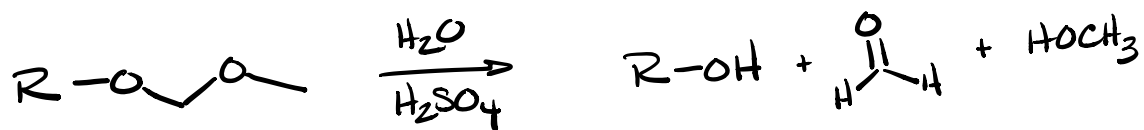
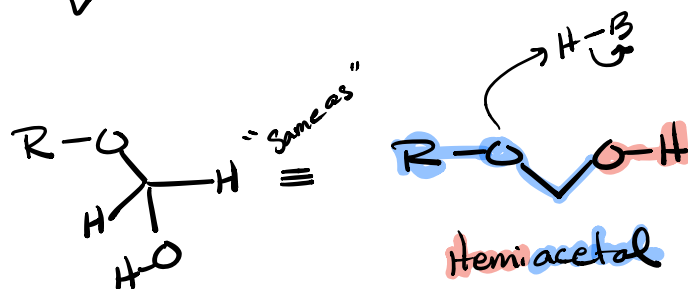
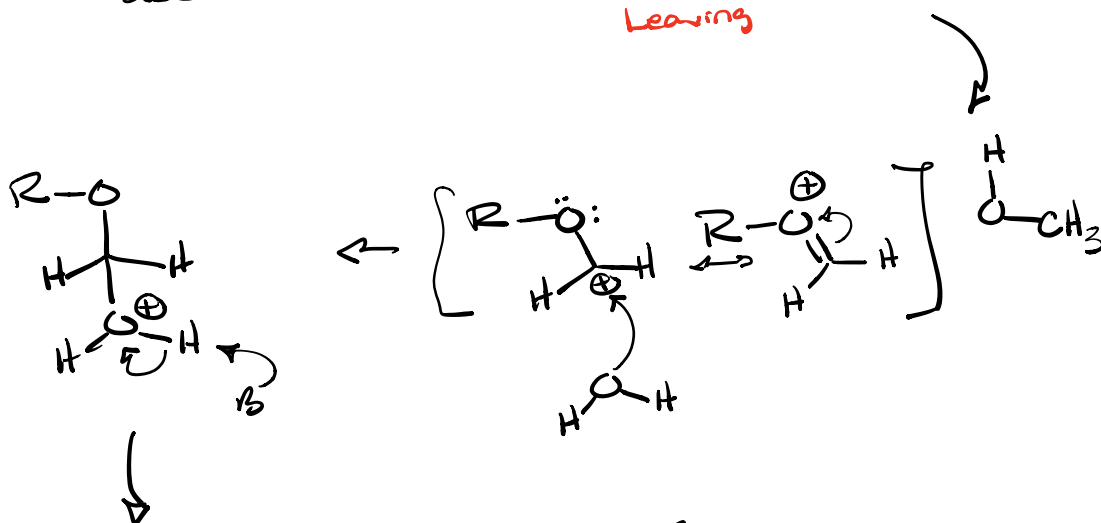
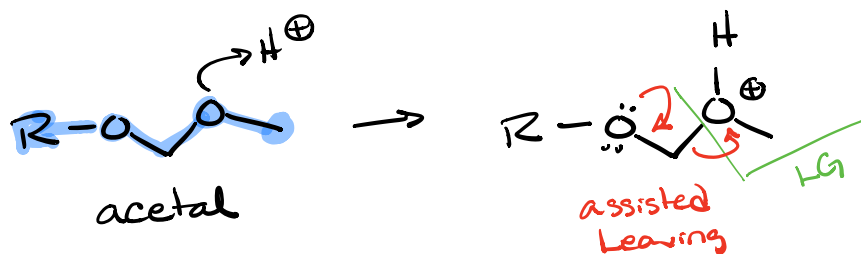


# Methoxy methyl ether removal

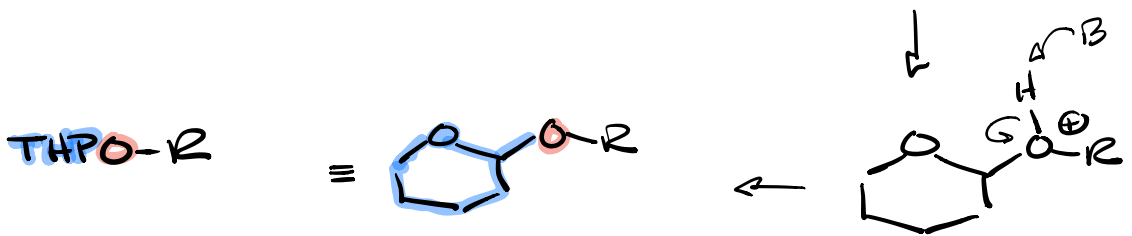
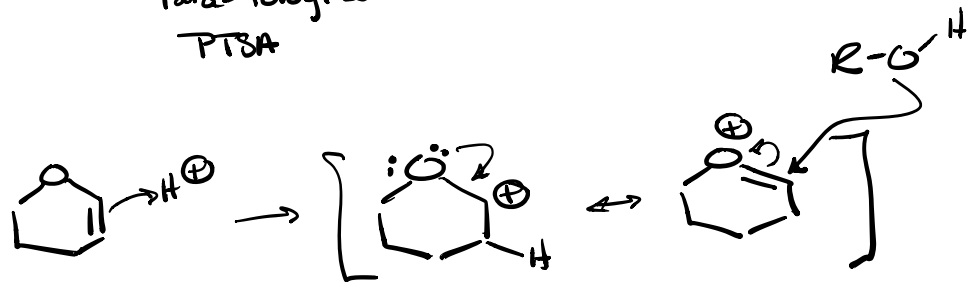
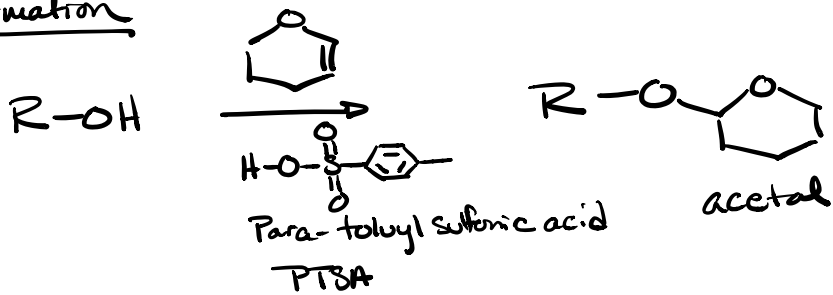


# acetal hydrolysis

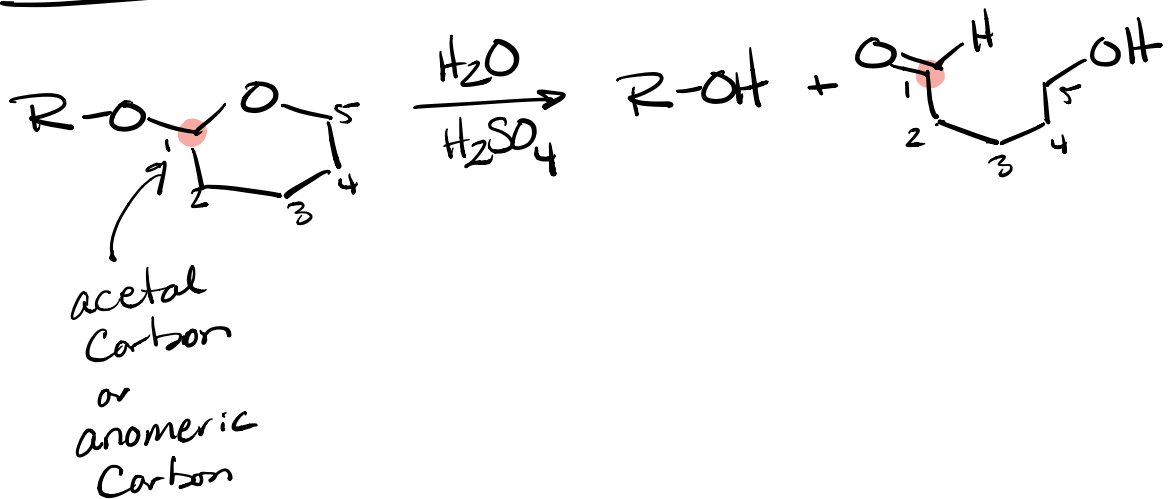




**THP** TetrahydroPyran  
Formation



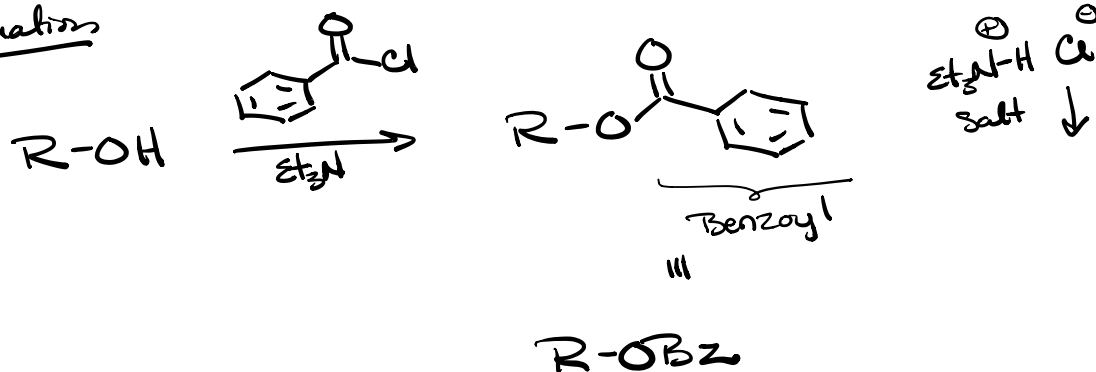
Removal



### 3<sup>rd</sup> Type - Ester type

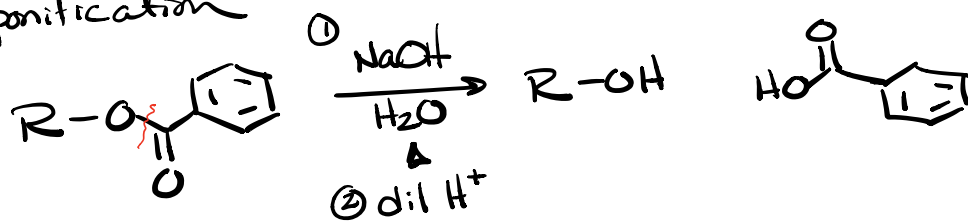
#### Benzoyl

#### formation

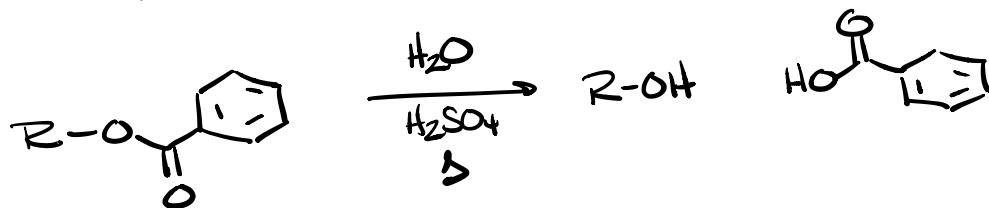


Removal either by saponification (basic conditions)  
or by hydrolysis (acidic conditions)

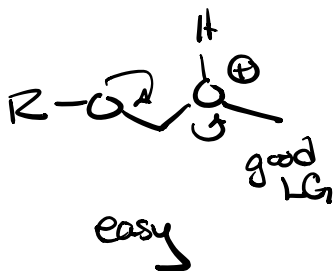
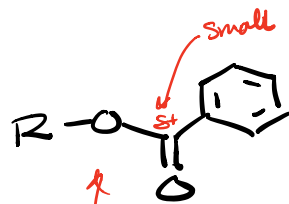
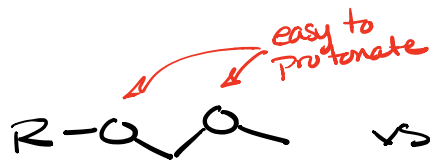
#### saponification



#### Acid Hydrolysis



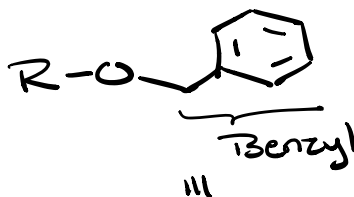
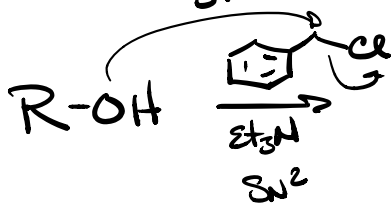
Both Strong  
Conditions



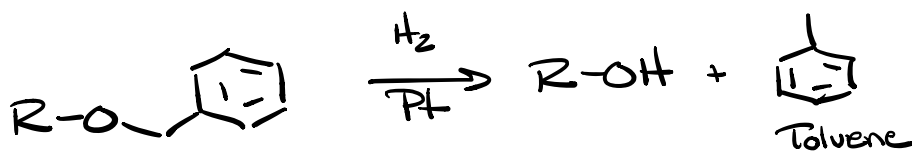
easy to protonate

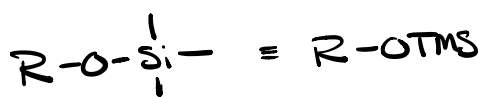
No assisted leaving  
poor electrophile  
no good LG

4<sup>th</sup> Type Benzyl group



Removal





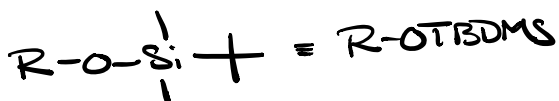
on



off

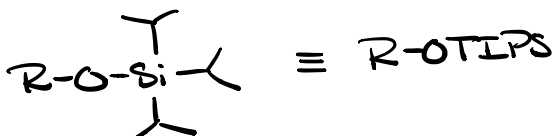
- ① TBAF
- ② dil H<sup>+</sup>

stable to  
acid/Base/  
hydrogenation

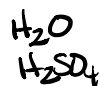
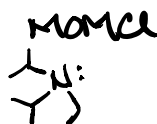
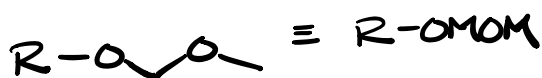


- ① TBAF
- ② dil H<sup>+</sup>

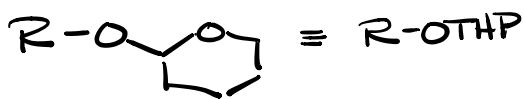
Selective  
for 1°  
alcohol



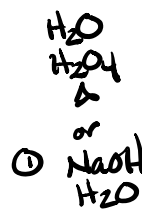
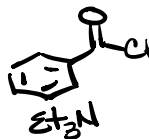
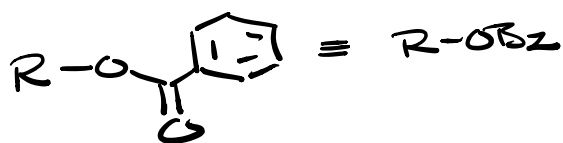
- ① TBAF
- ② dil H<sup>+</sup>



Stable to  
TBAF/Base/  
hydrogenation

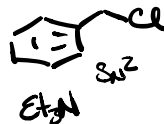
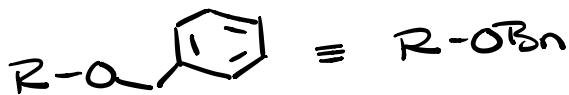


Acid labile

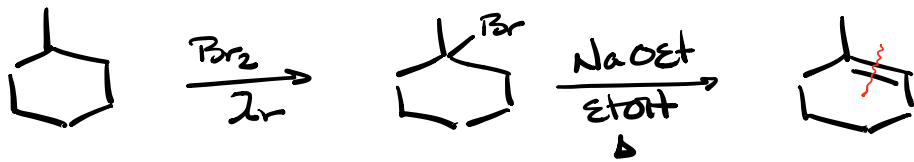


stable to  
TBAF  
≠  
hydrogenation

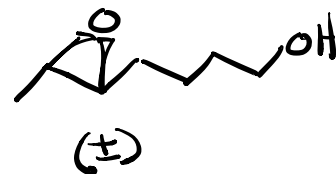
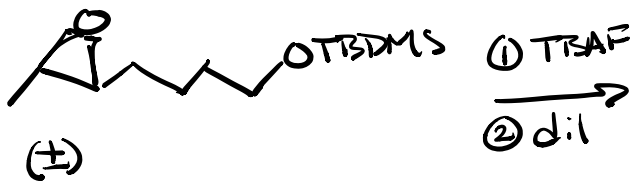
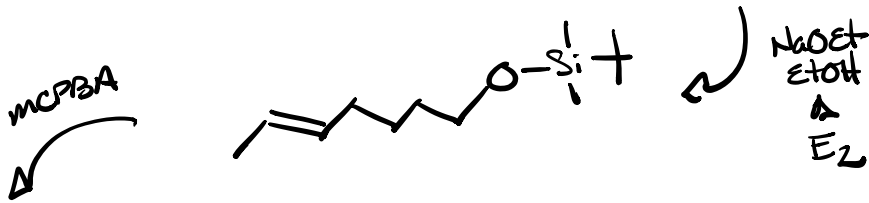
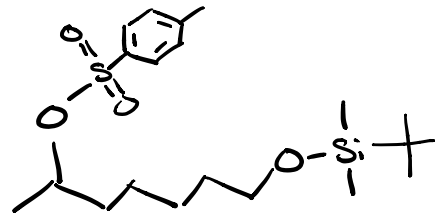
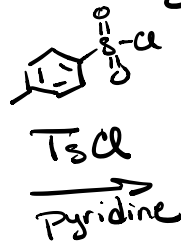
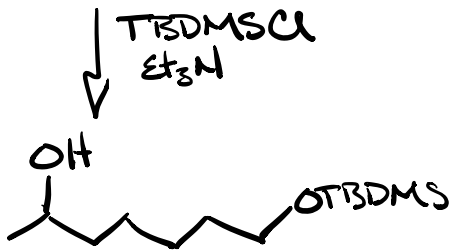
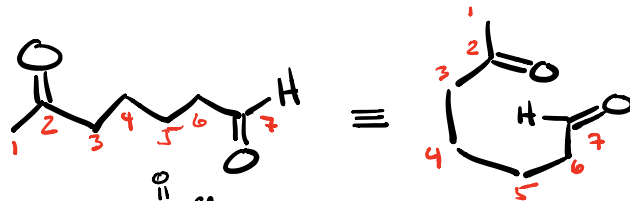
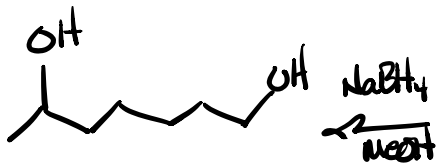
- ② dil H<sup>+</sup>



Stable to  
TBAF,  
Acid/Base

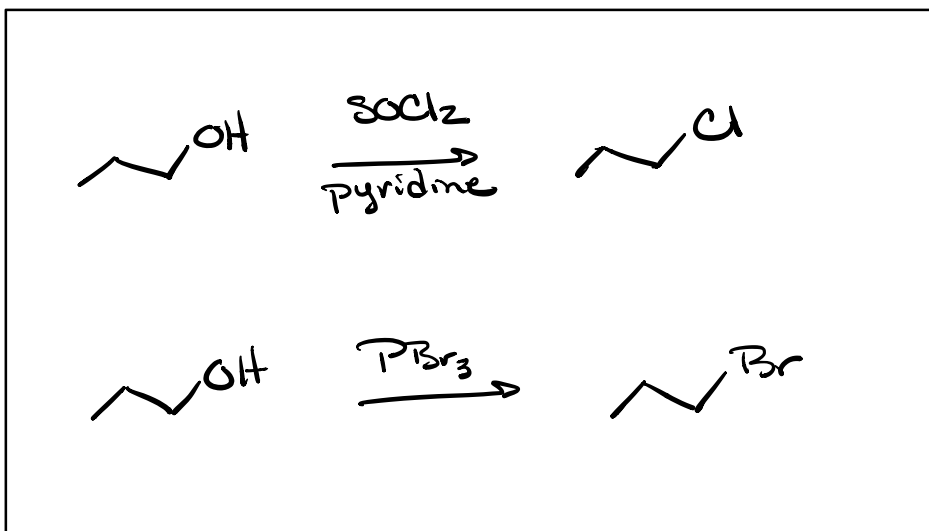
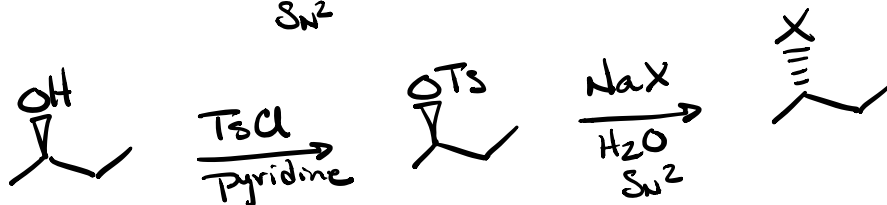
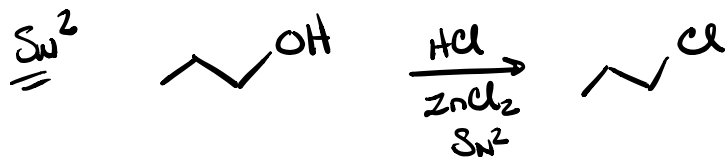
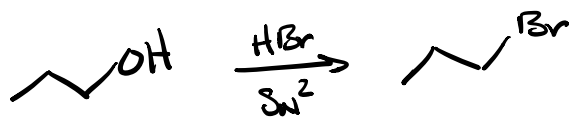
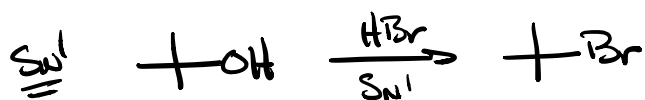


①  $O_3$   
 ②  $Zn, H_2O$



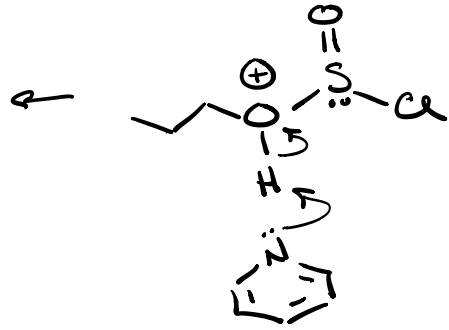
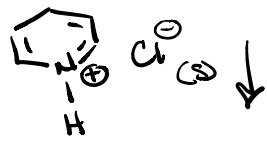
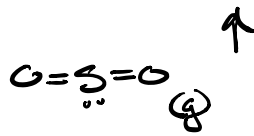
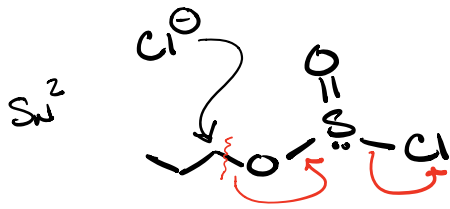
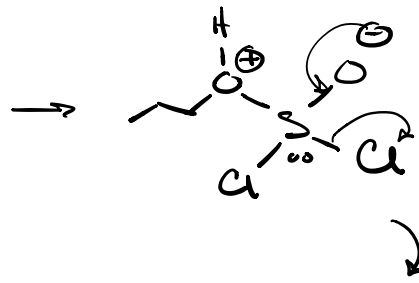
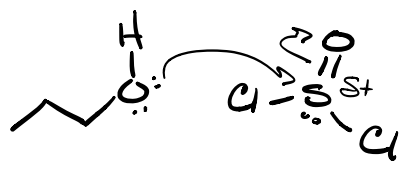


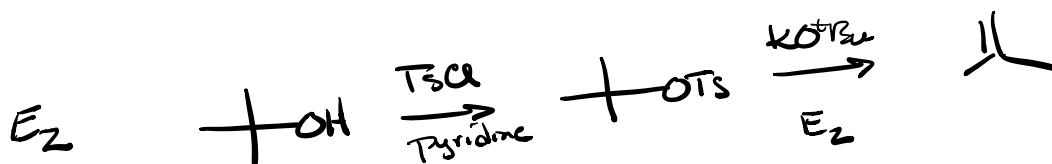
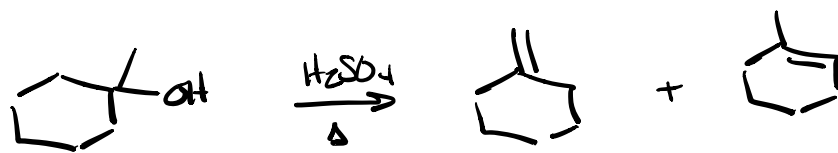
Conversion of alcohols into other functional groups



more  
Common







Oxidations on Tuesday

