LeAP: Synthesis Preview

- Due Oct 24, 2024 at 11:59pm
- Points 5
- Questions 5
- Available Oct 6, 2024 at 12am - Oct 28, 2024 at 11:59pm
- Time Limit None
- Allowed Attempts 2

Instructions

Lecture Application Practices (LeAPs) serve as initial opportunities for students to apply the information they've gathered from the pre-lecture videos and in-person lectures/lecture videos.

Students are strongly encouraged to complete LeAPs on the same day that the corresponding topic is completed in class. However, to provide consistent due dates, sets of LeAPs will be due on Thursdays at 11:59 PM - Chicago time. See the Weekly Schedules or Course Calendar for specific due dates for each activity.

Each LeAP is worth 5 points. Credit will be awarded based on accuracy. There is no time limit. Students will receive two attempts for each assignment and the highest score will be recorded in the gradebook. LeAPs may consist of multiple-choice, calculation, ranking, choose all that apply, and fill in the blank type questions.

This quiz was locked Oct 28, 2024 at 11:59pm.

Attempt History

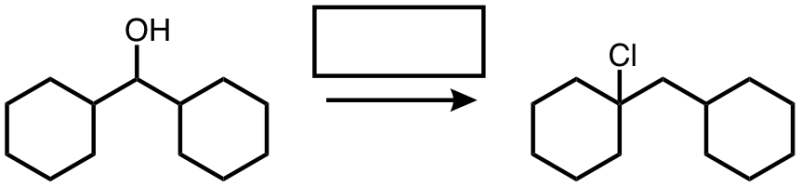
	Attempt	Time	Score
LATEST	Attempt 1	7,298 minutes	5 out of 5

ⓘ Correct answers are hidden.

Score for this attempt: 5 out of 5
Submitted Oct 24, 2024 at 5:30pm
This attempt took 7,298 minutes.

Question 1
1 / 1 pts

Fill in the box with the missing reagent.

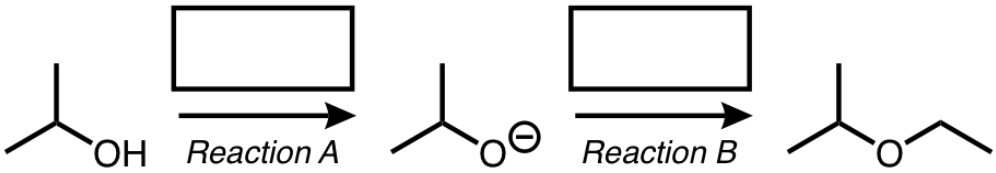


- Cl_2, heat
- HCl
- pyridine, $SOCl_2$
- PCl_3

Question 2

1 / 1 pts

Use the reaction shown below to answer questions 2-3.

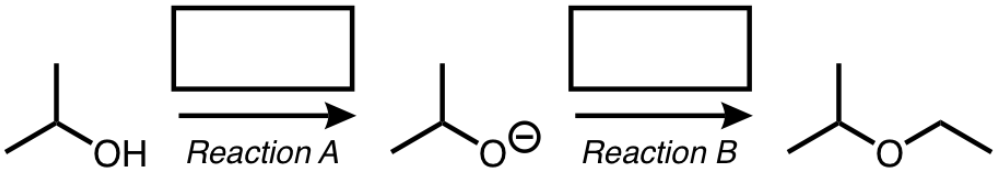


Consider the structural changes that take place during Reaction A and Reaction B. (Make a list of objectives.) Which fundamental mechanisms take place during Reaction A and Reaction B? **Choose one mechanism for each reaction.**

- [ ] Reaction **A**: Acid/base (protonation)
- [x] Reaction **A**: Acid/base (deprotonation)
- [ ] Reaction **A**: S_N2
- [ ] Reaction **B**: S_NAc
- [ ] Reaction **B**: E2
- [x] Reaction **B**: S_N2

Question 3

1 / 1 pts



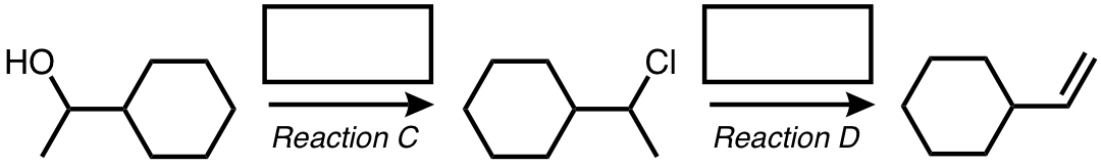
Consider the structural changes that take place during Reaction A and Reaction B and the fundamental mechanisms that you identified from the previous question. Fill in the boxes with the missing reagent that is required to complete Reaction A and Reaction B? **Choose one reagent per reaction.**

- [ ] Reaction **A**: NH_3
- [ ] Reaction **A**: H_2SO_4
- [x] Reaction **A**: NaH
- [ ] Reaction **B**: $HOCH_2CH_3$
- [x] Reaction **B**: $BrCH_2CH_3$
- [ ] Reaction **B**: $BrCH(CH_3)_2$

Question 4

1 / 1 pts

Use the reaction shown below to answer questions 4-5.

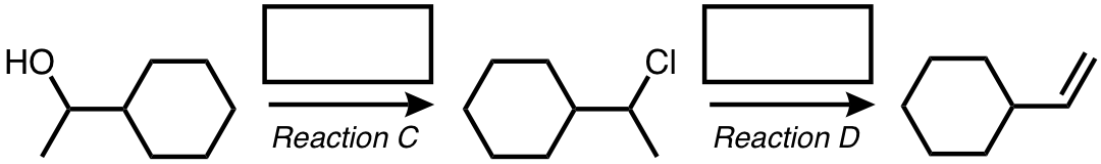


Consider the structural changes that take place during Reaction C and Reaction D. (Make a list of objectives.) Which fundamental mechanisms take place during Reaction C and Reaction D? **Choose one mechanism for each reaction.**

- [x] Reaction **C**: S_N2
- [ ] Reaction **C**: S_N1
- [ ] Reaction **C**: E1 (Zaitzev's rule)
- [ ] Reaction **D**: E1 (Zaitzev's rule)
- [x] Reaction **D**: E2 (Hofmann's rule)
- [ ] Reaction **D**: E2 (Zaitzev's rule)

Question 5

1 / 1 pts



Consider the structural changes that take place during Reaction C and Reaction D and the fundamental mechanisms that you identified from the previous question. Fill in the boxes with the missing reagent that is required to complete Reaction C and Reaction D? **Choose one reagent per reaction.**

- [ ] Reaction **C**: HCl
- [ ] Reaction **C**: Cl_2, heat
- [x] Reaction **C**: Pyridine, $SOCl_2$
- [x] Reaction **D**: $KOC(CH_3)_3$
- [ ] Reaction **D**: $NaOCH_2CH_3$
- [ ] Reaction **D**: $HOCH_2CH_3$

Quiz Score: 5 out of 5