

Reagents Timed Practice Quiz - 6 extra credit points


- Due Nov 7, 2024 at 11:59pm
- Points 6
- Questions 8
- Available Oct 20, 2024 at 12am - Nov 7, 2024 at 11:59pm
- Time Limit 10 Minutes
- Allowed Attempts Unlimited

Instructions

The Reagents Timed Practice Quiz is due on 11/7. It has **NO** grace period.

This extra credit quiz will help you to practice analyzing structural changes during reactions and associating these changes with reactions and their reagents.

The quiz is timed (10 minutes), and there are unlimited attempts. The highest score will be the one recorded in the gradebook. This quiz pulls from a pool of questions, so the problems you receive on each attempt will change.

You may want to have the [Functional Group List and Reagent Cabinet List Document](https://docs.google.com/document/d/1RGMriYLL_vMpFFJwR9g6cNQAaUpIRSXUXcZQaINLY3Y/edit?usp=sharing)  (https://docs.google.com/document/d/1RGMriYLL_vMpFFJwR9g6cNQAaUpIRSXUXcZQaINLY3Y/edit?usp=sharing) on hand for help writing reagents as condensed formula (see the last page of the document). If multiple reagents are needed for a reaction, they should be listed in alphabetical order and separated by commas.

This quiz was locked Nov 7, 2024 at 11:59pm.

Attempt History

	Attempt	Time	Score
KEPT	Attempt 5	6 minutes	6 out of 6
LATEST	Attempt 5	6 minutes	6 out of 6
	Attempt 4	6 minutes	4.6 out of 6
	Attempt 3	8 minutes	4.5 out of 6
	Attempt 2	10 minutes	5.1 out of 6
	Attempt 1	10 minutes	3.8 out of 6

❗ Correct answers are hidden.

Score for this attempt: 6 out of 6

Submitted Nov 2, 2024 at 3:59pm

This attempt took 6 minutes.



Question 1

0.5 / 0.5 pts

Which reagent is a strong base, can be used to open an epoxide, and forms a new C-H bond? (Use the Reagent Cabinet List for reference. Remember to list multiple reagents in alphabetical order and separated by a comma.)

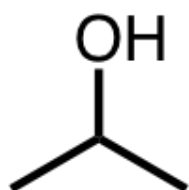
LiAlH₄



Question 2

0.5 / 0.5 pts

Name the functional group shown below. (Use the Functional Group List for reference.)



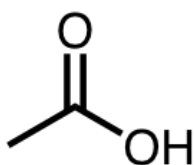
Secondary alcohol



Question 3

0.5 / 0.5 pts

Name the functional group shown below. (Use the Functional Group List for reference.)



Carboxylic acid



Question 4

1 / 1 pts

What reagent(s) are needed for Tollens' reagent? (Use the Reagent Cabinet List for reference. Remember to list multiple reagents in alphabetical order and separated by a comma.)

Ag₂O, H₂O, NH₄OH

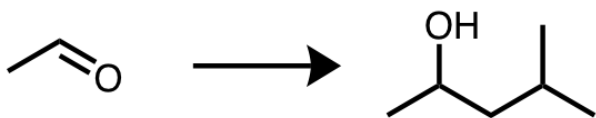


Question 5

0.5 / 0.5 pts

Provide the organometallic reagent that is needed to perform the transformation shown below.

(The last page of the Reagent Cabinet List has a table of alkyl groups written as condensed formulas.)



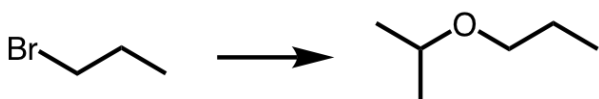
LiCH2CH(CH3)2



Question 6

0.5 / 0.5 pts

Provide the reagent that is needed to perform the transformation shown below. (Use the Reagent Cabinet List as a reference for correct formatting of your answer.)



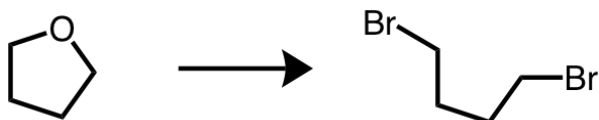
NaOCH(CH3)2



Question 7

0.5 / 0.5 pts

Provide the reagent that is needed to perform the transformation shown below. (Use the Reagent Cabinet List as a reference for correct formatting of your answer.)



HBr

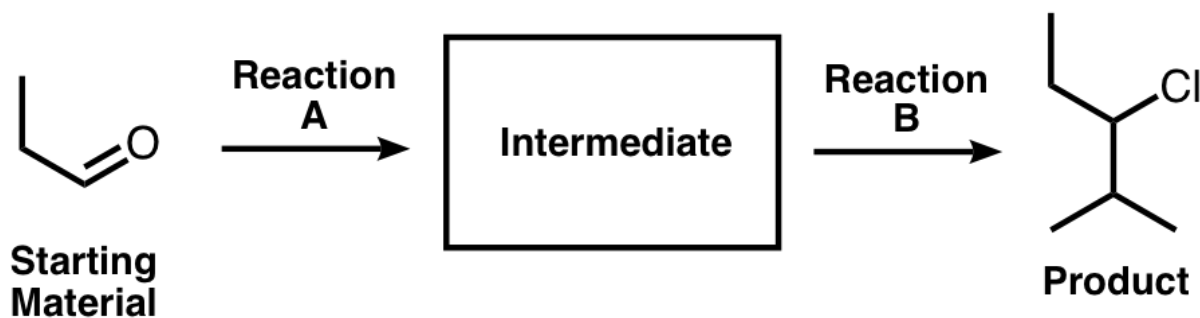


Question 8

2 / 2 pts

Fill in the blanks and follow the directions to complete the 2-step synthesis problem given below.

Use the Reagent Cabinet List to help you answer this question. Answers that require multiple reagents should list reagents in alphabetical order, separated by commas. R groups should be written out in condensed formula. Do NOT use superscript or subscripts in your answers.



Name the functional group found in the starting material and the product.

Starting material:

Product:

Recall your synthesis map. Name the functional group that appears in the Intermediate Product during this synthesis.

Intermediate Product:

Provide the reagent(s) needed for reactions A and B. Assume acidic workups if needed.

Reaction A:

Reaction B:

Answer 1:

aldehyde

Answer 2:

secondary alkyl halide

Answer 3:

secondary alcohol

Answer 4:

$\text{LiCH}(\text{CH}_3)_2$

Answer 5:

PCl_3

Quiz Score: 6 out of 6