

Today

Chemoselective and Reductions
Sections 16.7

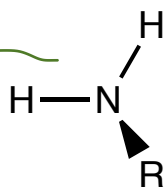
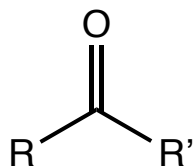
Reactions with Nitrogen Nucleophiles
Section 16.8

Next Class

Reactions with Oxygen Nucleophiles
Section 16.9

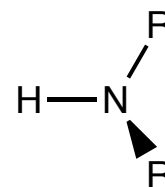
Protecting Groups
16.10

Rework Test 2 by Wednesday, April 6

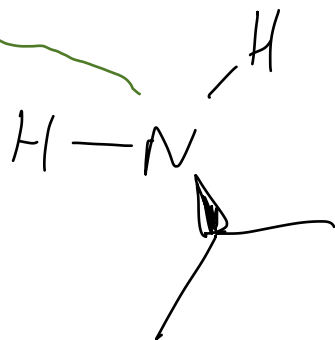


this is a primary amine

number of H atoms will be important



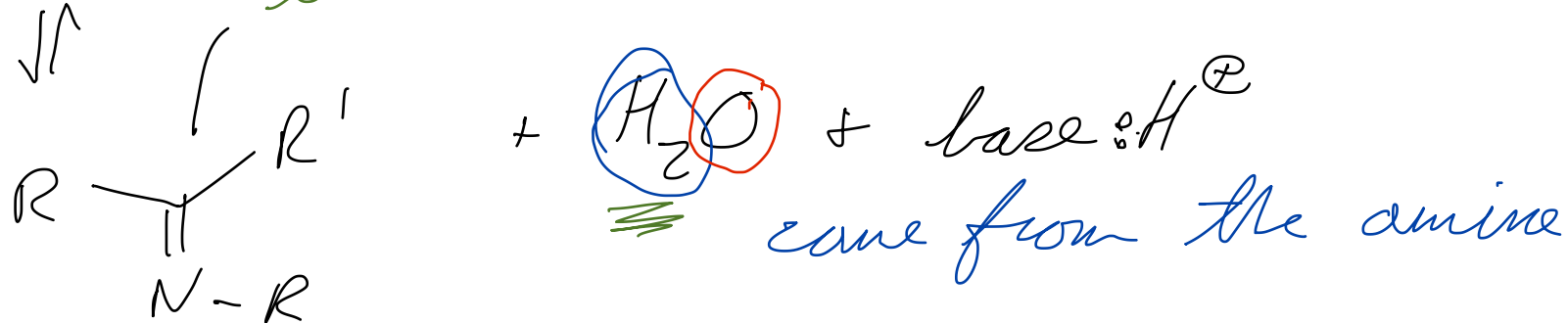
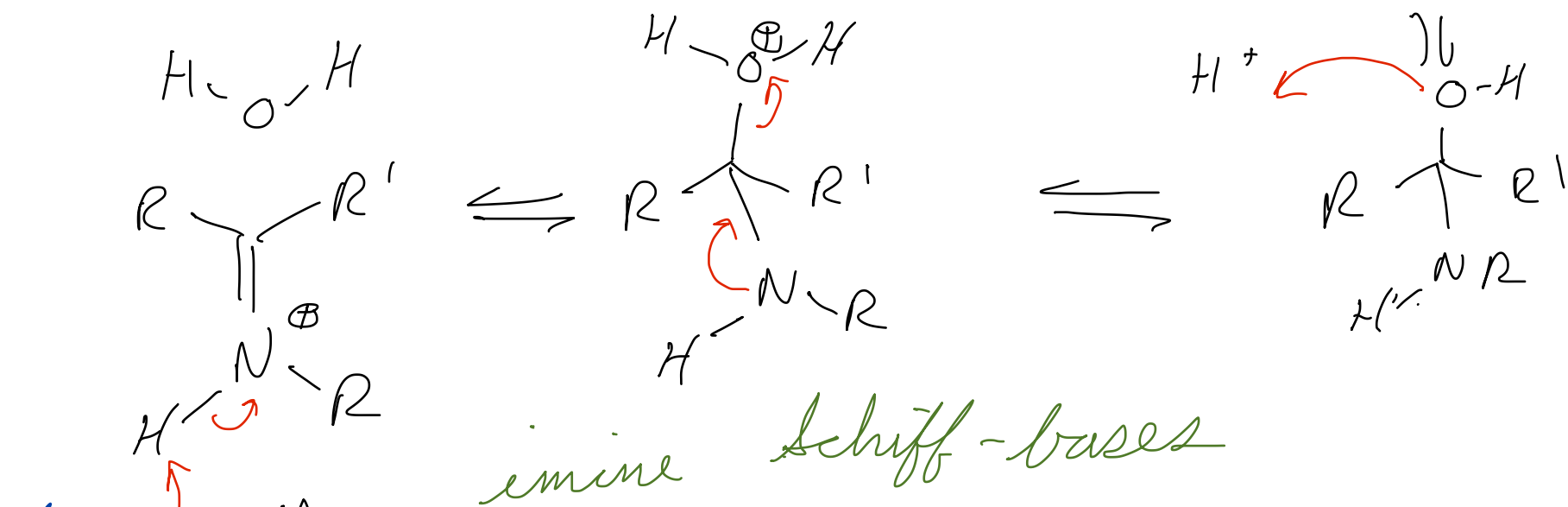
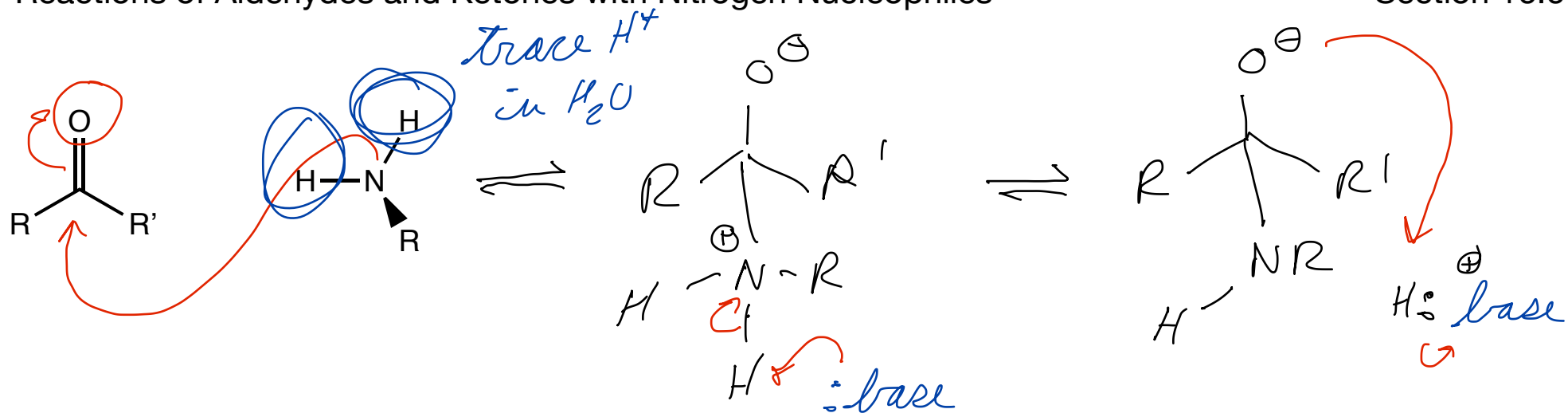
this is a secondary amine

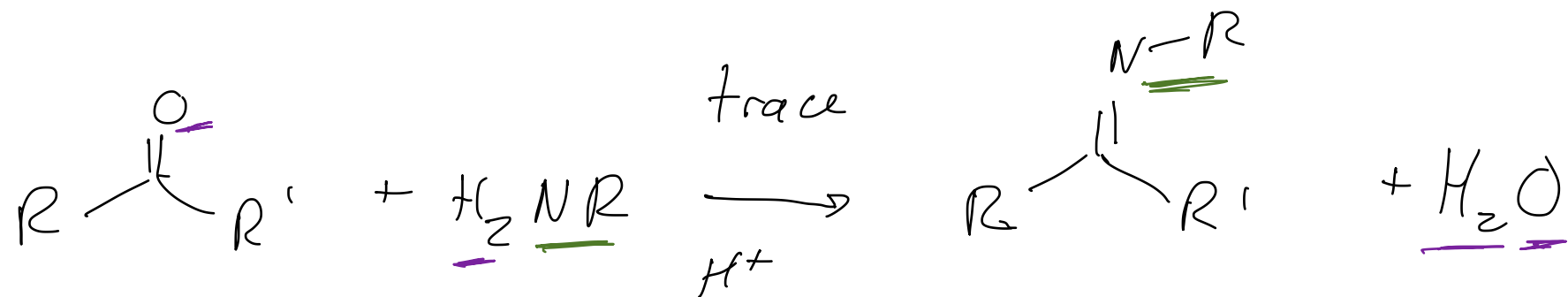


tertiary amines cannot do what we are doing here

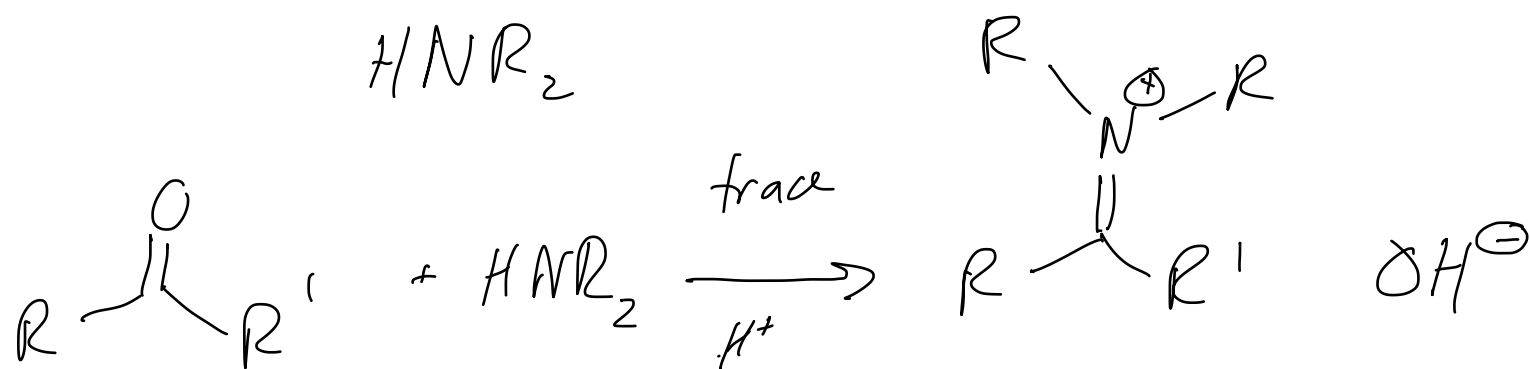
Reactions of Aldehydes and Ketones with Nitrogen Nucleophiles

Section 16.6

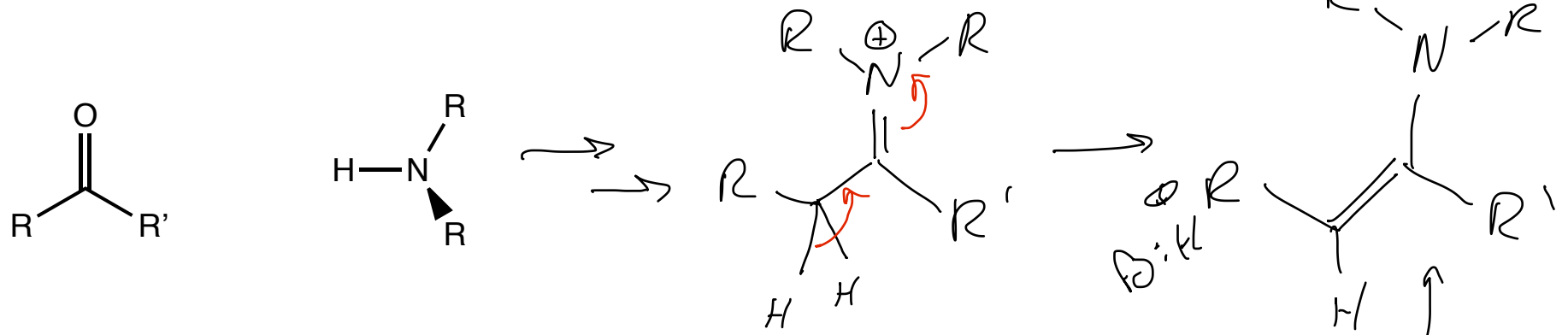




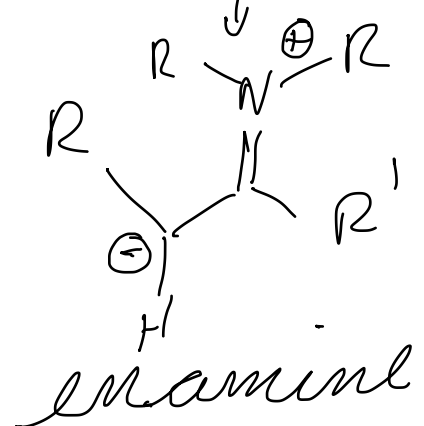
Can a secondary amine do the same reaction?



Reactions of Aldehydes and Ketones with Nitrogen Nucleophiles



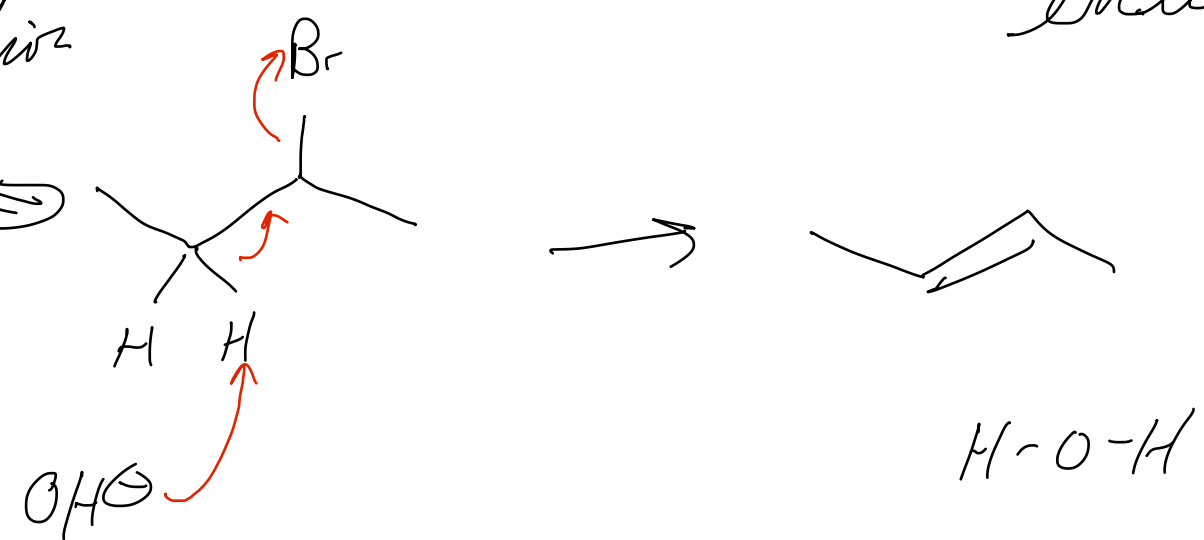
2° amines do a nucleophilic addition, and then does an

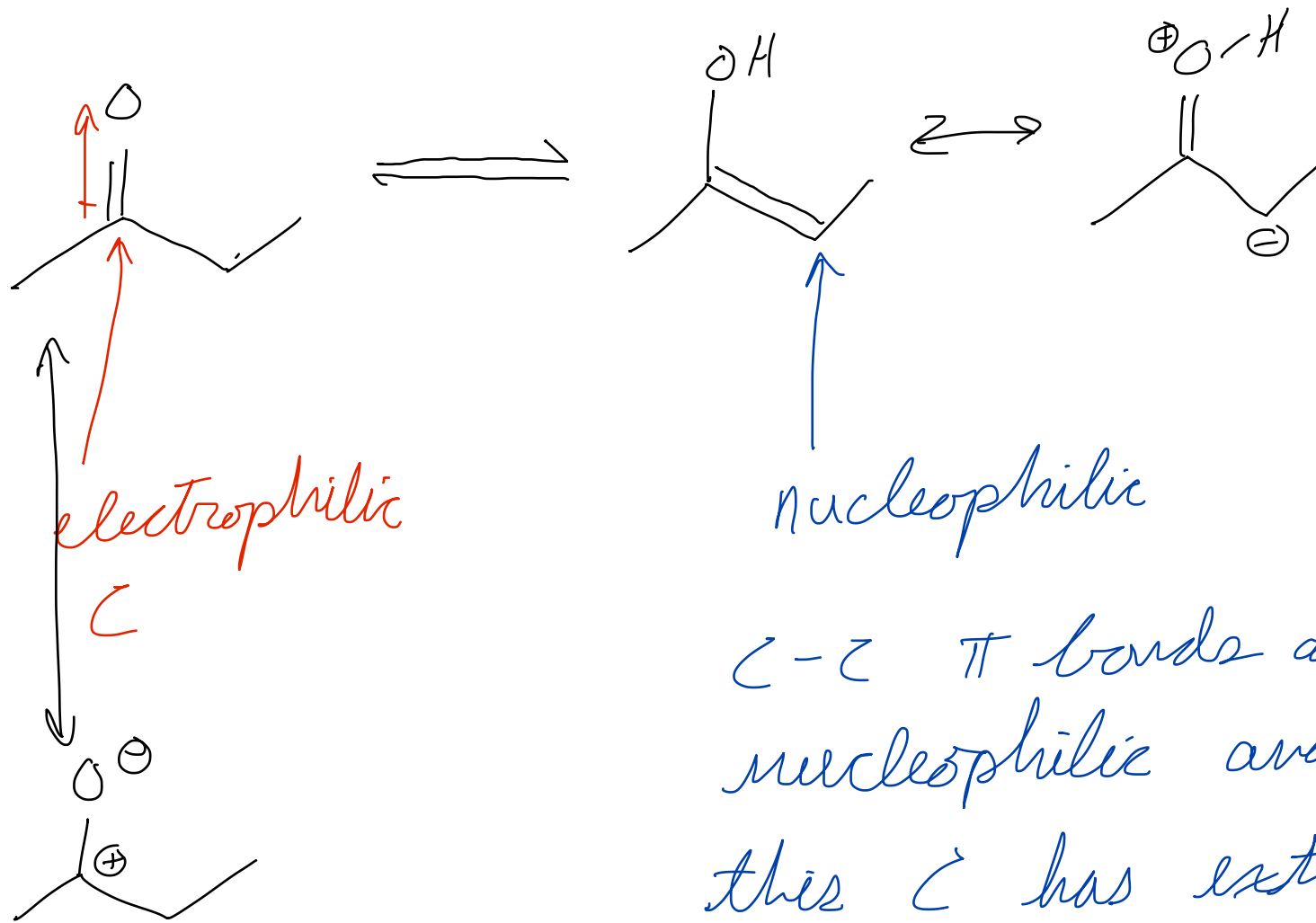


enamine

elimination

$\text{E}2$
 $\text{S}_{\text{N}}1$





$C-C$ π bonds are nucleophilic and this C has extra e^- density as seen in the resonance contributors