

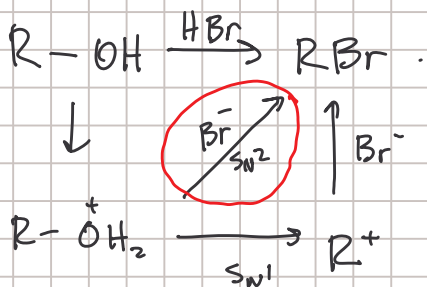
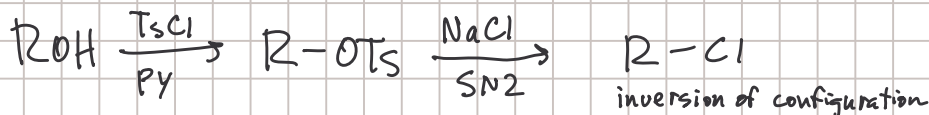
# Ch 11

Note Title

1/13/2006

Tosylates  $R-OH \rightarrow R-OTs$  good leaving group

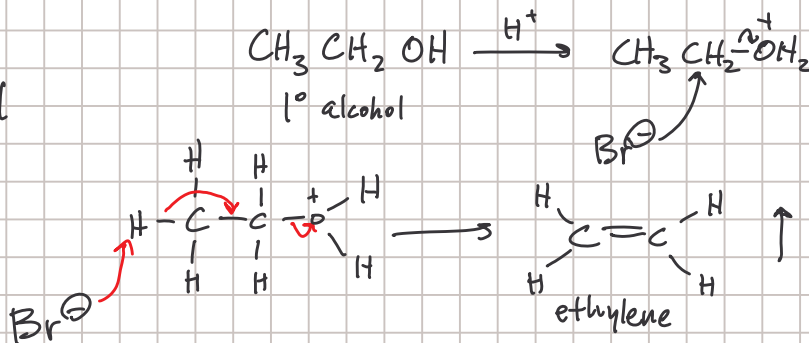
$R-OH \rightarrow R-X$   $X = Cl, Br, I$



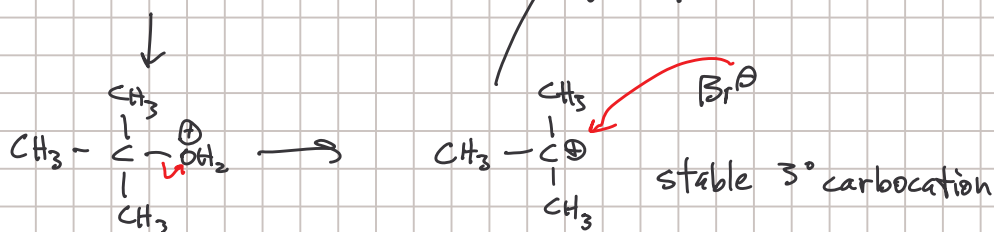
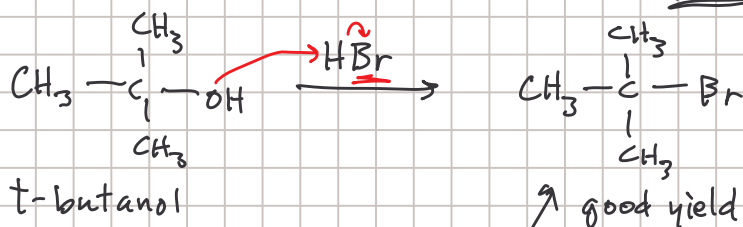
$SN2$  is unreliable w/  $HBr$   
( $HCl, HI$  too)

only  $1^\circ/2^\circ$  ROH can do  $SN2$

$SN2$  not practical  
b/c of elimination

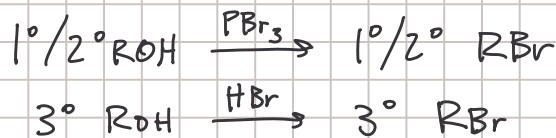
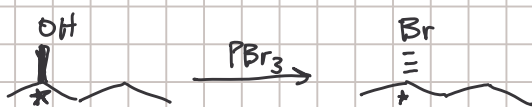
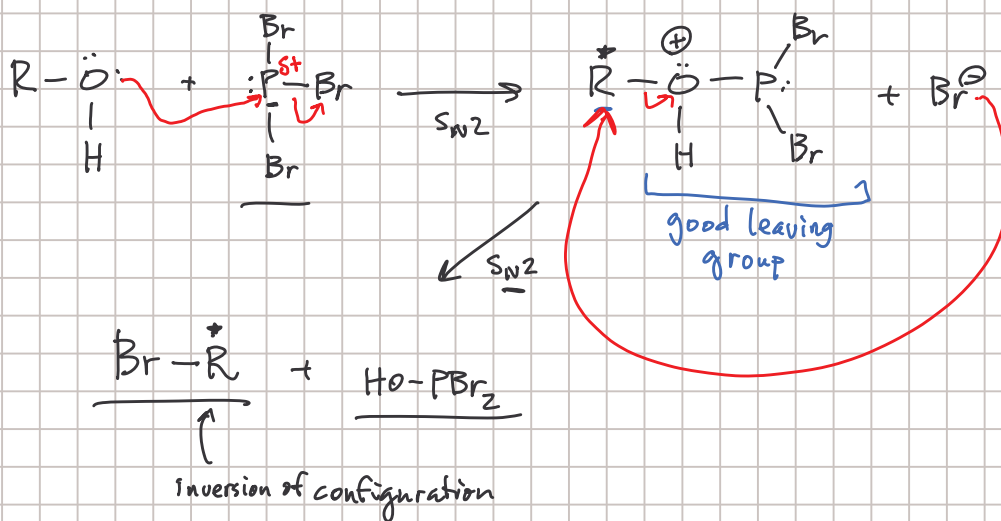


$SN1$  can be reliable, but only on  $3^\circ$  alcohols

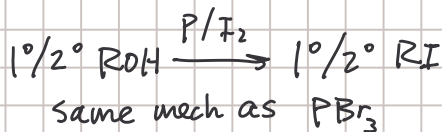
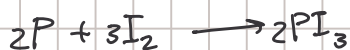


1°/2° alcohols → alkyl halides

use of phosphorus halides PBr<sub>3</sub>



similar w/ iodides "PI<sub>3</sub>" unstable

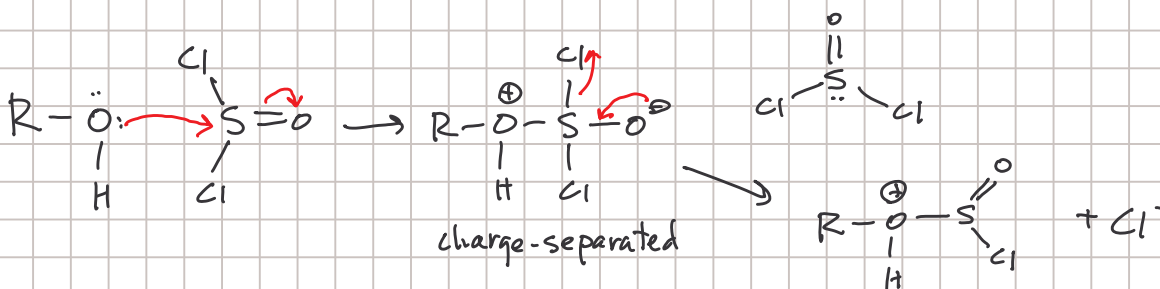


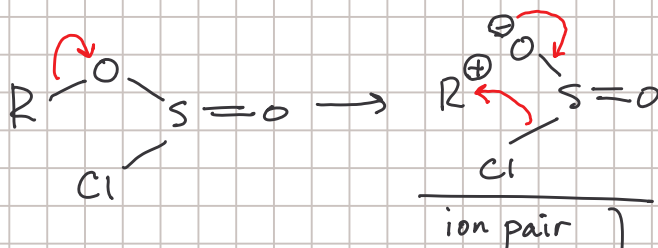
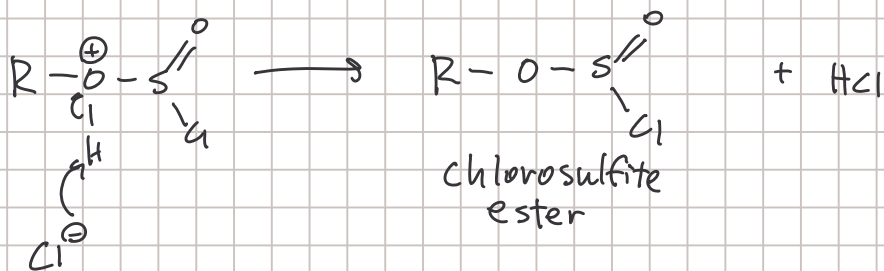
no 3° RI in 1 step

Alkyl chlorides

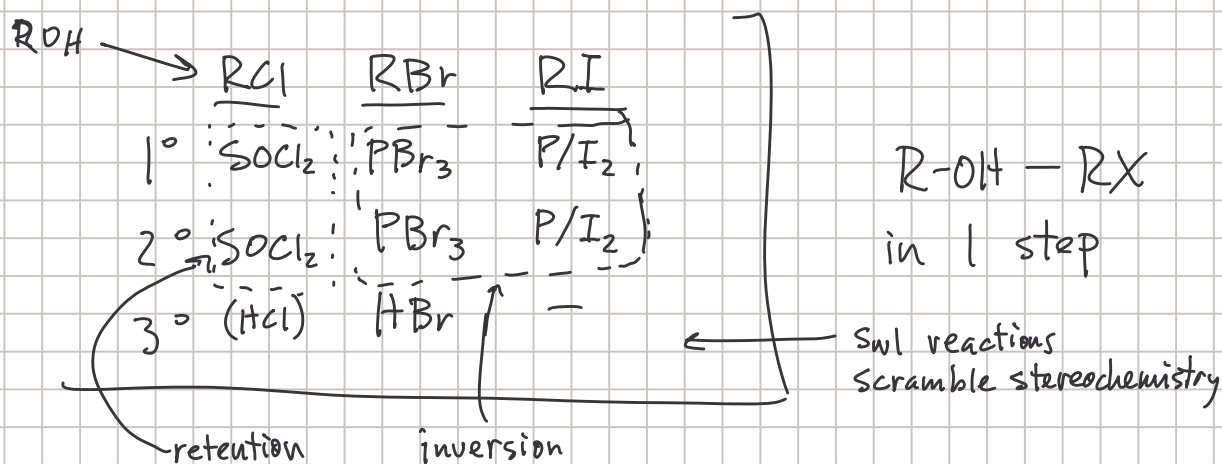
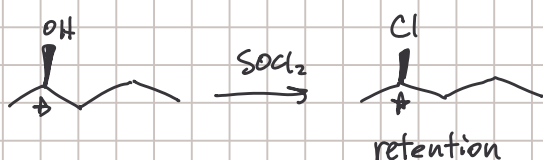
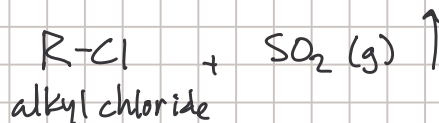


thionyl chloride SOCl<sub>2</sub>





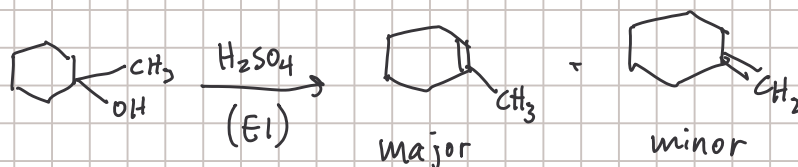
Configuration is retained  
(in most cases)



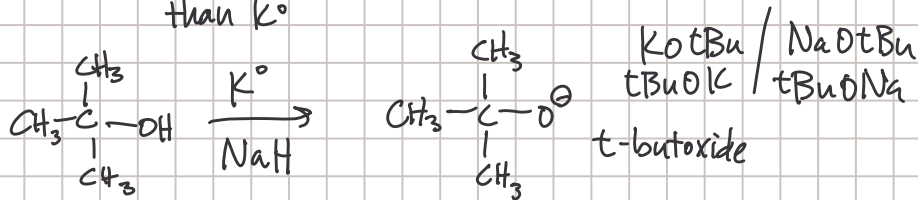
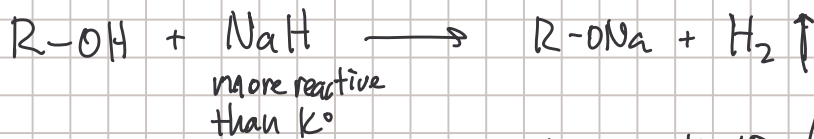
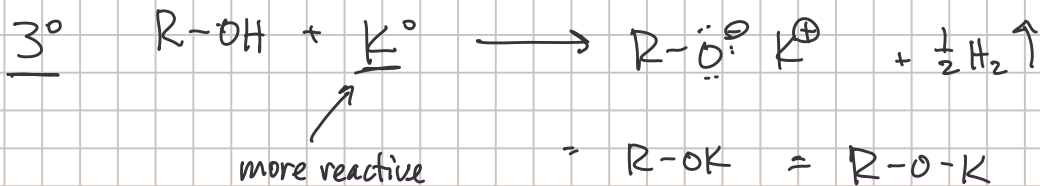
skip 11-10B (do proposing mechanisms)

skip 11-11, 11-12, 11-13

Dehydration review



# 11-14 Alkoxides



## Williamson Ether Synthesis $\text{R-O-R}'$

