











Molecular Polarity

- Determining the polar nature of molecular substances
 - Evaluating Substance Structure
 - Physical Observations Common Sense Approach
- Solubility (solute/solvent interactions) to gauge molecular polarity
 - "Like will dissolve Like"
 - Polar solutes will have highest solubility in polar solvents
 - Nonpolar solutes will have highest solubility in nonpolar solvents
 - Polar solutes will have <u>lowest</u> solubility in nonpolar solvents
 - Nonpolar solutes will have lowest solubility in polar solvents















Predict whether the substance is Polar or Nonpolar

sugar	$C_6H_{12}O_6$	polar
baby oil	$C_{20}H_{42}$	nonpolar
candle wax	$C_{40}H_{82}$	nonpolar
ethanol	C ₂ H ₅ OH	polar
oxygen	O ₂	nonpolar
iodine	I_2	nonpolar