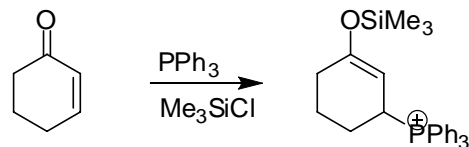
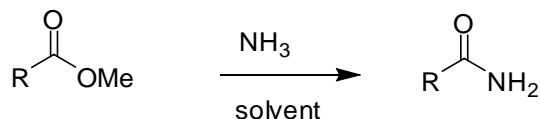
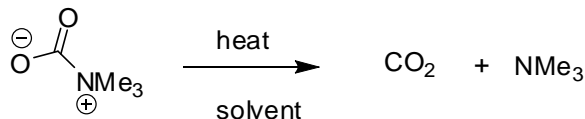
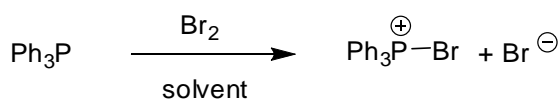


1. Suggest a mechanism for this reaction. Why does conjugate addition occur rather than direct addition?



Why is the product shown as a cation? If it is indeed a salt, what is the anion?

2. What would be the solvent effects on these reactions? Would they be accelerated or retarded by a change from nonpolar to a polar solvent?



3. Define the terms homotopic, enantiotopic, diastereotopic and heterotopic groups in a molecule?

Are the faces of the carbonyl groups and hydrogens in the following compounds homotopic, enantiotopic, or diastereotopic?

