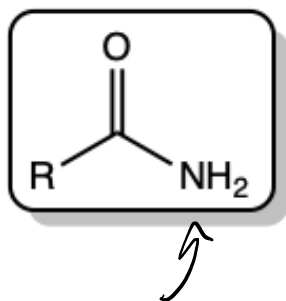


Slide 1 Topic: Amide Nomenclature

Section: 15.1

Slide 2



base the name on the parent hydrocarbon

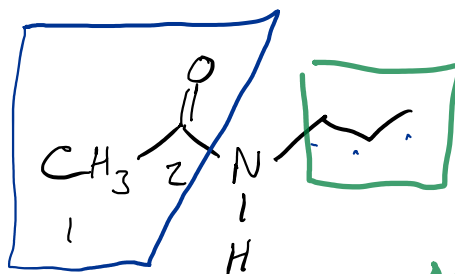
Slide 3

Slide 4

2 C = ethanamide

Slide 5

Slide 6*



N-propyl-ethanamide

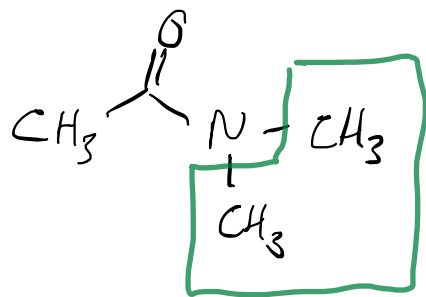
Slide 7

substituents on N-hydrocarbon name

Slide 8

- lose the "e"
- add "yl"

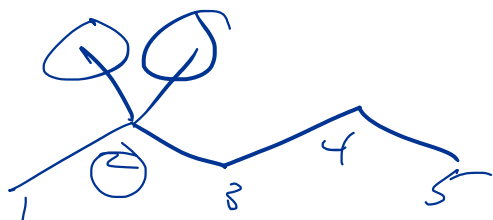
Slide 9



N,N-dimethyl-ethanamide

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Slide 11



2,2-dimethylpentane

Nucleophilic acyl substitution reactions

Slide 1 Topic: How Carboxylic Acids and Their Derivatives React

Section: 15.4

Slide 2



Slide 3

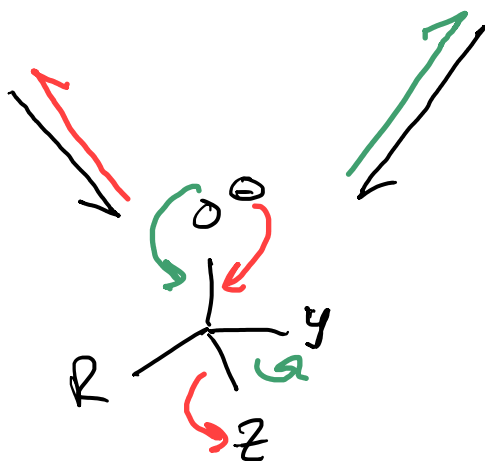
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tetrahedral intermediate



Slide 8

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Slide 11

equilibrium
reaction
extent of reaction
depends on which
is the better LG

Slide 1 Topic: Reactions of Acyl Chlorides

Section: 15.6

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Slide 6

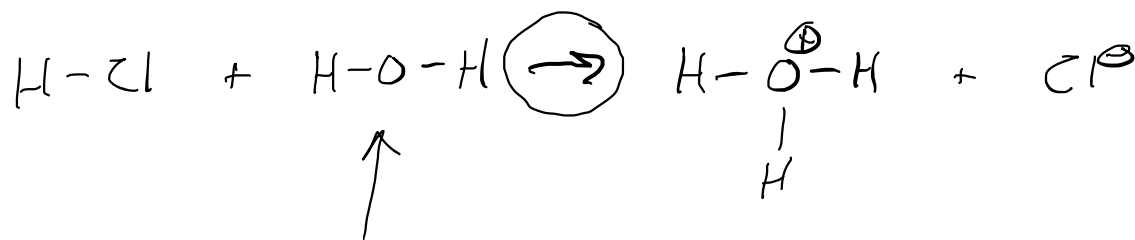
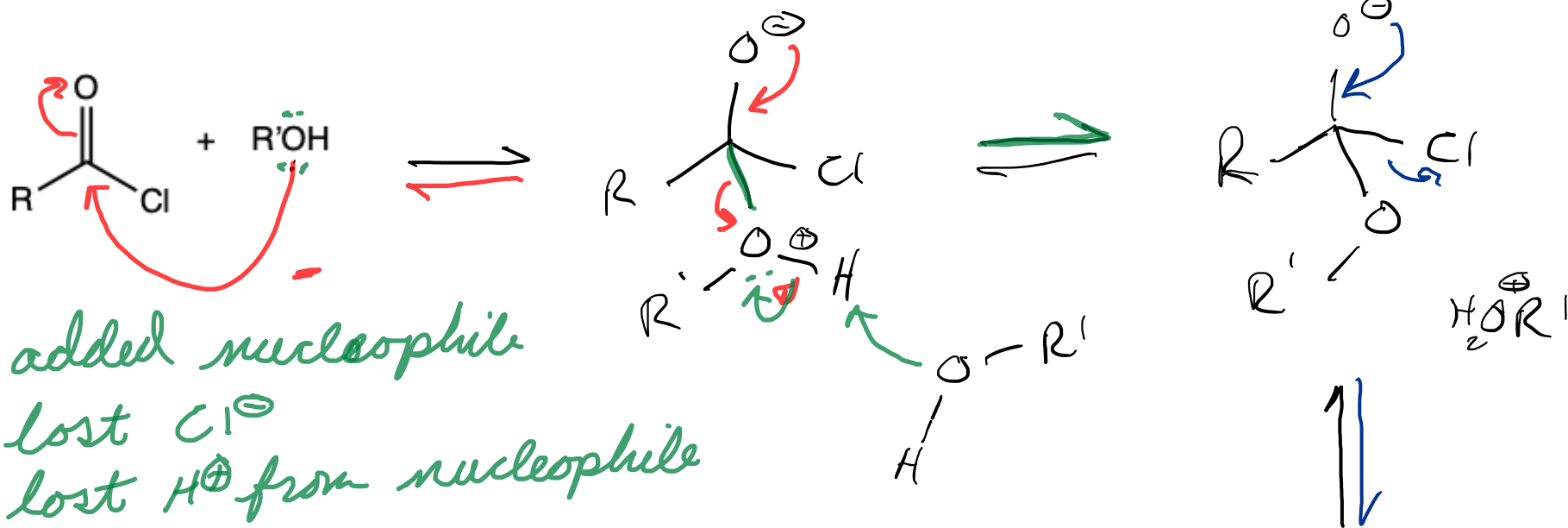
Slide 7

Slide 8*

Slide 9

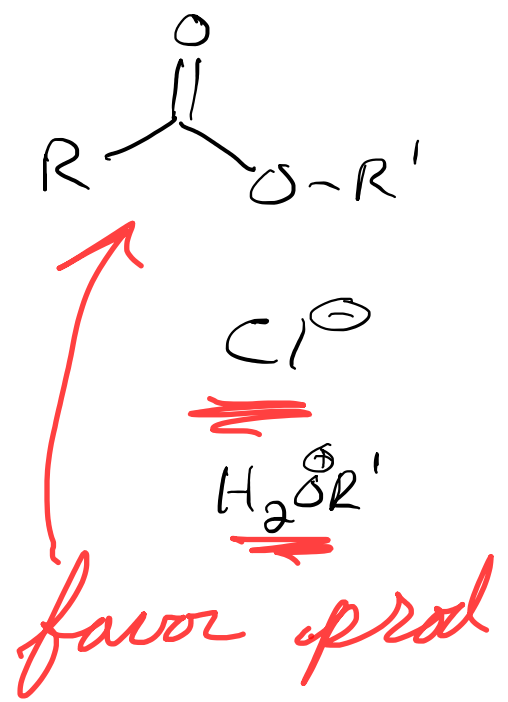
Slide 10

Slide 11



water molecules
are more attractive
to H⁺ than Cl⁻

Water is a stronger base
than Cl⁻



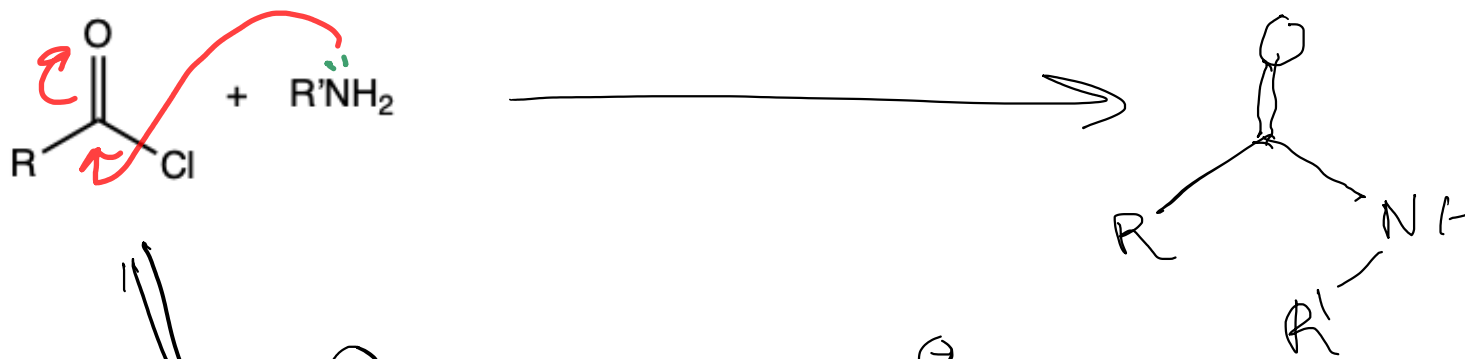
Slide 1 Topic: Reactions of Acyl Chlorides

Section: 15.6

add Nu to C, lose Cl⁻, lose H⁺ from Nu

Slide 2

Slide 3



Slide 4

Slide 5

Slide 6

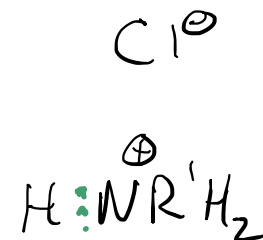
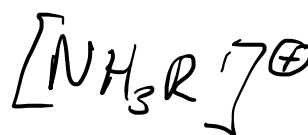
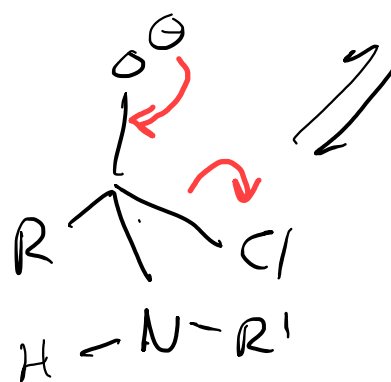
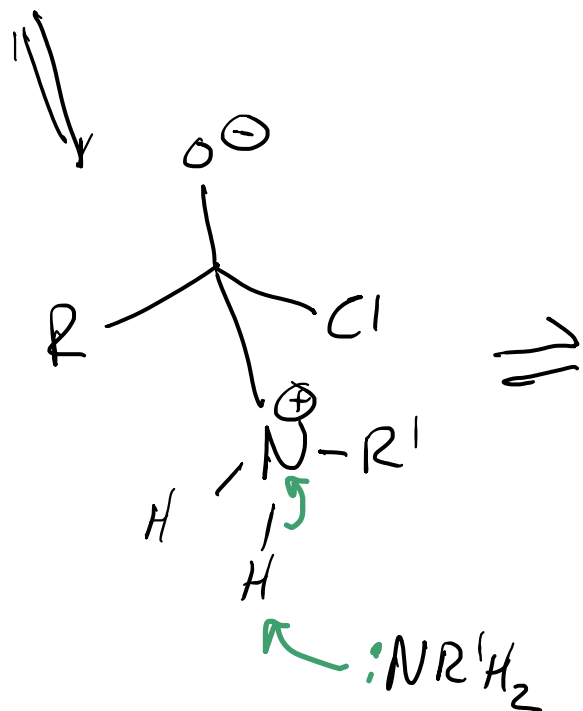
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Slide 11



some amine is lost to ammonium ion formation

Slide 1 Topic: Reactions of Esters

Section: 15.7

hydrolysis

Slide 2



Slide 3

LG

Slide 4

even so slightly more basic

Slide 5

transesterification

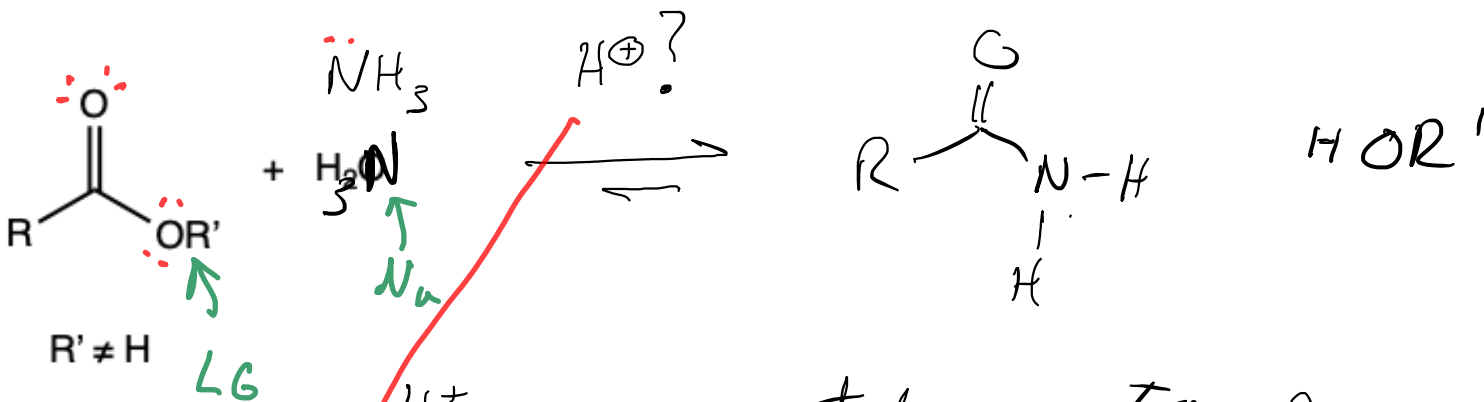
Slide 6



Slide 7

Slide 8

Slide 9



Slide 10*

Slide 11

H⁺ can catalyze top 2 rxns ...
 bottom one? No ... NH₃ reacts with
 what will the H⁺ be attracted to? ⁷⁶⁴
 lp e⁻'s ...