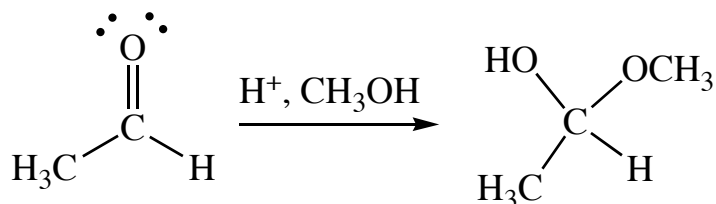
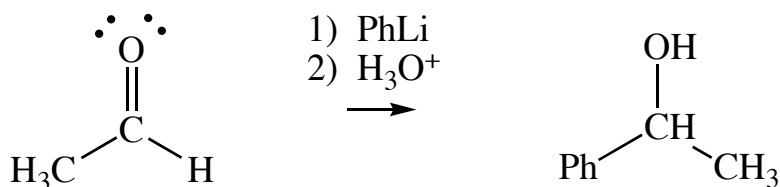
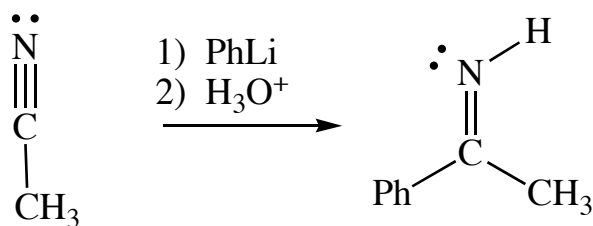


Exercise 94 - Electrophilic/Nucleophilic Addn To CO, etc.

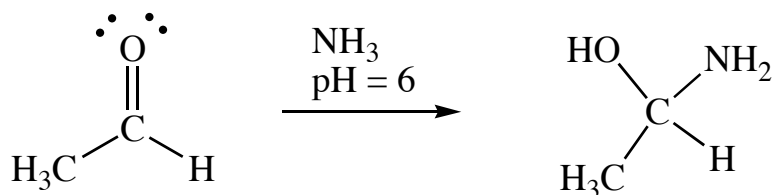
Provide a mechanism for each of the following addition reactions. Indicate whether they are nucleophilic or electrophilic. How can you tell the difference?



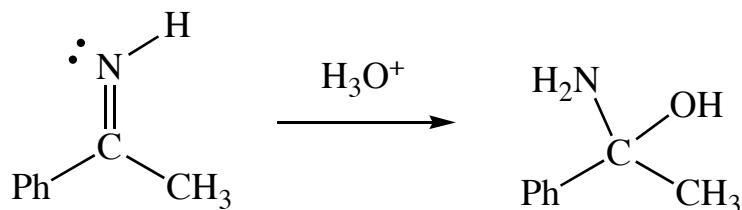
The formation of a hemiacetal from an aldehyde, the first part of acetal formation.



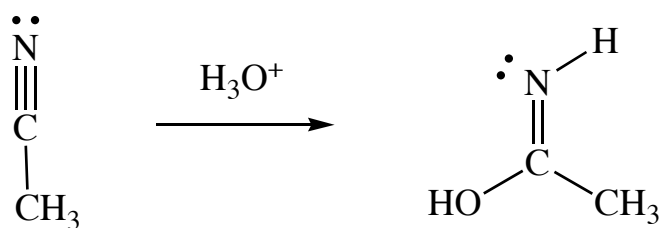
The formation of an imine from a nitrile, the first part of the transformation of nitriles to ketones.



The first step in the formation of an imine via addition - elimination.



Formation of a hemiaminal from an imine, the first half of imine hydrolysis to a ketone



The first part of nitrile hydrolysis.