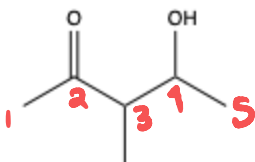
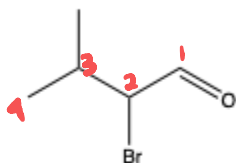


CHEM 2300 Solution 10

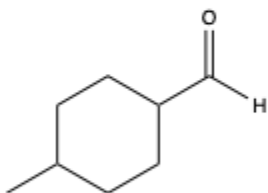
1. Name/Draw the following Aldehydes and Ketones



4-hydroxy-3-methyl-2-pentanone



2-bromo-3-methylbutanal



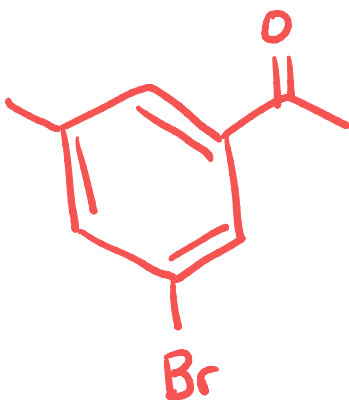
4-methylcyclohexanecarbaldehyde

↳ I don't think you need?

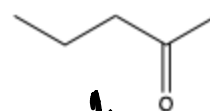
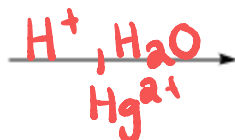
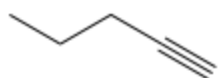
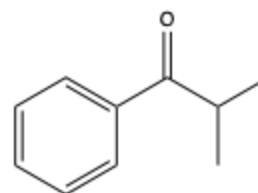
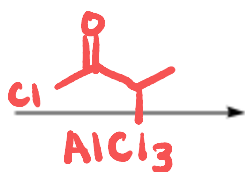
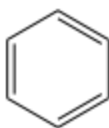
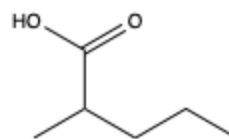
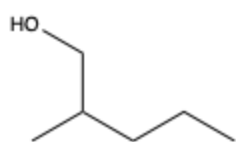
(E)-but-2-enal



3-bromo-5-methylacetophenone

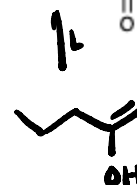


2. List the reagents to synthesize the following compounds



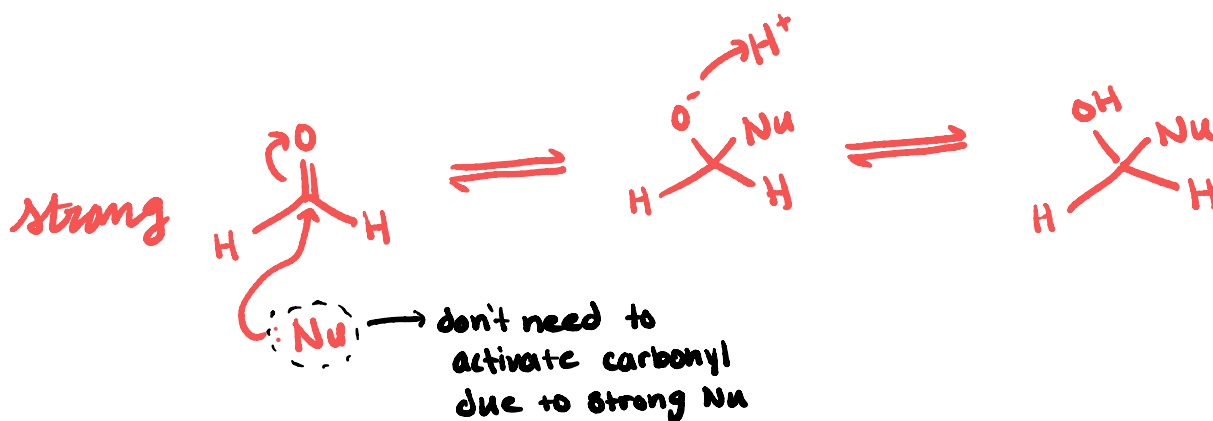
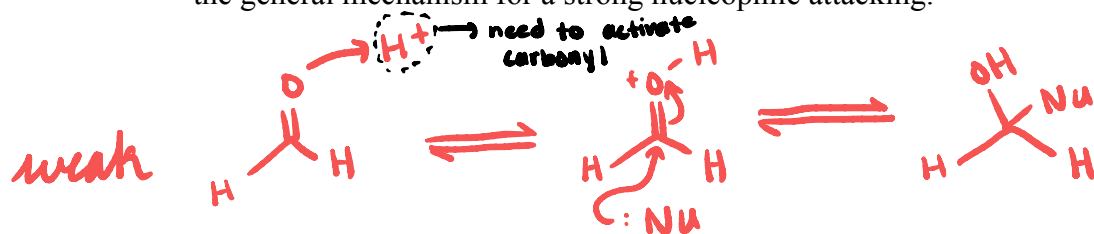
keto

1st get

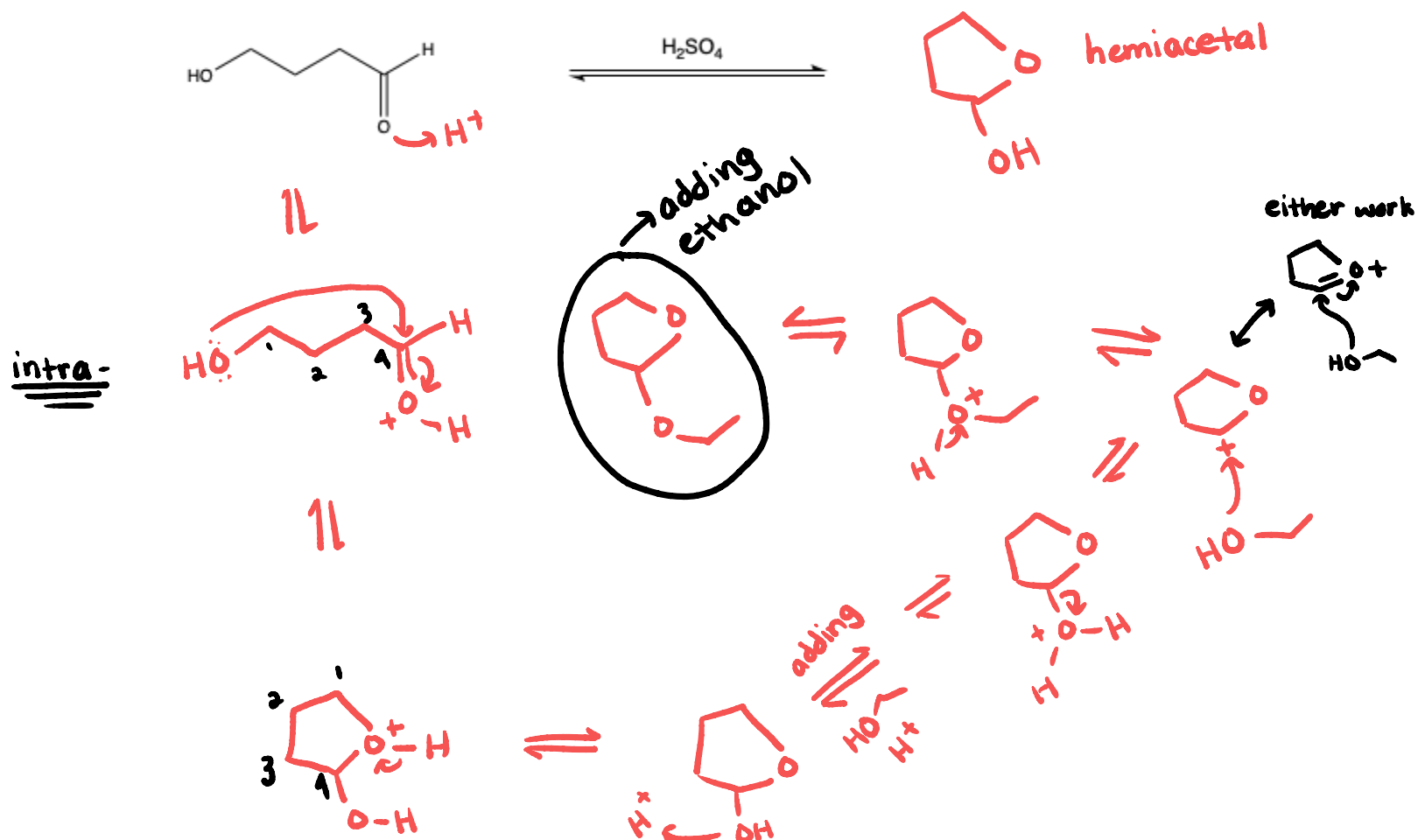


enol

3. Draw the general mechanism for a weak nucleophile attacking formaldehyde, then draw the general mechanism for a strong nucleophile attacking.

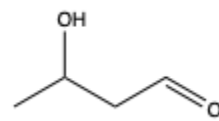
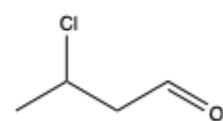


4. Draw the major product and mechanism for the following reaction. What might occur if you add H^+ and ethanol to the final product? Draw a mechanism for that as well.

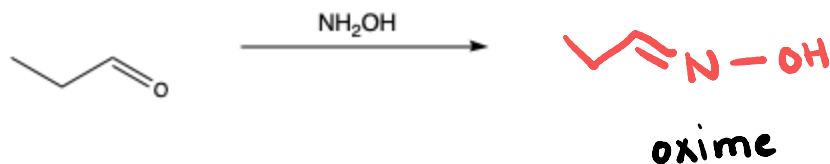
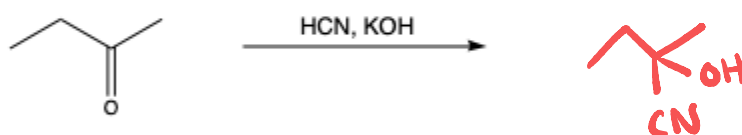
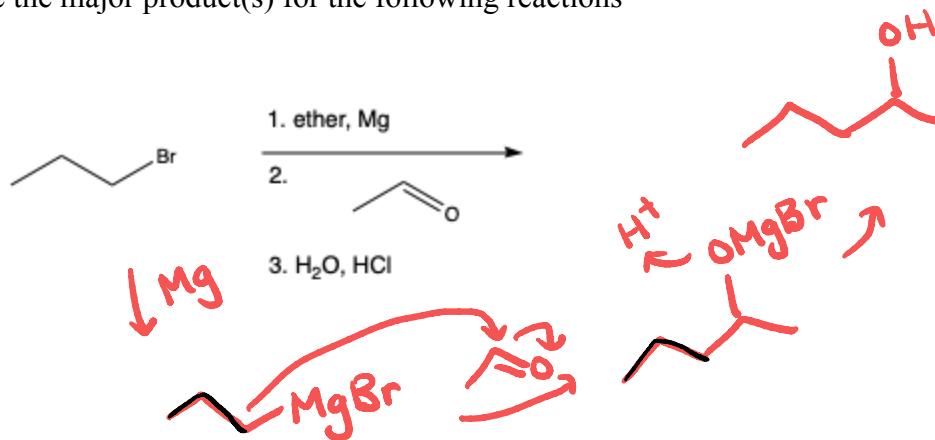


5. Why would this reaction not work? How could we get it to work?

^-OH would attack carbonyl carbon, need protecting group



6. Give the major product(s) for the following reactions



7. Synthesize the following molecule from 2-bromopropane

