

Acylation With Acid Chlorides And Anhydrides

from chapter(s) _____ in the recommended text

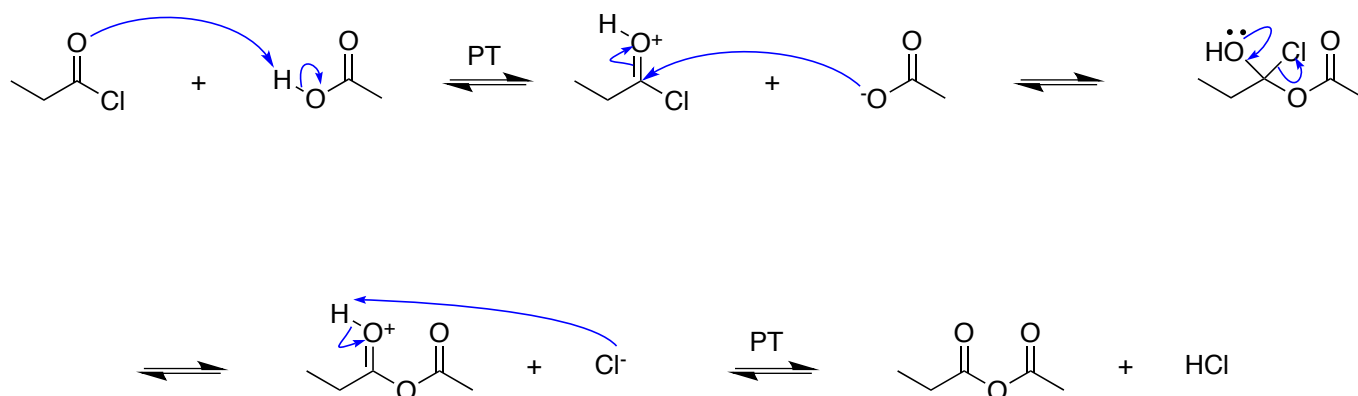
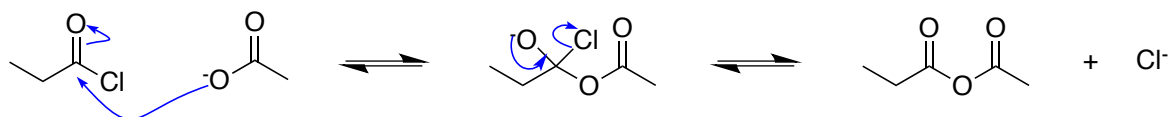
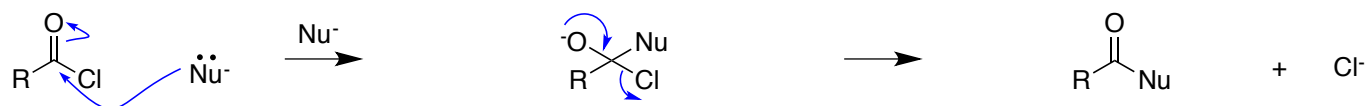
A. Introduction

B. Reactions Of Acyl Halides

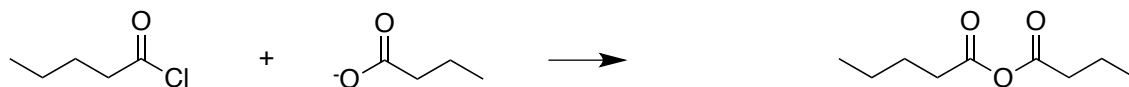
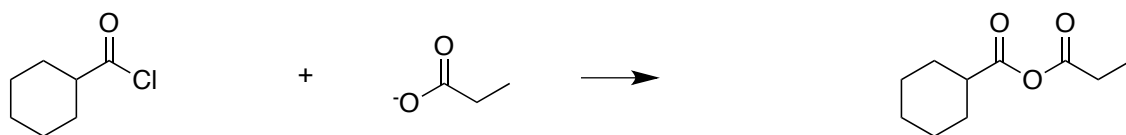
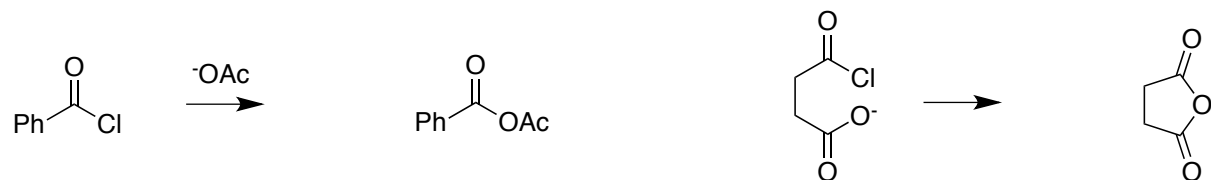
Under Basic Conditions

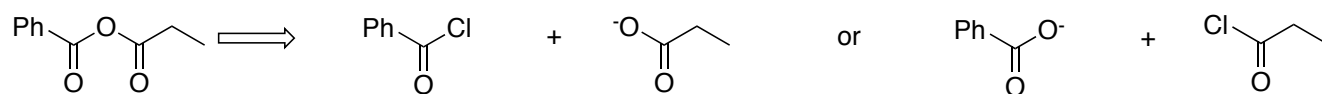
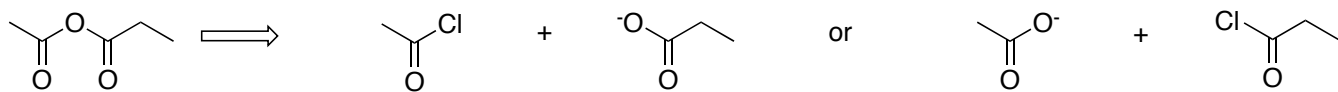
stable *many*

Chloride is a relatively *irreversible*.



Syntheses Of Anhydrides Via Acylation Of Carboxylates





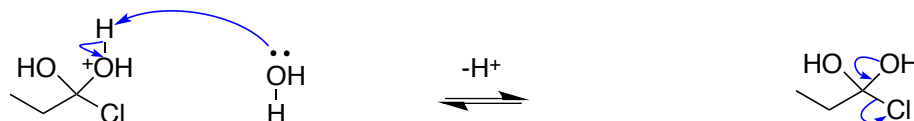
Hydrolysis Of Acid Chlorides To Form Carboxylic Acids

the nucleophile is *hydroxide*,

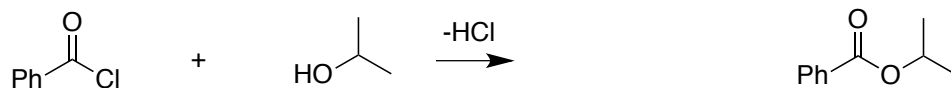
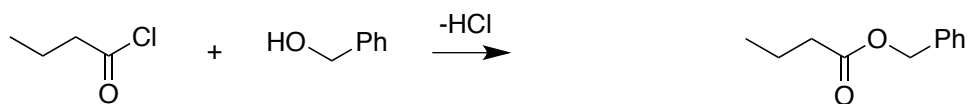
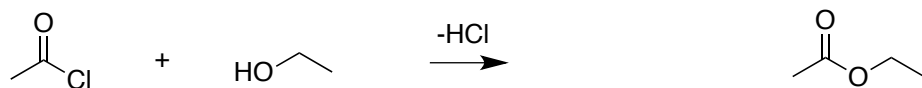
it is *water*;

acylation of water.

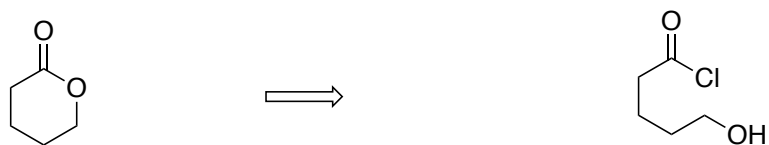
under *acidic* conditions.

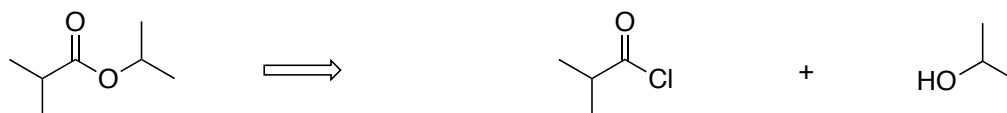


Acylation Of Alcohols To Form Esters

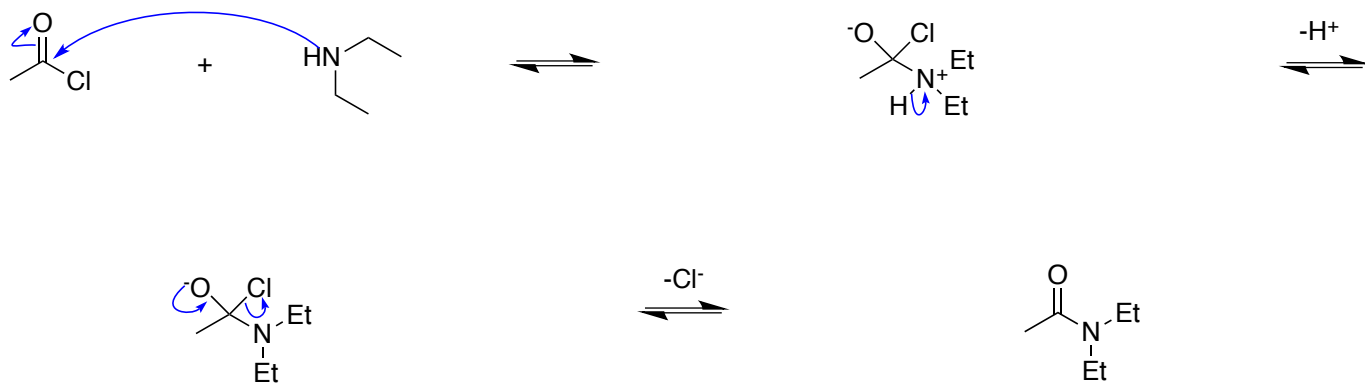


Indicate acid chloride and alcohol starting materials that could be used to make the following esters.

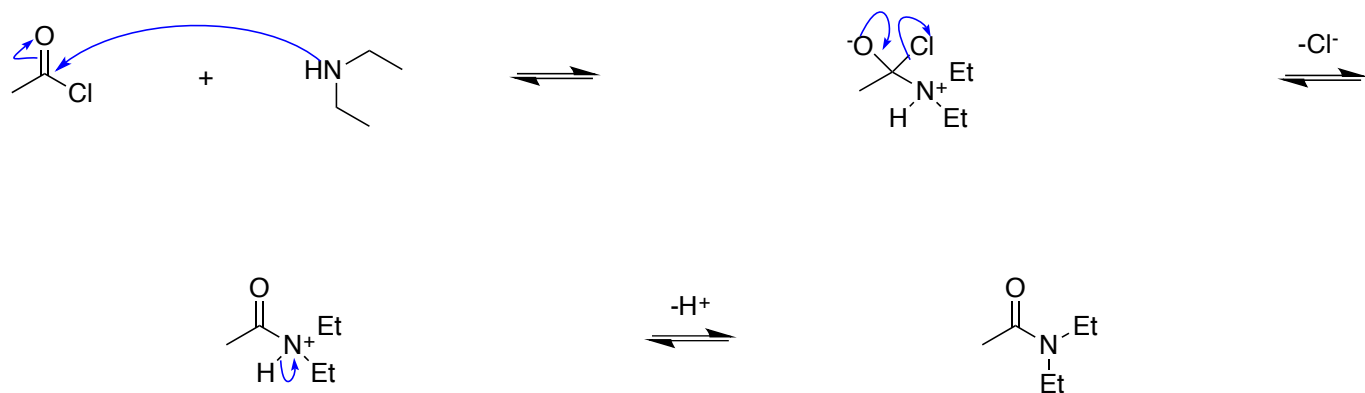




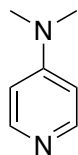
Acylation Of Amines To Give Amides



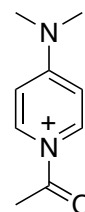
proton *before* chloride loss,
shows it *after*.



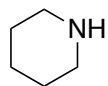
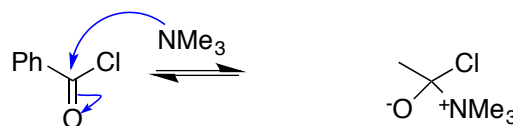
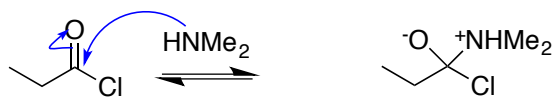
gives *unstable* products



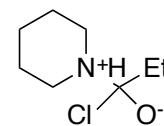
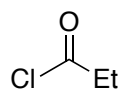
DMAP



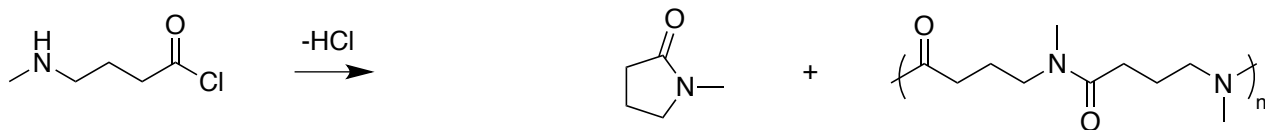
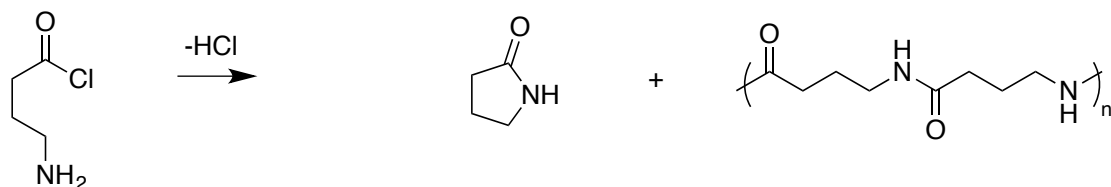
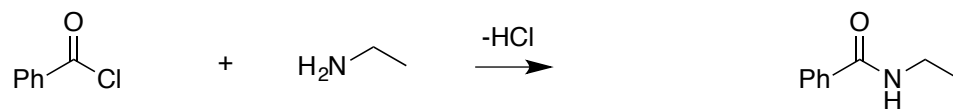
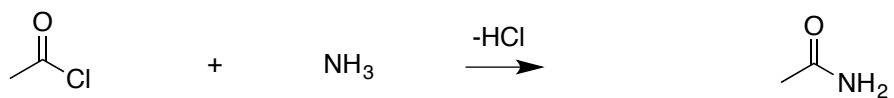
N-acetyl DMAP
good acylating agent for other nucleophiles

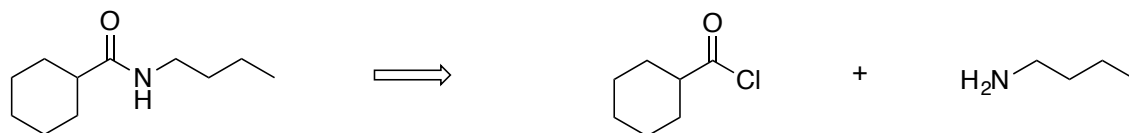
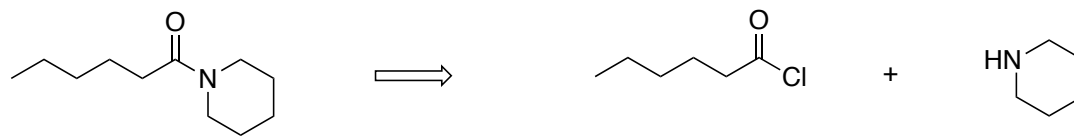
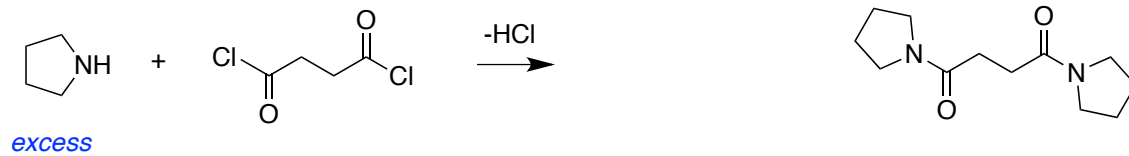


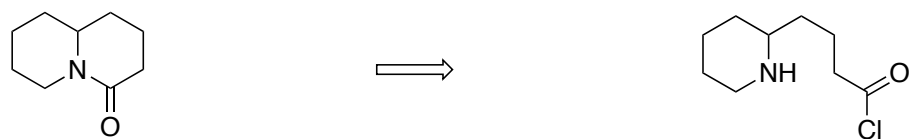
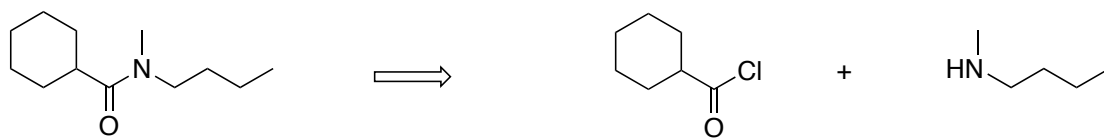
+



which amine?







give *esters*,
acids,
ammonia to give *amides*.

C. Acylation Reactions Of Carboxylic Acid Anhydrides

slightly less reactive

would be *the same*.

an electrophile and the

would be *a good strategy*.

