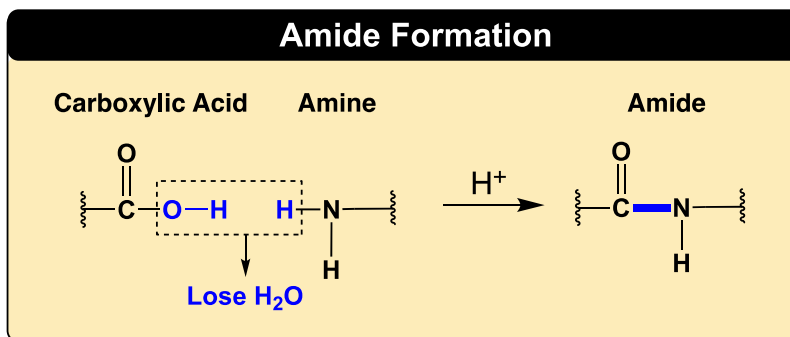
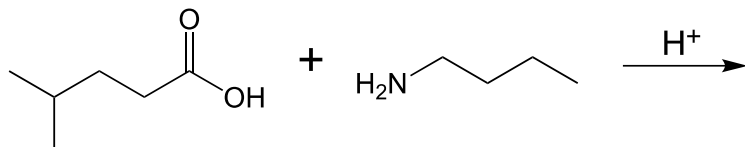


CONCEPT: AMIDE FORMATION

- Under this type of reaction, a carboxylic acid and an amine undergo a condensation reaction to form an _____.
 - Recall, a condensation reaction results in the loss of _____.
 - The carboxylic acid loses its _____ and the amine nitrogen loses _____ hydrogen.
 - An _____ catalyst is required for the reaction to start.



EXAMPLE: Determine the amide product formed when 4-methylpentanoic acid reacts with butylamine.



PRACTICE: Predict the amide product formed when 2,2-dimethylpropanoic acid reacts with dimethylamine.

