

Alpha-halogenation

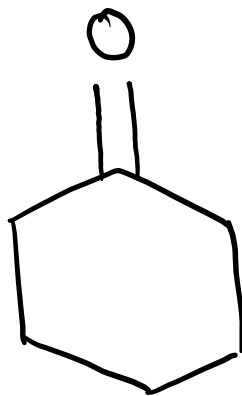
Aldol Reactions

3/17/2023

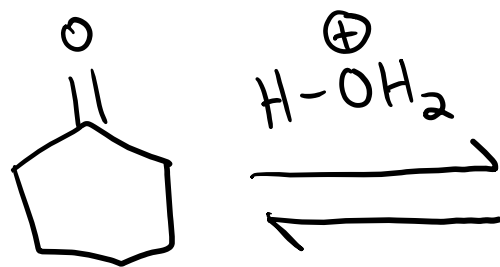
Alpha-halogenation: **Acidic** Conditions

(21.2)

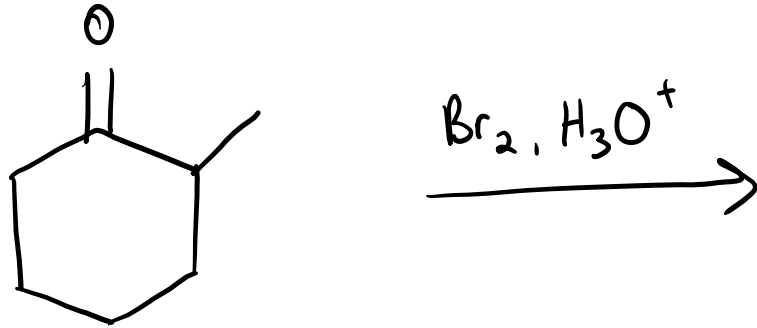
In **acidic** conditions:



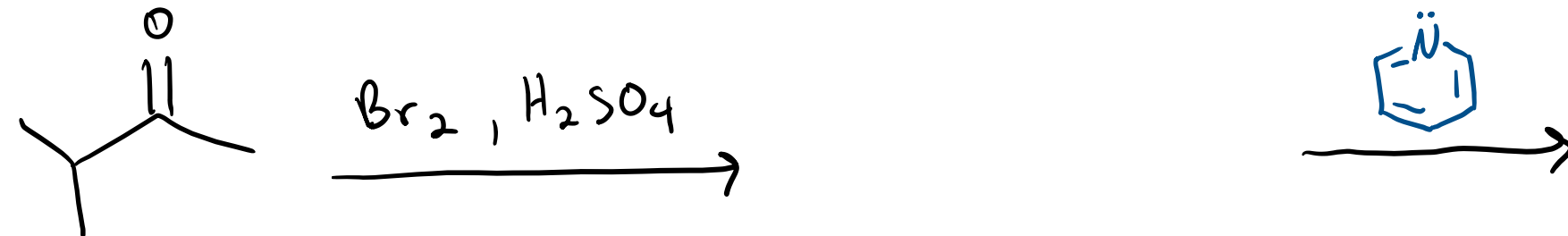
Mechanism:



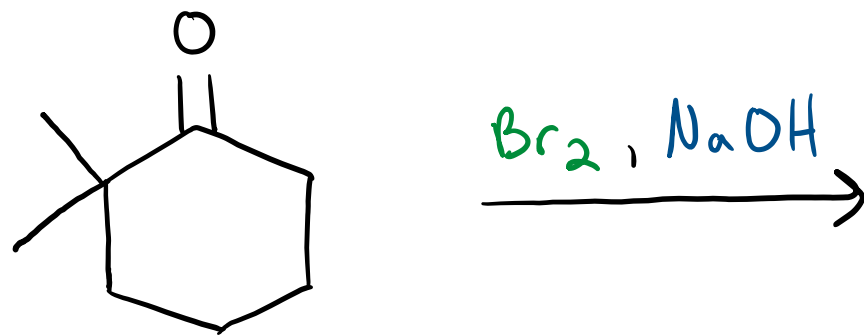
Alpha-halogenation: Regioselectivity



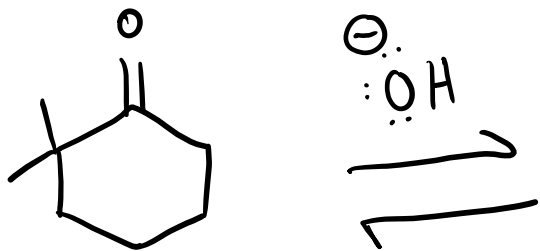
Halogenation product can react with a base



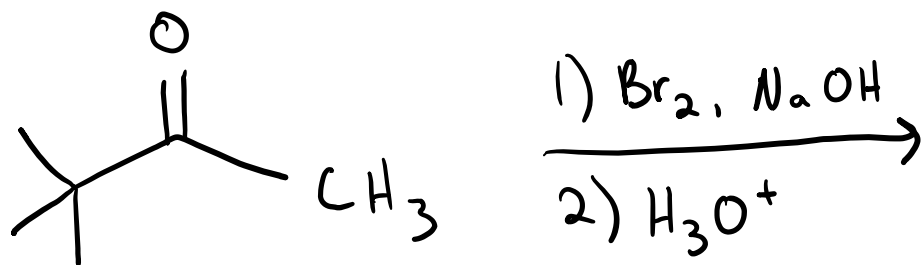
Alpha-halogenation: **Basic** Conditions



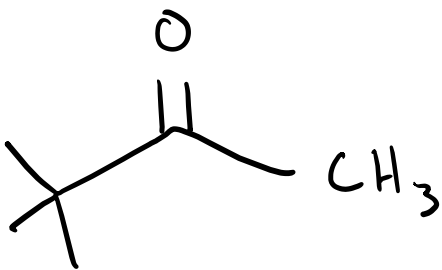
Mechanism:

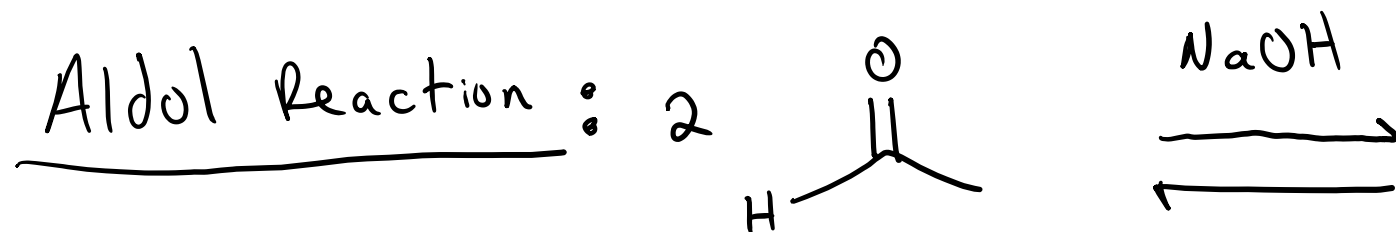
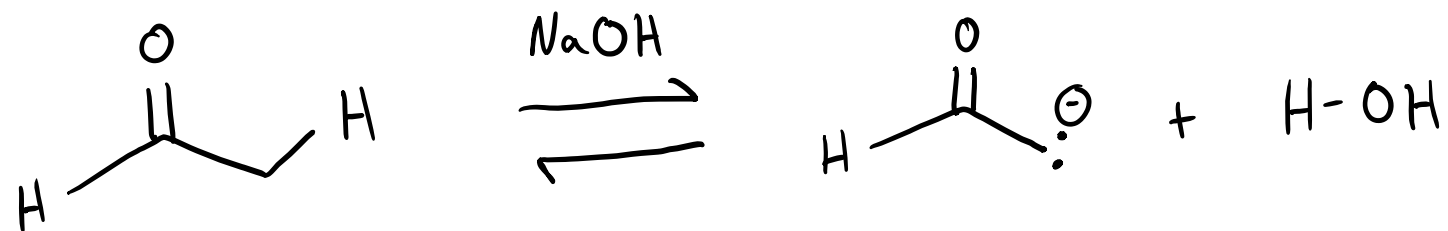


Haloform Reaction

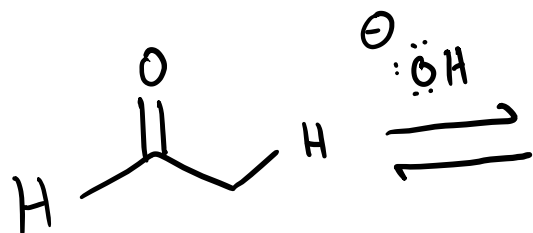


Mechanism:

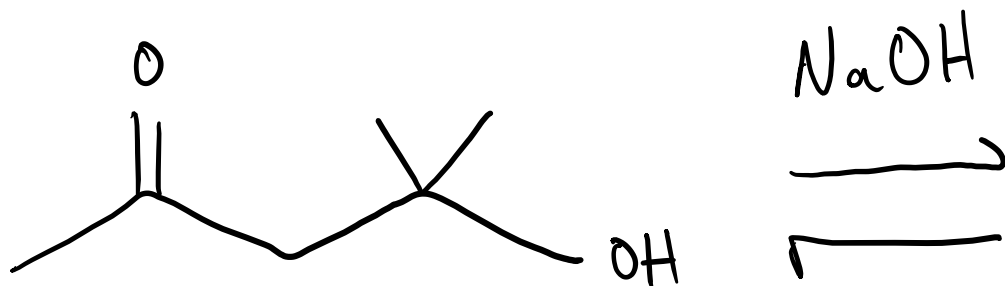
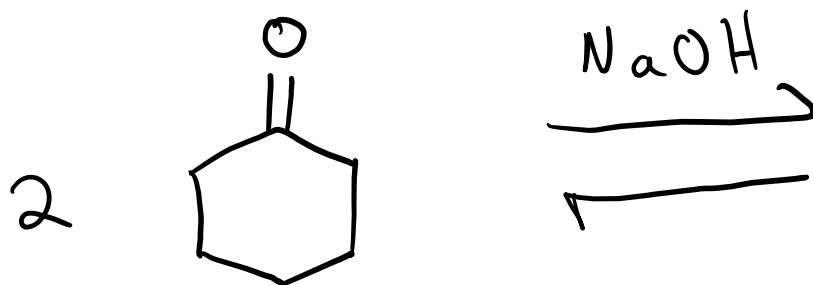
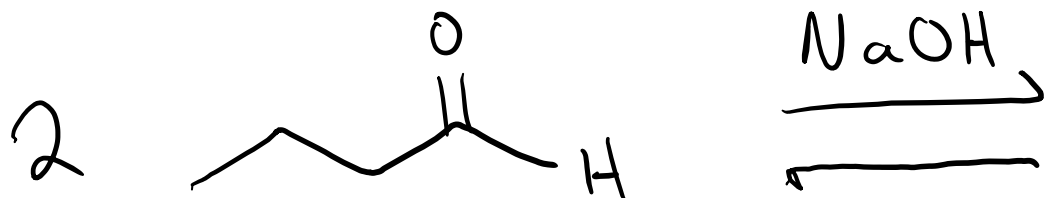




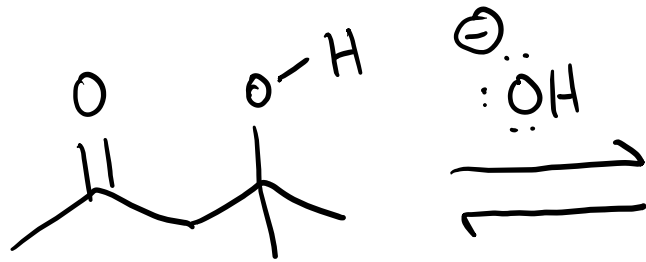
Mechanism:



Aldol Reaction: Equilibrium Position & Retro-Aldol



Retro-Aldol: Mechanism



Examples:

