

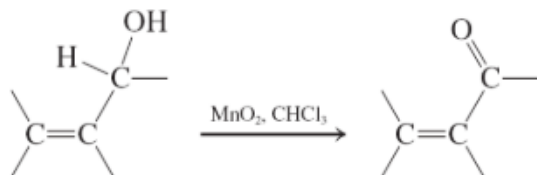
# New Reactions

## Synthesis of Aldehydes and Ketones

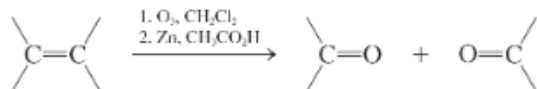
### 1. Oxidation of Alcohols ([Section 17-4](#))



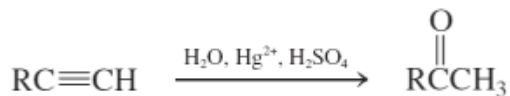
### Allylic oxidation



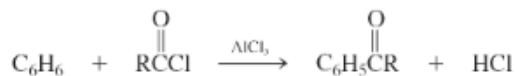
### 2. Ozonolysis of Alkenes ([Section 17-4](#))



### 3. Hydration of Alkynes ([Section 17-4](#))



### 4. Friedel-Crafts Acylation ([Section 17-4](#))

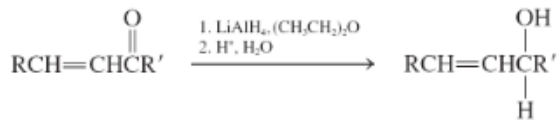


## Reactions of Aldehydes and Ketones

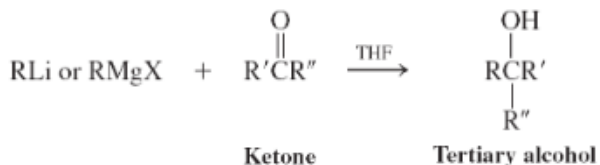
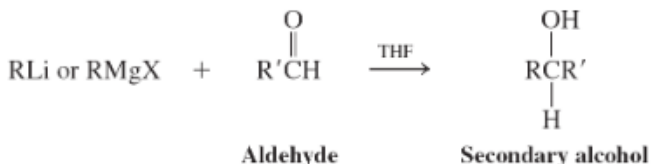
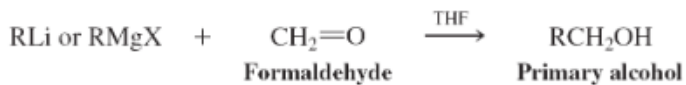
### 5. Reduction by Hydrides ([Section 17-5](#))



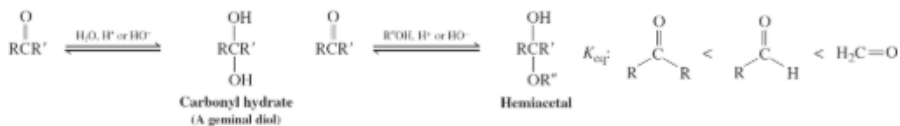
## Selectivity



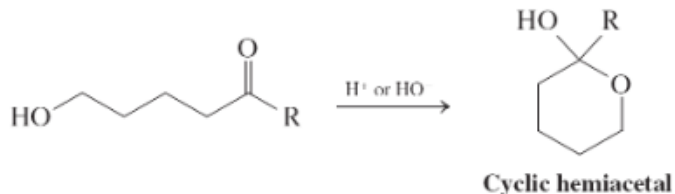
### 6. Addition of Organometallic Compounds ([Section 17-5](#))



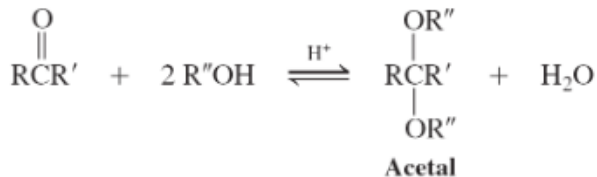
## 7. Addition of Water and Alcohols—Hemiacetals (Sections 17-6 and 17-7)



Intramolecular addition

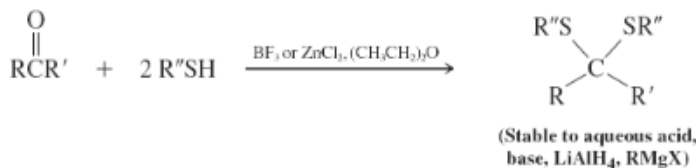


## 8. Acid-Catalyzed Addition of Alcohols—Acetals (Sections 17-7 and 17-8)

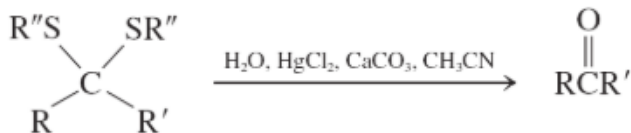


## 9. Dithioacetals (Section 17-8)

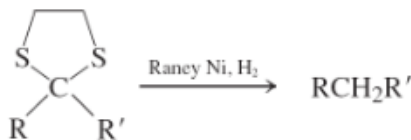
Formation



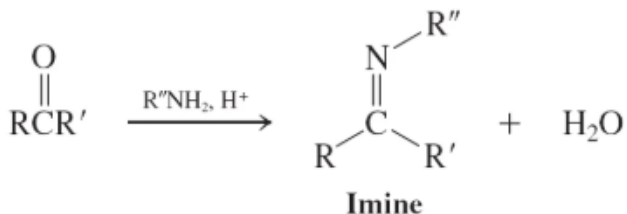
Hydrolysis



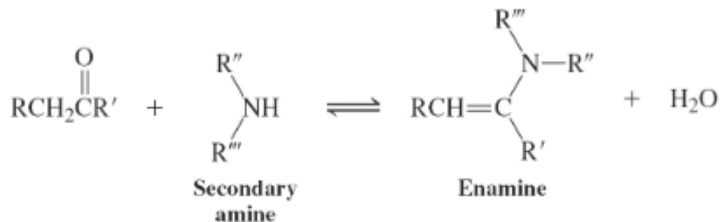
## 10. Raney Nickel Desulfurization (Section 17-8)



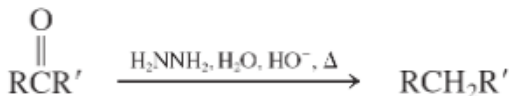
## 11. Addition of Amine Derivatives ([Section I7-9](#))



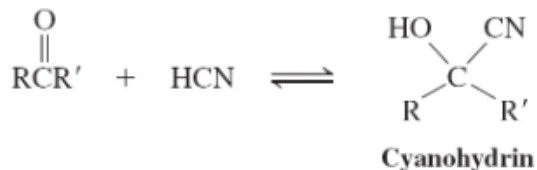
## 12. Enamines ([Section I7-9](#))



## 13. Wolff-Kishner Reduction ([Section I7-10](#))



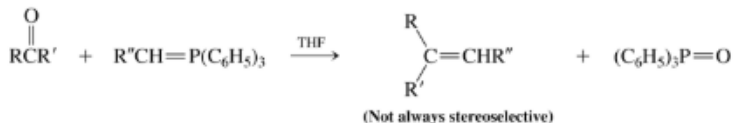
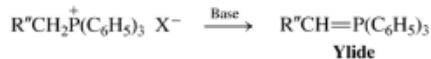
## 14. Cyanohydrins ([Section I7-II](#))



## 15. Wittig Reaction ([Section I7-I2](#))



Works with primary or secondary haloalkanes



## 16. Baeyer-Villiger Oxidation ([Section 17-13](#))



Migratory aptitudes in Baeyer-Villiger oxidation

Methyl < primary < phenyl - secondary < cyclohexyl < tertiary