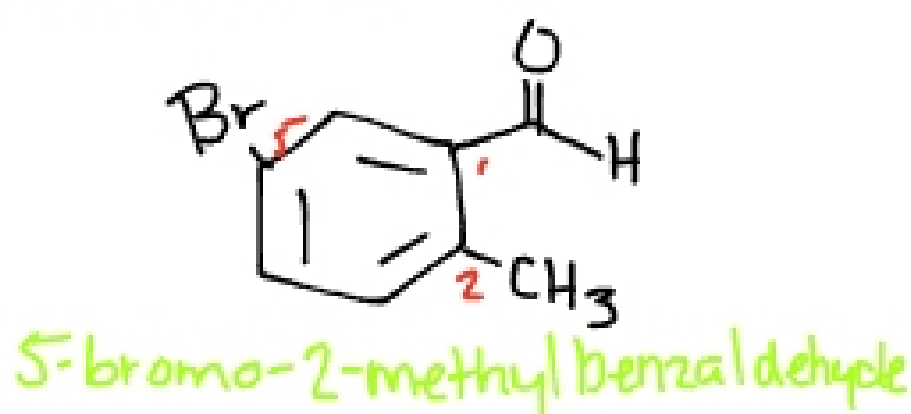
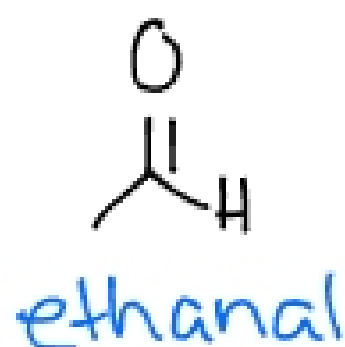


Chapter 17: Aldehydes and Ketones

I. Naming and Structure

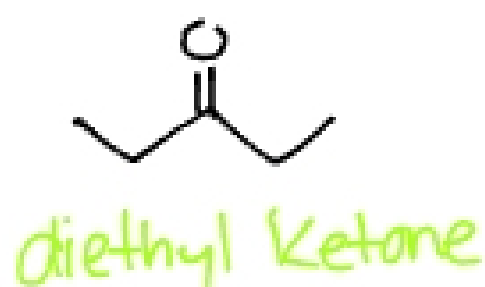
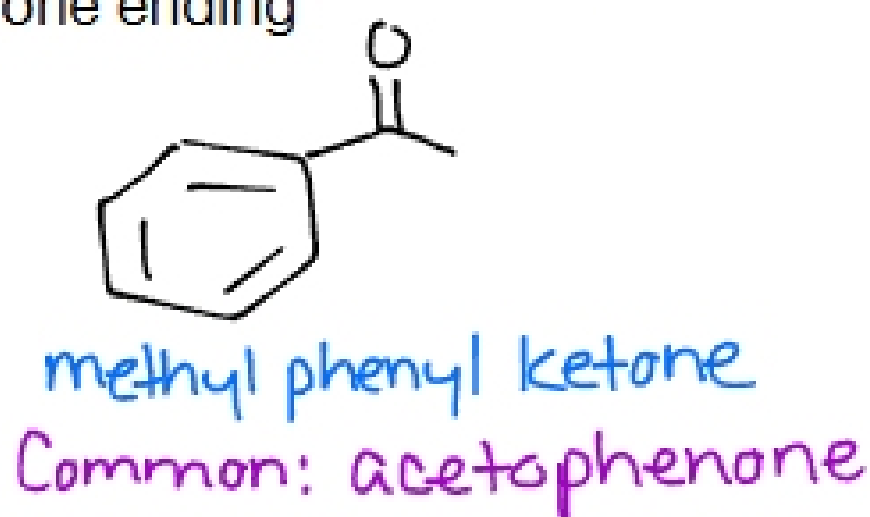
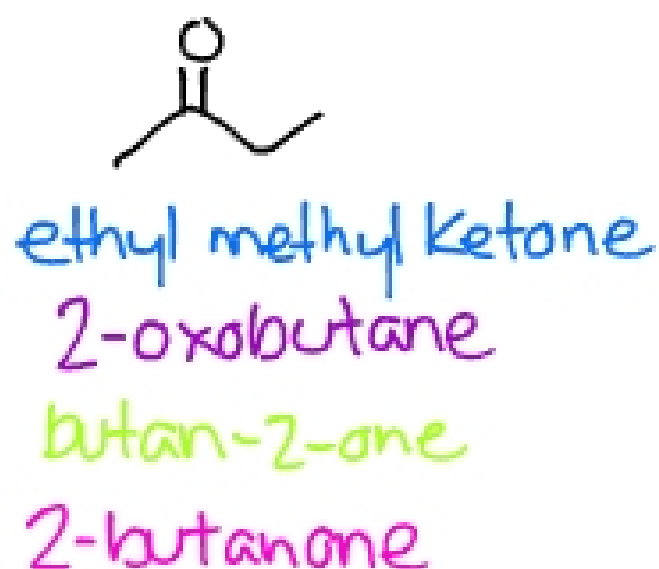
1. Naming (17-1)

A. Aldehydes get an -al ending, if substituent formyl



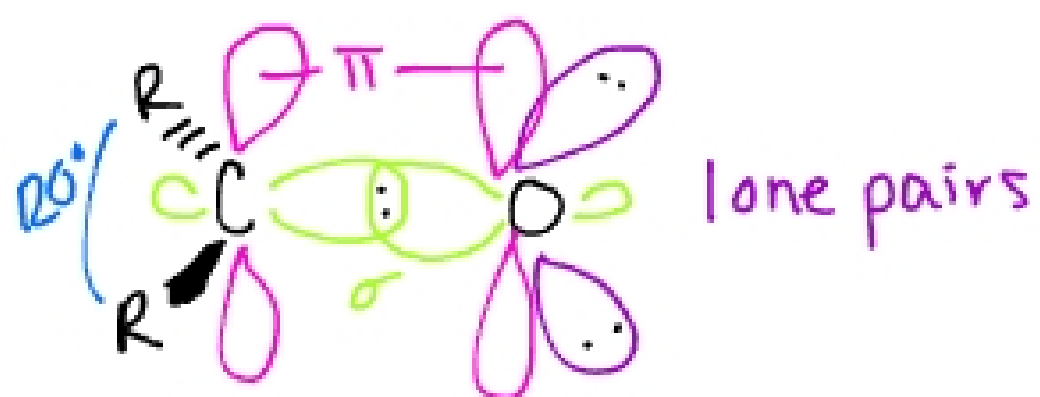
4-formylcyclohexanecarboxylic acid

B. Ketones are named as substituents + ketone, or an oxo substituent, or with and -one ending

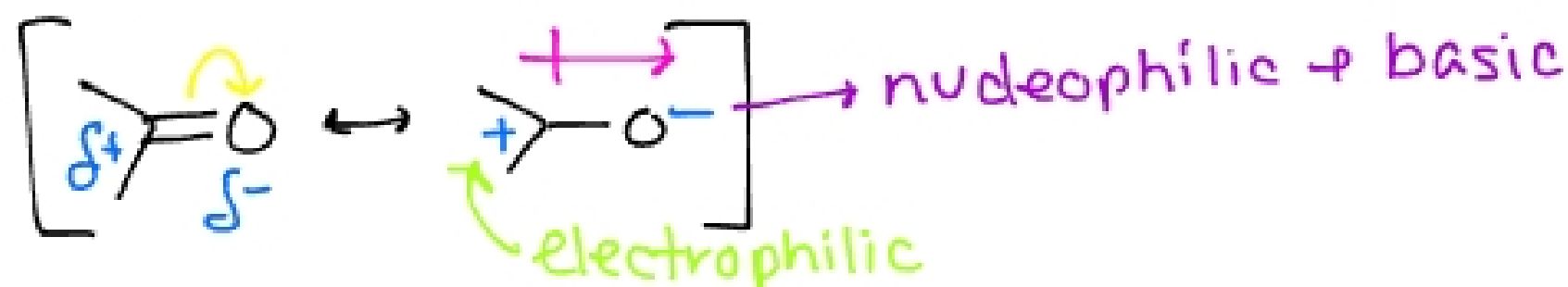


2. Structure (17-2)

-carbonyls are planar, sp²



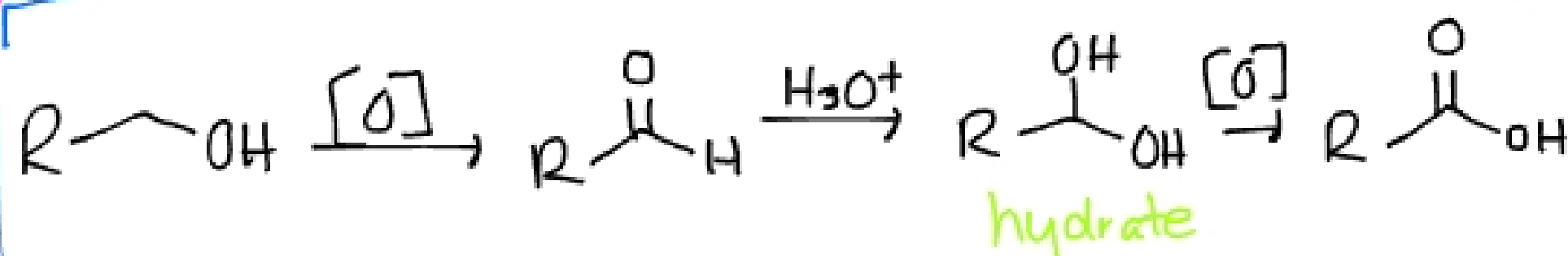
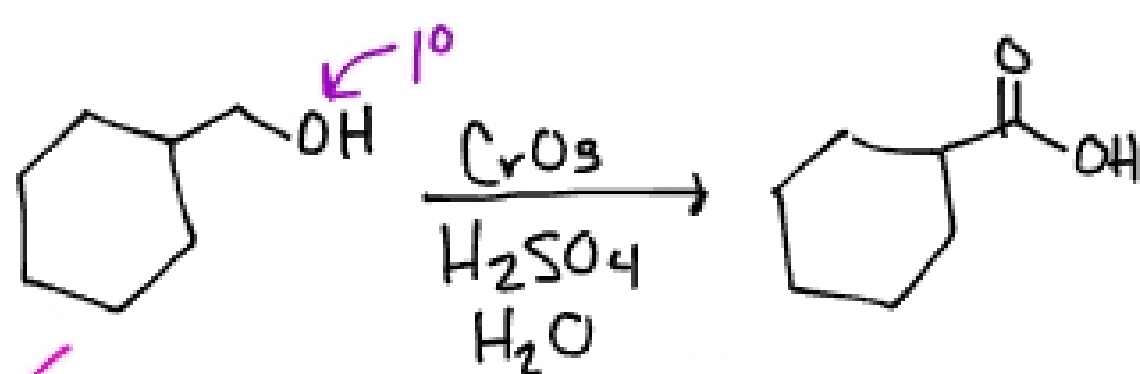
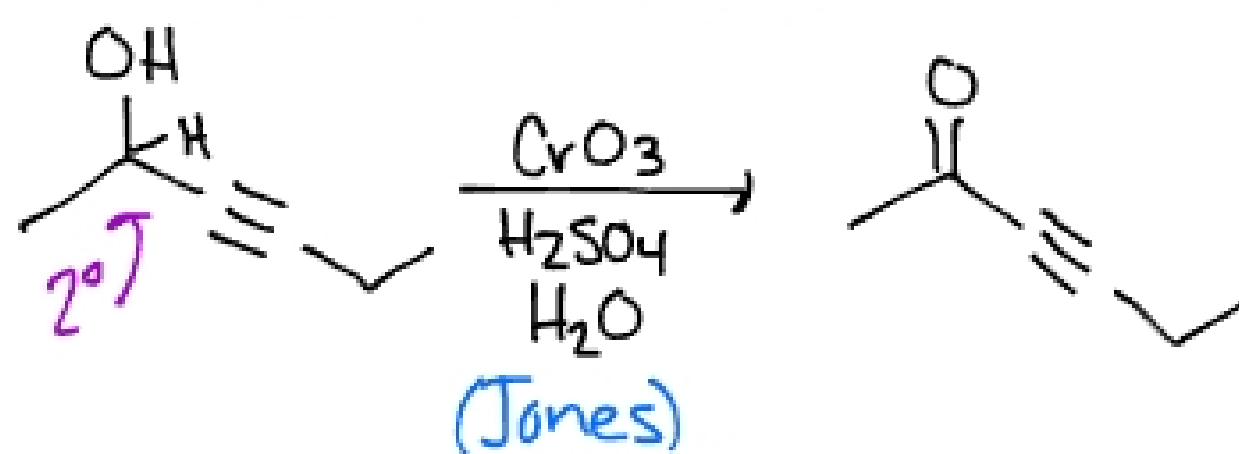
-polarized through induction/resonance

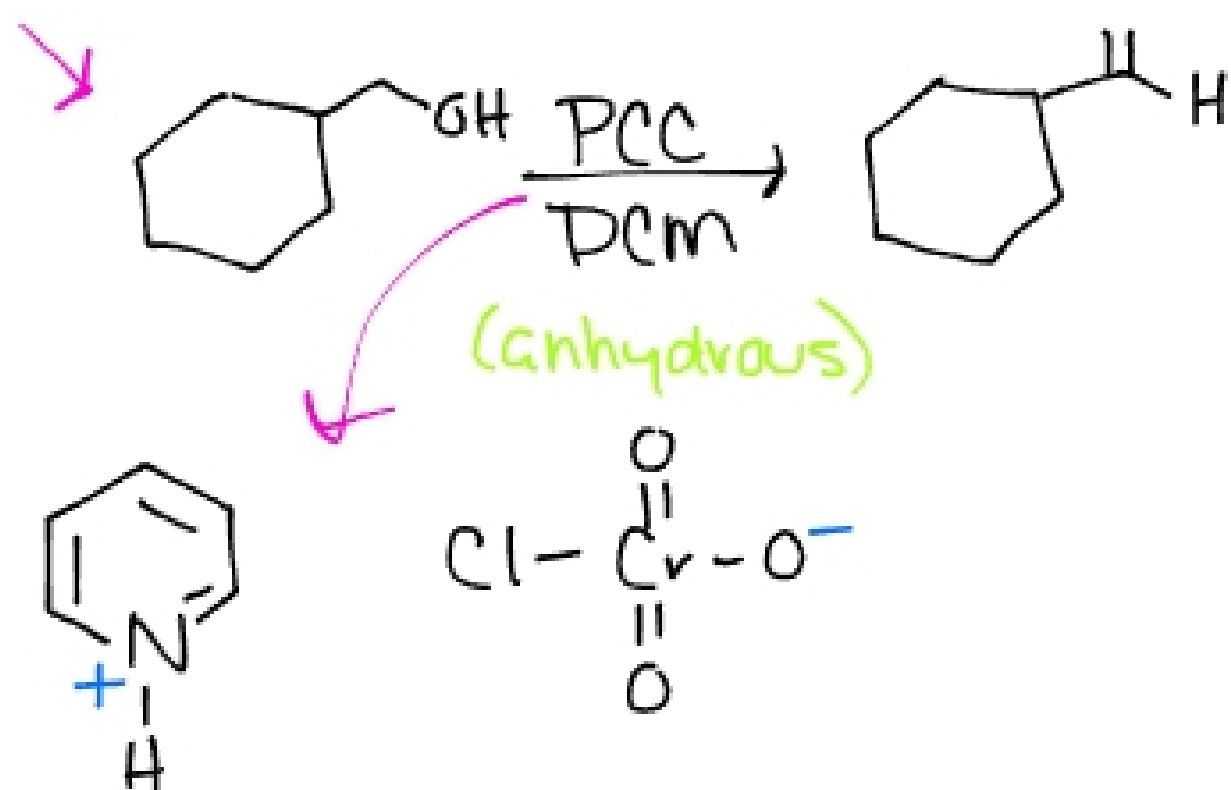


II. Preparation of Aldehydes and Ketones (17-4, table 17-2)

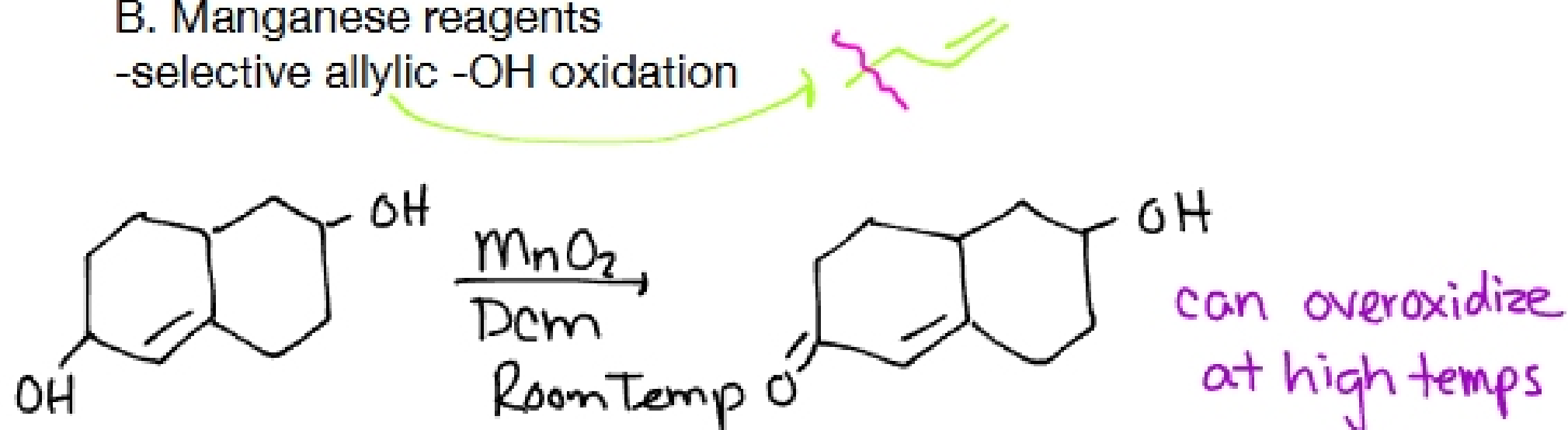
1. Oxidation of alcohols

A. Chromium reagents (8-6)

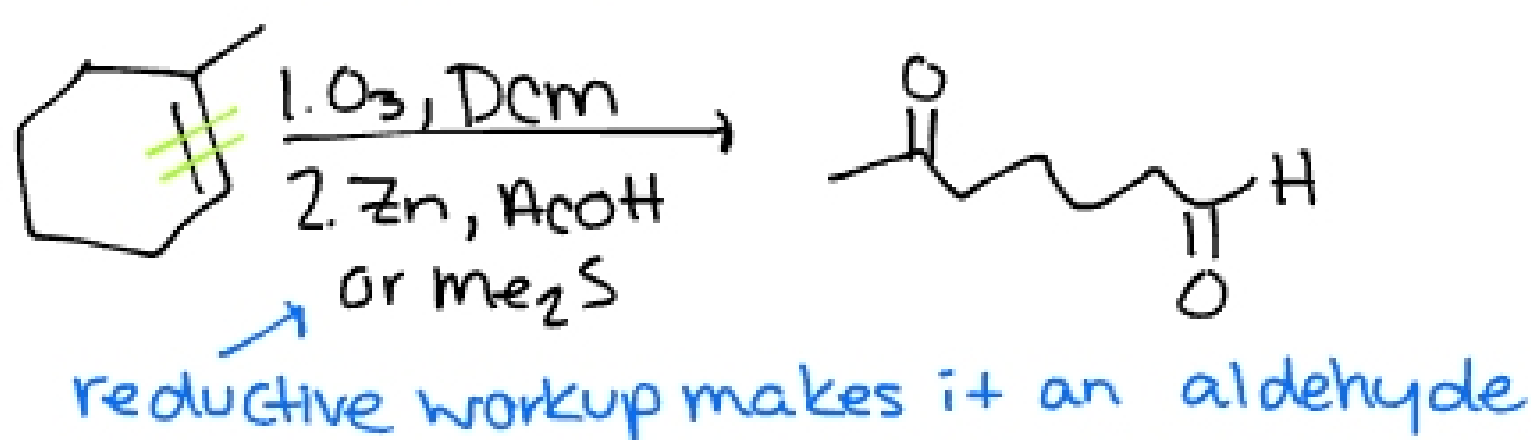




B. Manganese reagents
 -selective allylic -OH oxidation



2. Ozonolysis (12-12)



3. Hydration of Alkynes (13-7 and 13-8)

A. Markovnikov

