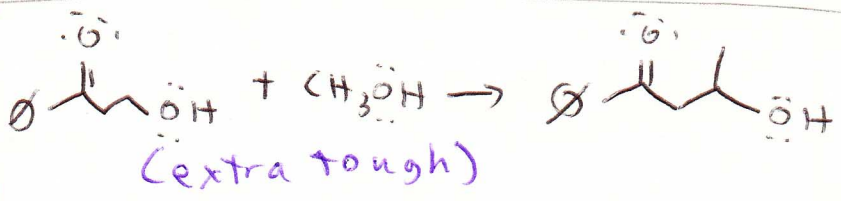
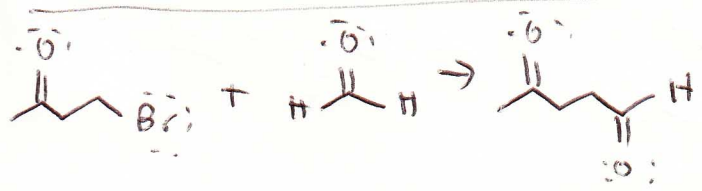


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Conjugation

- Atomic orbitals (AOs) describe the possible locations of electrons in a mononuclear system, All AOs have shapes that depend on only one nucleus being present and are symmetric about that nucleus.
- Molecules contain bonds, which are interactions of two or more atoms. Because multiple nuclei are involved, AOs cannot be directly used to explain molecular structure.
- Hybridization involves combining AOs on the same atom to create new MOs (molecular orbitals) that match the geometry of the system (match VSEPR)
- Bonding can be represented by combining AOs on different atoms.

CH₄ Structural Molecular Orbital Graph

- a graphical depiction of the types of orbitals present in a molecule, ignoring wave function sign,

