Central Atom Hybridization sp^3d^2 Polar or not? non-polar	Molecular geometry: See-SqW Bond angle(s): $\sim 118^\circ, \sim 88^\circ$ Central Atom Hybridization sp^3d Polar or not? polar
SiF_4	CO_2	XeF_3^+
Lewis structure: 	Lewis structure: 	Lewis structure: 
Molecular geometry: tetrahedral Bond angle(s): 109° Central Atom Hybridization sp^3 Polar or not? non-polar	Molecular geometry: linear Bond angle(s): 180° Central Atom Hybridization sp Polar or not? non-polar	Molecular geometry: T-shaped Bond angle(s): 90° Central Atom Hybridization sp^3d Polar or not? polar