

Reaction Mechanism Steps

Nucleophile - Electron Rich species
looking for + (cation) or δ^+



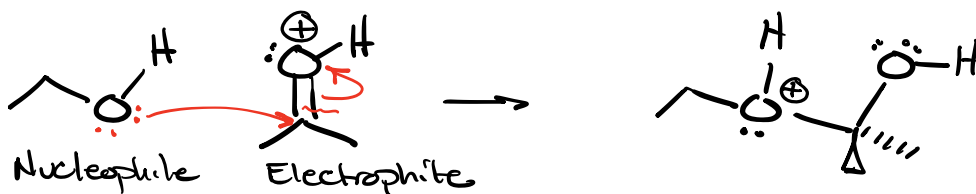
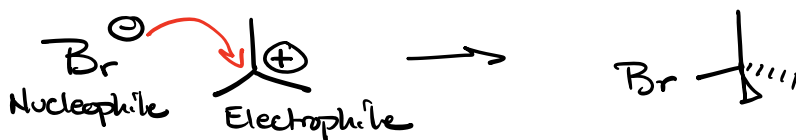
Electrophile - Electron poor species
looking for - (anion) or δ^-

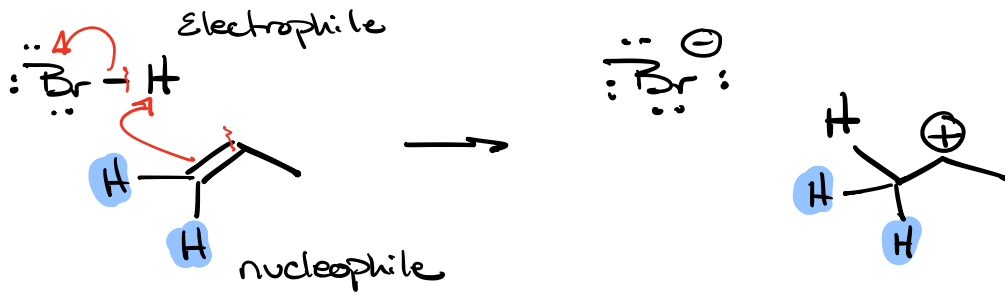


Common mechanistic steps (arrow pushing)

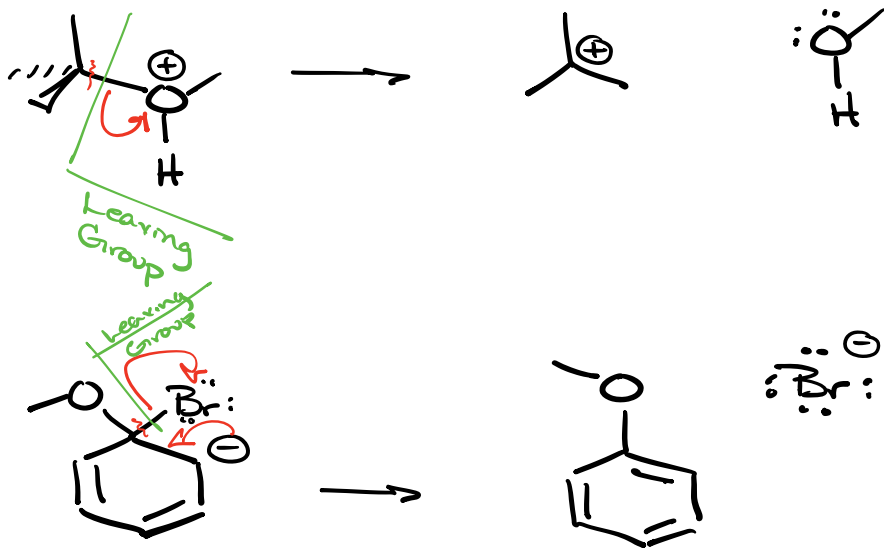


Nucleophilic attack

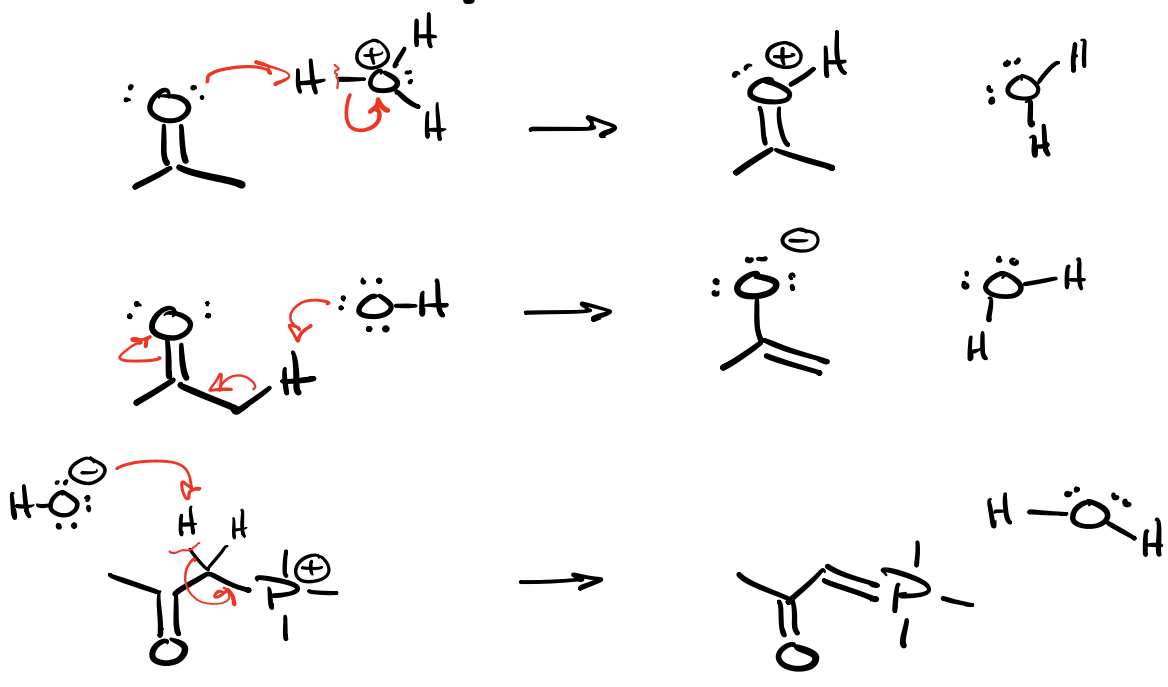




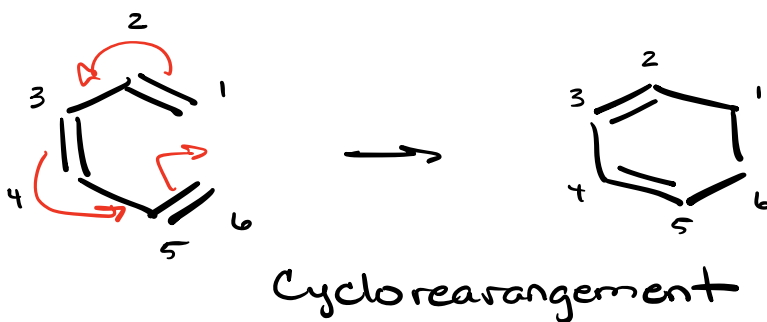
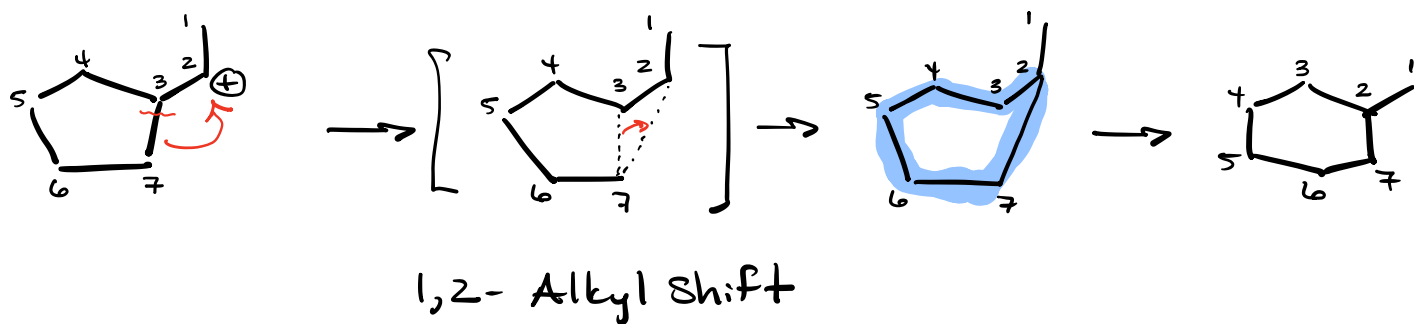
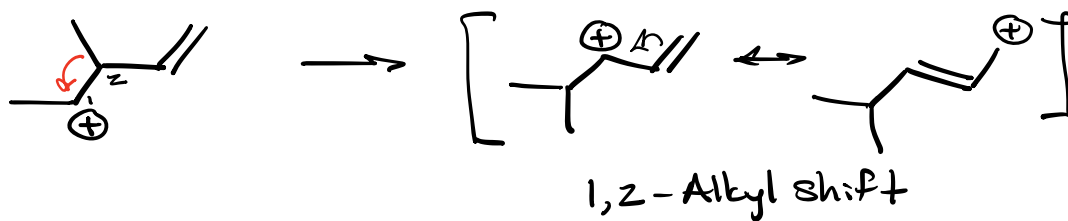
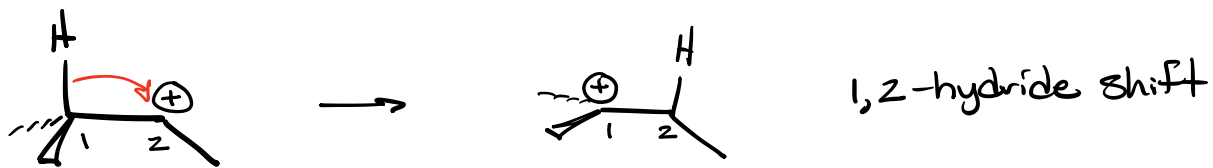
Loss of Leaving Group



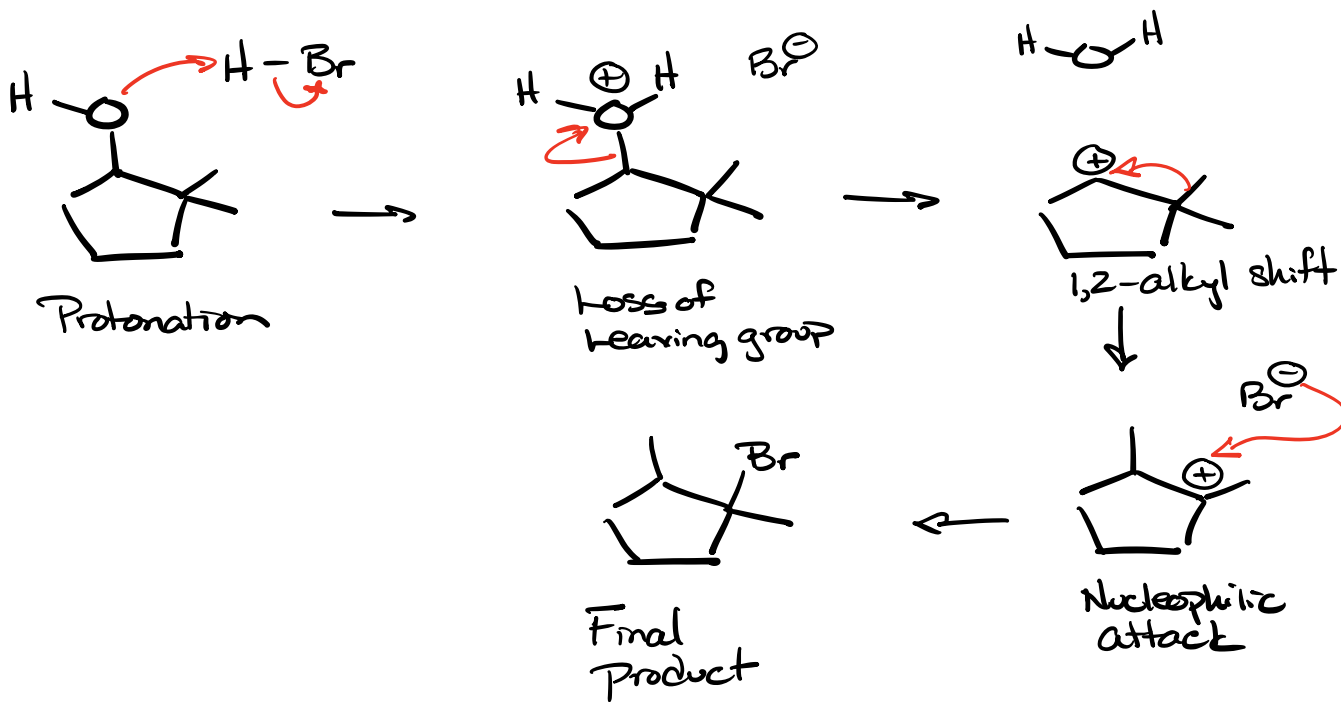
Proton Transfer



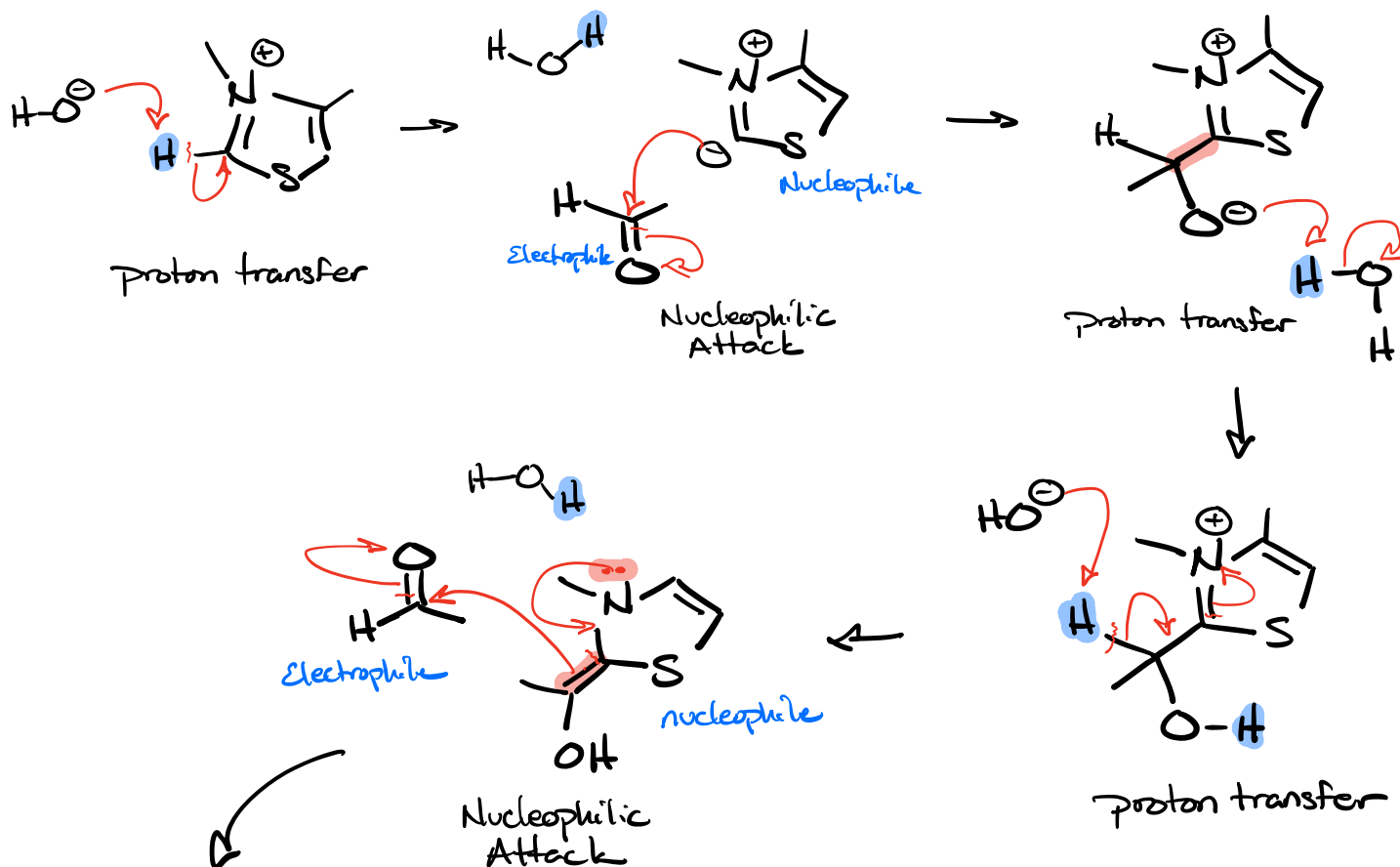
Rearrangements

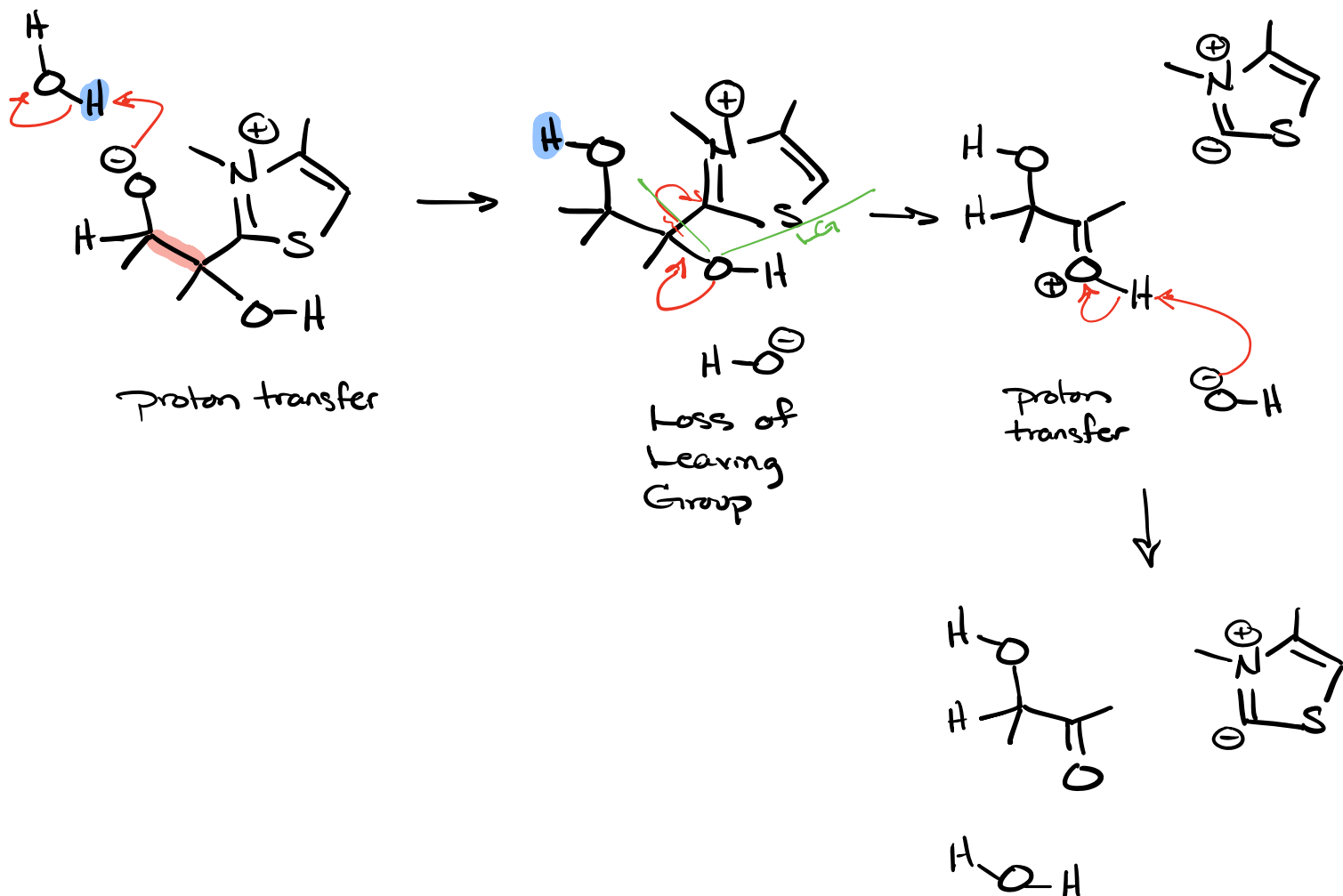


Combining Patterns for Rxns



Curved Arrows



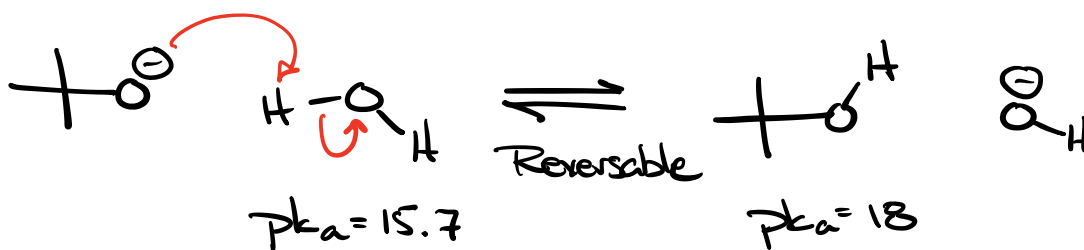
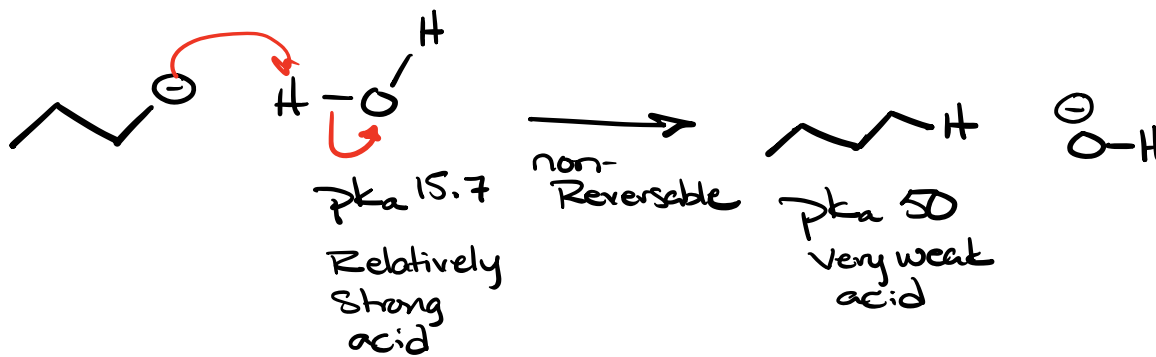
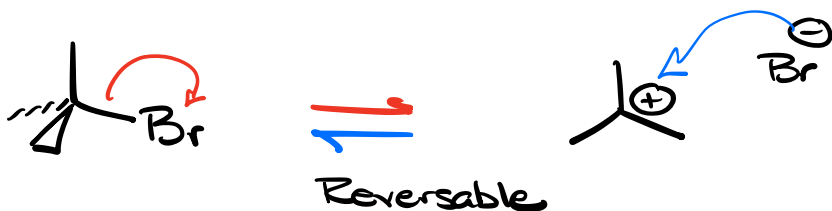
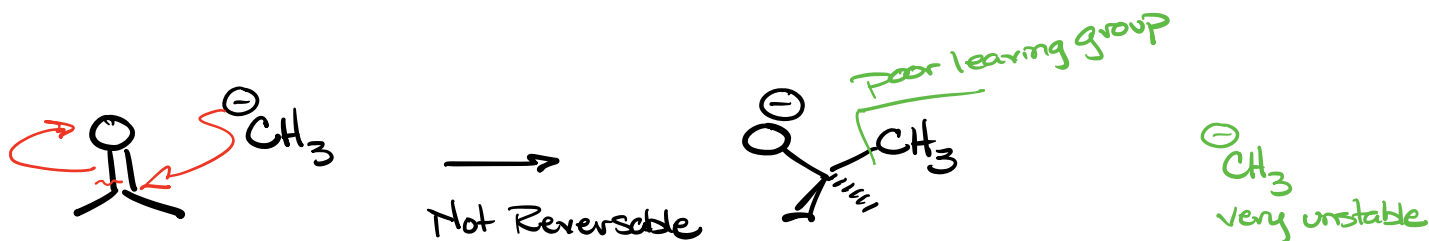
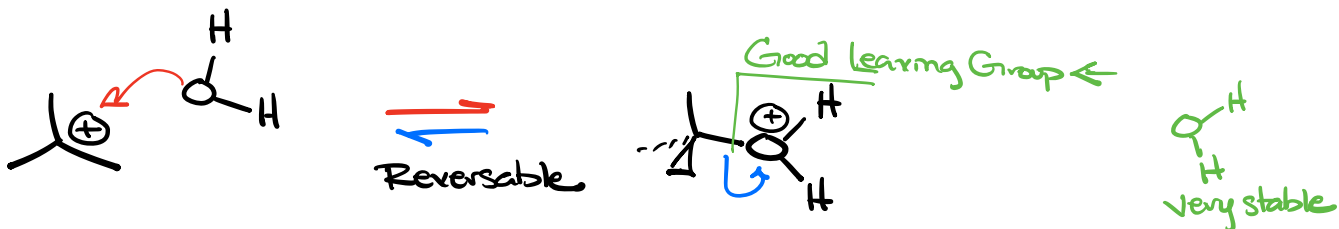


6.11 Carbocation Rearrangement

⇒ Save for Chapter 7

we'll look at it in context with S_N1 Rxn

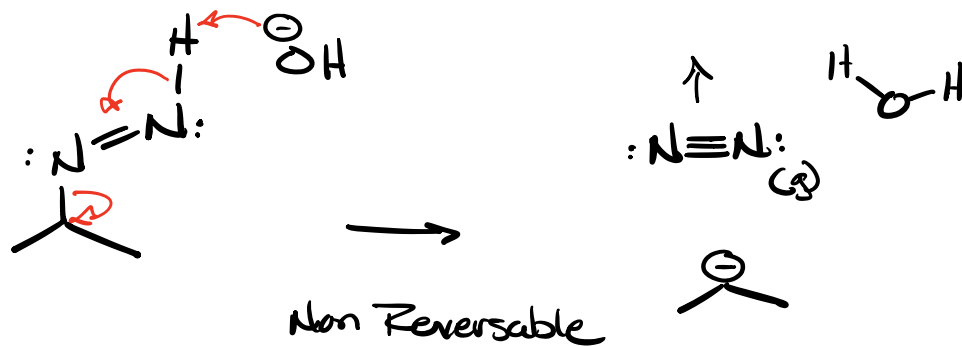
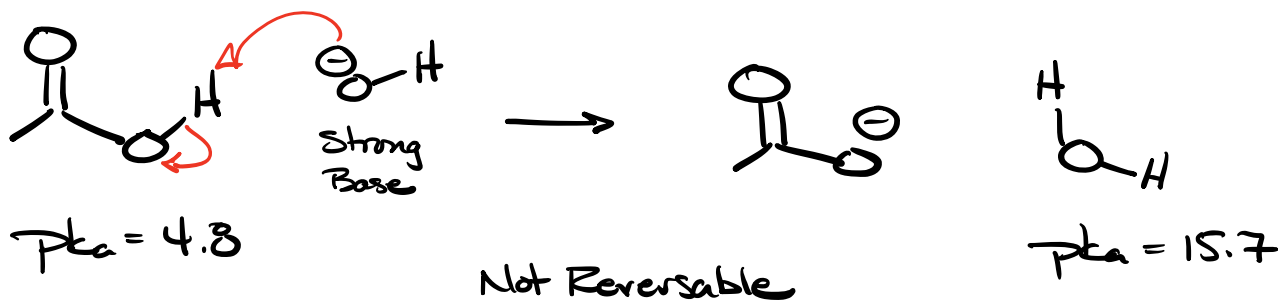
Reversible vs. Irreversible



pKa's similar

→
Non-Reversible
Reaction arrow

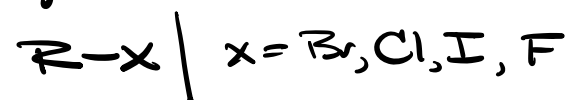
⇌
Reversible
Equilibrium arrows



When a product is eliminated either by leaving Rxn as a gas or precipitating out as a solid, then the reaction is non-reversible



Chapter 7 looks at alkyl halides



and alcohols $R-OH$

We'll look at nomenclature & Substitution Reactions

S_N^1 & S_N^2

Substitution nucleophilic first order

second order