

Bond Polarity

Polarity - distribution of valence electron

ΔEN - difference in Electronegativity

Example of Work

Na & Cl
 EN 0.9 3.0
 $\Delta EN = 3.0 - 0.9 = 2.1$
 "Ionic bond"

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 ↳ ions

$\Delta EN \geq 1.7$
 0.8 \leq ΔEN $<$ 1.7
 polar covalent bond

$\Delta EN < 0.8$

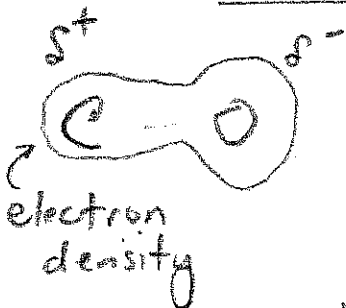
Example of Work

$\overset{+}{\text{C}} - \overset{-}{\text{O}}$
 EN 2.5 3.5
 $\Delta EN = 3.5 - 2.5 = 1.0$
 polar covalent bond

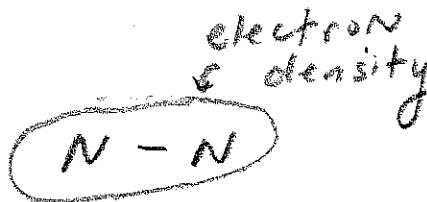
non-polar covalent bond
 N - N
 EN 3.0 - 3.0 = 0.0
 non-polar covalent bond

ΔEN

What it means



• unevenly distributed shared valence electron causing two "poles".



• evenly distributed shared valence electron causing no "poles".