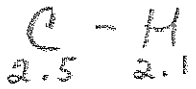
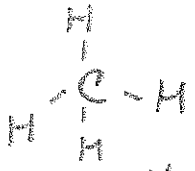
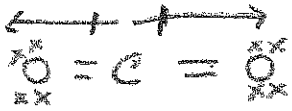
Example of Work

Molecular Polarity and Intermolecular Force (IMF) Worksheet

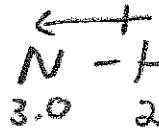
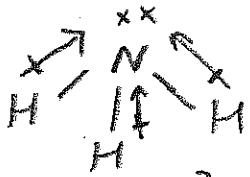
C_1H_4

Bond Polarity (Figure)	Molecular Polarity (Figure: Locate δ^- / δ^+ area)
	
ΔEN = 2.5 - 2.1 = 0.4 Bond Polarity: non polar (did show symbol for Polar)	#/type of bond polarity: 4 non-polar bond Geometry (symmetry): Tetrahedral (sym) Polar Bonds cancel out (Y/N): N/A Molecular Polarity: Non-polar Type of IMF: London Dispersion Force (LDF)

C_1O_2

Bond Polarity (Figure)	Molecular Polarity (Figure: Locate δ^- / δ^+ area)
	
ΔEN = 3.5 - 2.5 = 1.0 Bond Polarity: polar (did show symbol for Polar)	#/type of bond polarity: 2 polar bonds Geometry (symmetry): Linear (sym) Polar Bonds cancel out (Y/N): Yes Molecular Polarity: Non-polar Type of IMF: LDF

N_1H_3

Bond Polarity (Figure)	Molecular Polarity (Figure: Locate δ^- / δ^+ area)
	
ΔEN = 3.0 - 2.1 = 0.9 Bond Polarity: polar (did show symbol for Polar)	#/type of bond polarity: 3 polar bonds Geometry (symmetry): Pyramidal (not sym) Polar Bonds cancel out (Y/N): No Molecular Polarity: Polar (dipole) Type of IMF: Hydrogen bonding

Bond Polarity (Figure)	Molecular Polarity (Figure: Locate δ^- / δ^+ area)
ΔEN = ___ - ___ = _____ Bond Polarity: _____ (did show symbol for Polar)	#/type of bond polarity: _____ Geometry (symmetry): _____ Polar Bonds cancel out (Y/N): _____ Molecular Polarity: _____ Type of IMF: _____

Notes: Only show lone pairs (LP) on central atom (not on outside atoms)