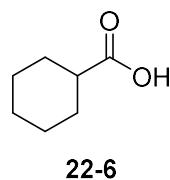
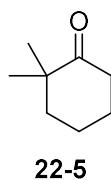
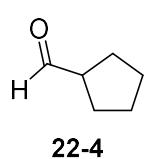
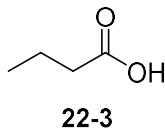
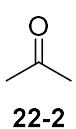
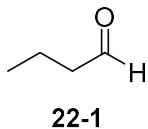


Chapters 22 & 23 Worksheet

I. Draw the product between each **aldehyde**, **ketone**, and **carboxylic acid** with reagents (a)-(e).

**Chapter 22 reagents (Wednesday)**

(a) Br<sub>2</sub>, HAc

(b) Br<sub>2</sub>, NaOH

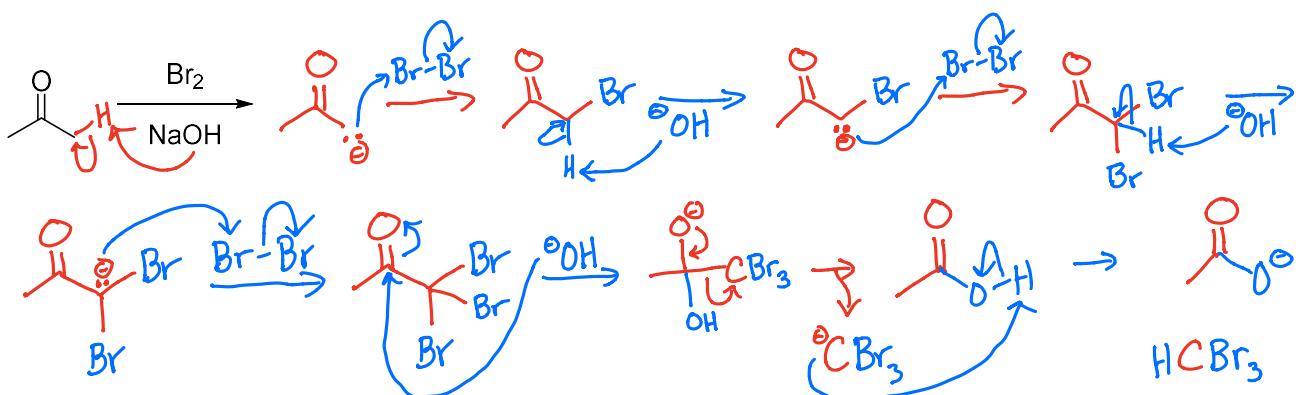
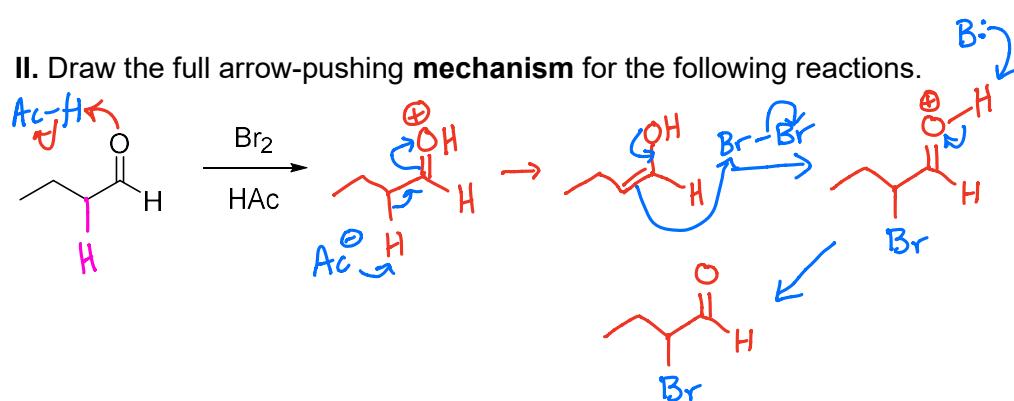
(c) 1. Br<sub>2</sub>, PBr<sub>3</sub>; 2. NaOH

**Chapter 23 reagents (Thursday)**

(d) catalytic (cat.) NaOH, EtOH

(e) 1 equiv. NaOH, EtOH, Δ

II. Draw the full arrow-pushing **mechanism** for the following reactions.



*More on the next page →*

Draw the full arrow-pushing mechanism for the following reactions.

