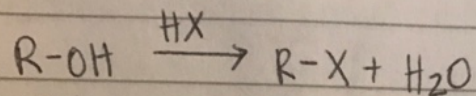


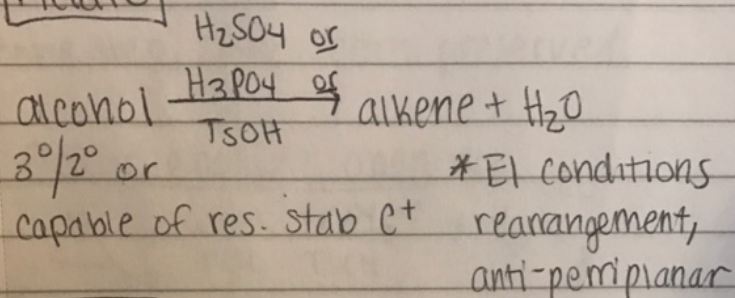
Acidic Conditions



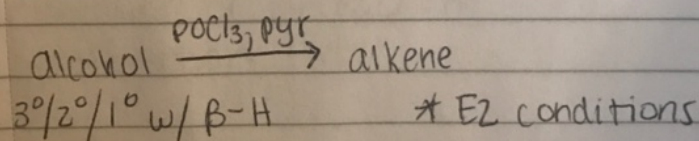
- 3°/2° or alcohols that can form res. stab. C⁺
- No S_N1 at Csp²
- C⁺ formation
- no strong base/nuc

Dehydration of alcohols

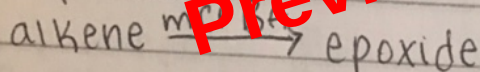
Acidic



Basic

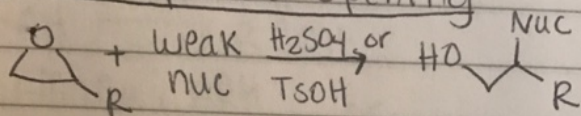


Epoxides



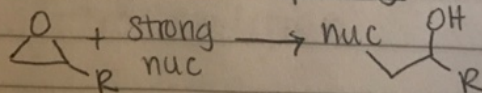
- one step, stereochem preserved

Acidic epoxide opening



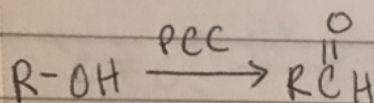
- attacks more sub. C of epoxide
- inversion of stereochem
- protonation first

Basic epoxide opening

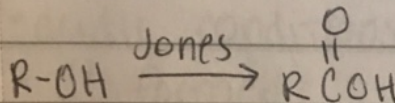


- attacks less sub. C of epoxide
- inversion of stereochem
- assume H₃O⁺ workup

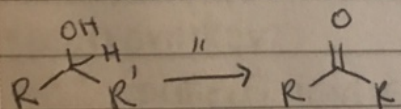
Oxidation of alcohols



- w/ 1° alcohol



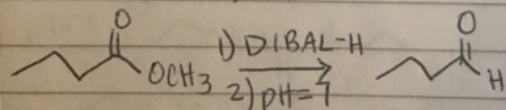
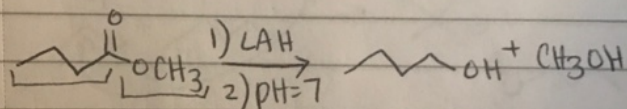
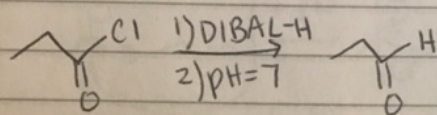
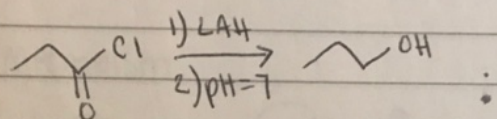
- KMnO₄, KOH or
- Na₂Cr₂O₇, H₂SO₄
- 1° alcohols



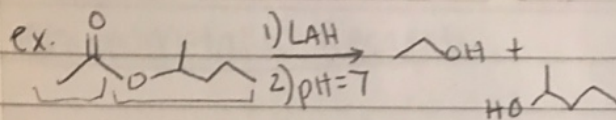
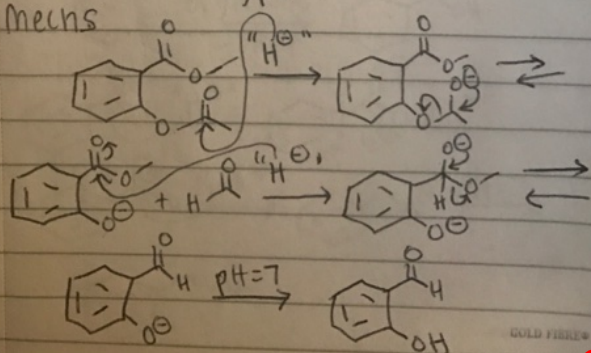
- 2° alcohols
- 3° → no oxidation

Preview from Notesale.co.uk
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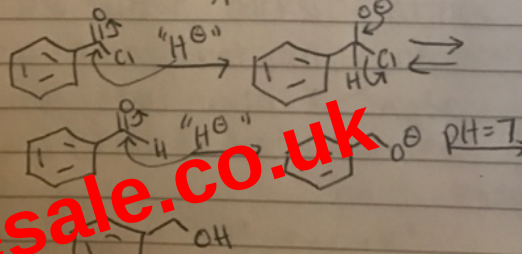
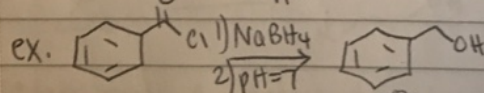
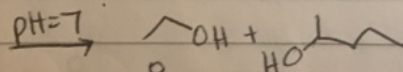
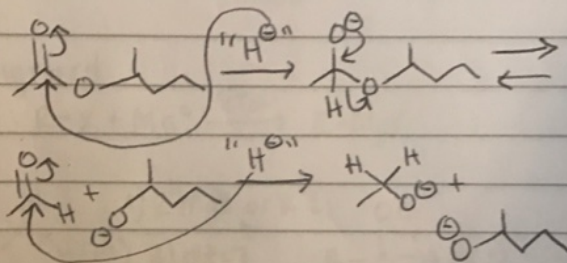
Reduction of Carboxylic acids & their derivatives.



mechs

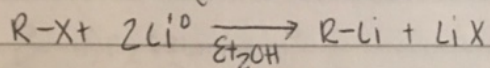


mechanism

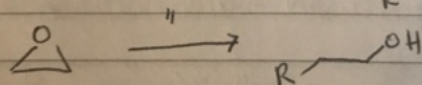
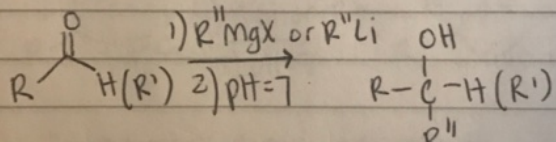
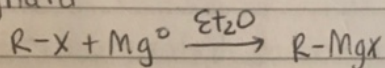


Organometallic Reagents

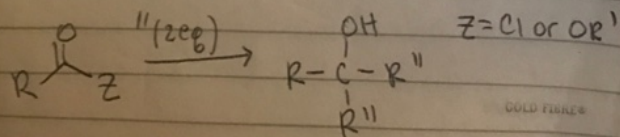
OrganoLithiums (R-Li)



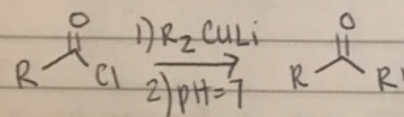
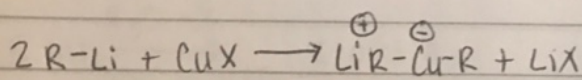
Grignard



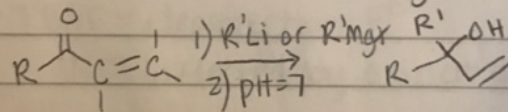
- less sub C, backside attack
- anything that can be deprotonated will react with R-MgBr
- w/ esters & acid chlorides



Organocuprates (Gillman Reagent)



α, β -unsaturated carbonyl compounds



1,2 addition; direct addition.

