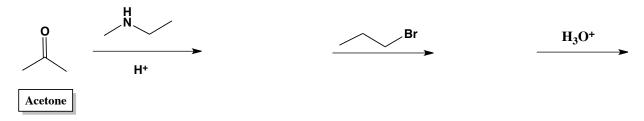
## **CONCEPT:** ENAMINE ALKYLATION AND ACYLATION

Carbonyls easily react with acid-catalyzed amine solvents to form imines and enamines.

Enamines have the ability to alkylate or acylate via the formation of an iminium salt

## **EXAMPLE:** Predict the products of the following reactions

<u>PRACTICE:</u> Provide the major product after each step for the following reaction.



PRACTICE: Which of the following can NOT be formed through the stork enamine reaction with 2-butanone?

- a) 3-pentanone
- b) 3-methyl-2-butanone
- c) 2-octanone
- d) 3-octanone