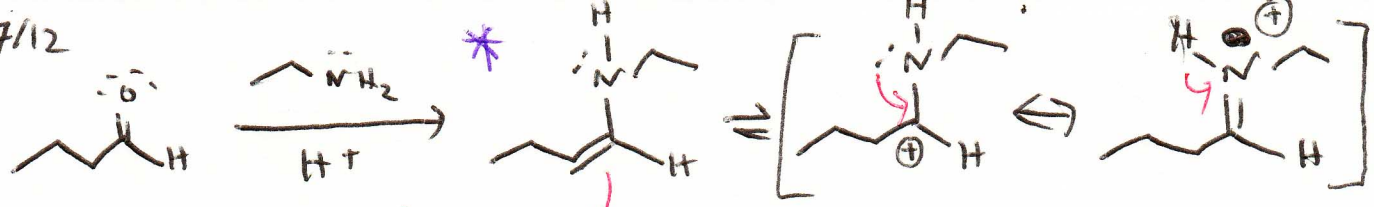
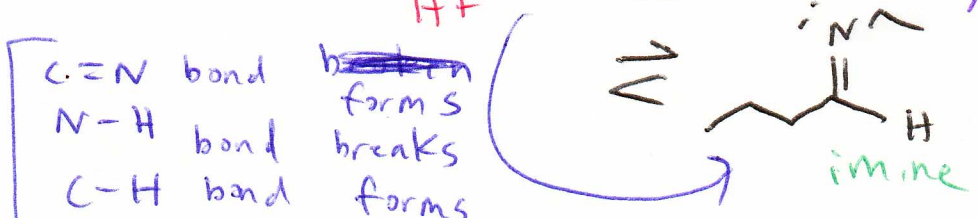
2/7/12



enamine

H+



tautomerization

imine

$\Delta H < 0$

- C=N bond forms
- N–H bond breaks
- C–H bond forms
- C=C bond breaks

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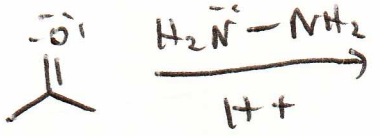
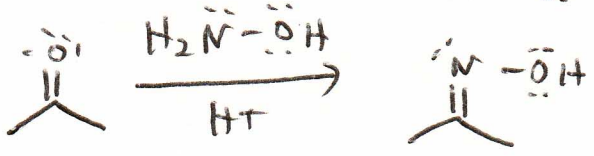
hydrazine H_2N-NH_2



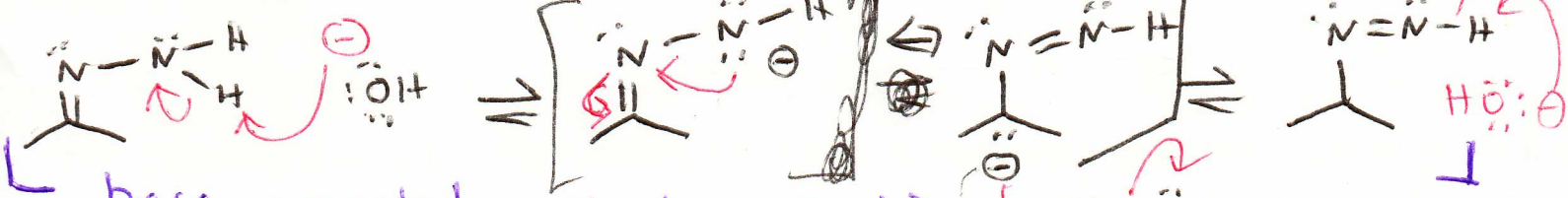
hydrazone

hydroxylamine H_2N-OH



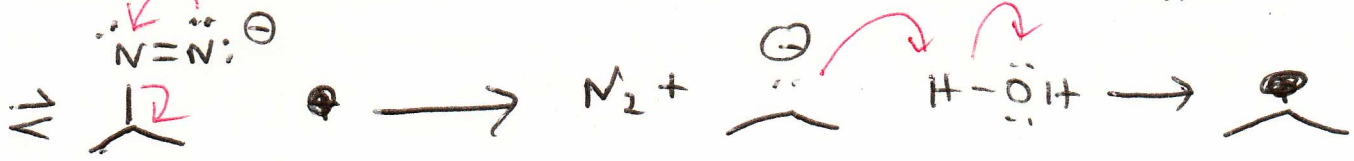
oxime

Wolff-Kishner reduction



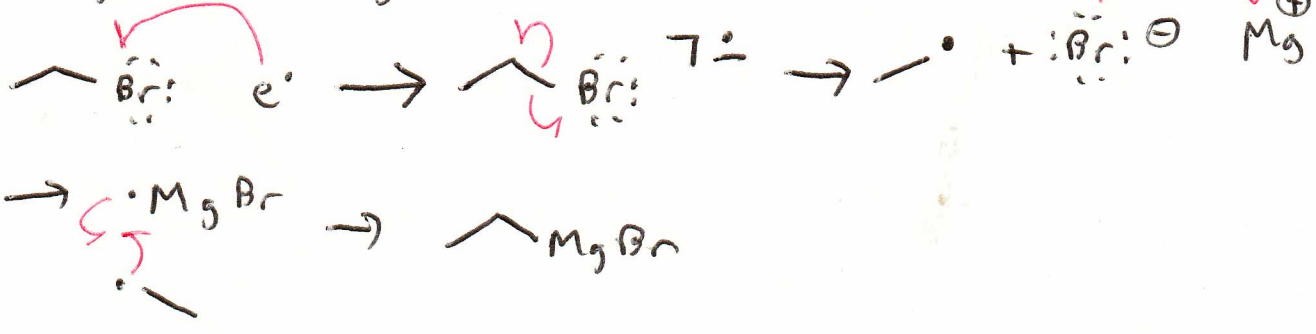
base-promoted

tautomerization



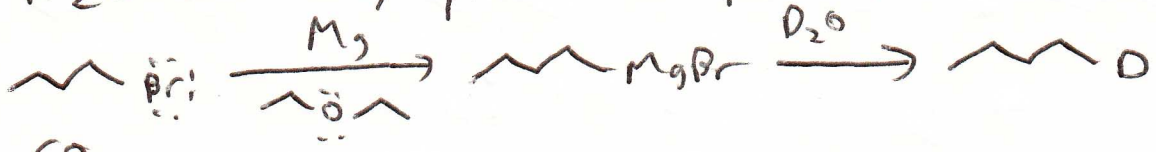
synthetic utility: convert aldehydes + ketones to alkanes (reduction)

Grignard reagents radical anion

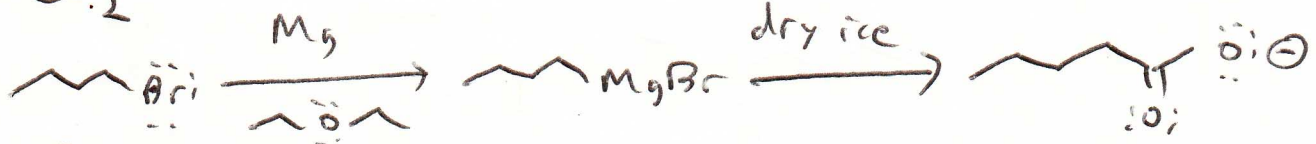


Grignard reagents can be destroyed by:

- H_2O (or any protic compound)

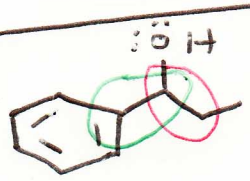


- CO_2



- O_2

Grignard reagents are ideally formed in flame-dried glassware under inert atmosphere (N_2, Ar)



- In a Grignard rxn, the alcohol formed is located at the carbon that used to be part of the C=O,
- The new C–C bond must contain the carbon that was part of the C=O