

# Welcome!

## iClicker & Achieve: Active Learning in the Chemistry Classroom

*For the best experience,  
watch on your computer  
while using iClicker on  
your smart device.*

During the webinar you will have the opportunity to participate using the iClicker student app.

1. **Download** the iClicker iOS or Android app from the **iTunes** or **Google Play** stores, or visit **iClicker.com** to vote using your computer's web browser.
2. Sign in with your existing instructor account credentials or create a new account.
3. Join this webinar's course to participate in polls:

Institution: **Macmillan Learning**

Course: **iClicker & Achieve: Chemistry**

Instructor: **Natalie Dougall**

# iClicker & Achieve: Active Learning in the Chemistry Classroom

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Natalie Dougall, Training Specialist & Faculty Advocate

Dr. Mike Varela, PhD, Learning Solutions Specialist



# iClicker & Achieve: Active Learning in the Chemistry Classroom

- iClicker & Achieve Introduction
- iClicker Overview and Demo
- Achieve Overview and Demo
- Question & Answer



- Easy and simple way to **design** and **deliver** course content
- Flexible and responsive, offering **synchronous** and **asynchronous** engagement
- Out-of-the-box, ready to assign **formative** and **summative** assessments
- An interactive **eBook** is often available within the Achieve system!
- **Achieve includes the iClicker student app!\***



- Easy and simple way to make classes **responsive** and **interactive**
- Instructors ask students questions and students respond **in real time**
- Use iClicker with **whatever tools you are already using**
- iClicker activities and question decks **are included with Achieve!**



**JOIN OUR  
POLLING  
SESSION NOW!**

Institution:  
**Macmillan  
Learning**

Course Name:  
**iClicker &  
Achieve:  
Chemistry**

Instructor:  
**Natalie  
Dougall**  


## Have you used Achieve or iClicker before?

**A.** I've used Achieve

**B.** I've used iClicker

**C.** I've used iClicker & Achieve

**D.** I haven't used either of them

# iClicker in the Classroom

- Get students to class with **iClicker Attendance**
  - iClicker can be used for **contract tracing**
- Make passive classes active with **iClicker Polling**
  - Reset student attention
  - Give every student a voice
  - Create tight feedback loops
- Automatically create flashcard packs/ practice tests with **iClicker Study Tools**



# Activating iClicker in Achieve



Write questions in  
your preferred  
presentation tool  
(or download them  
from Achieve)



Create your iClicker  
course in Achieve



Get comfortable  
using iClicker Cloud  
(we can help!)



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Macmillan  
Learning

## How are you teaching next term?

**A.** In-Person

**B.** Hybrid

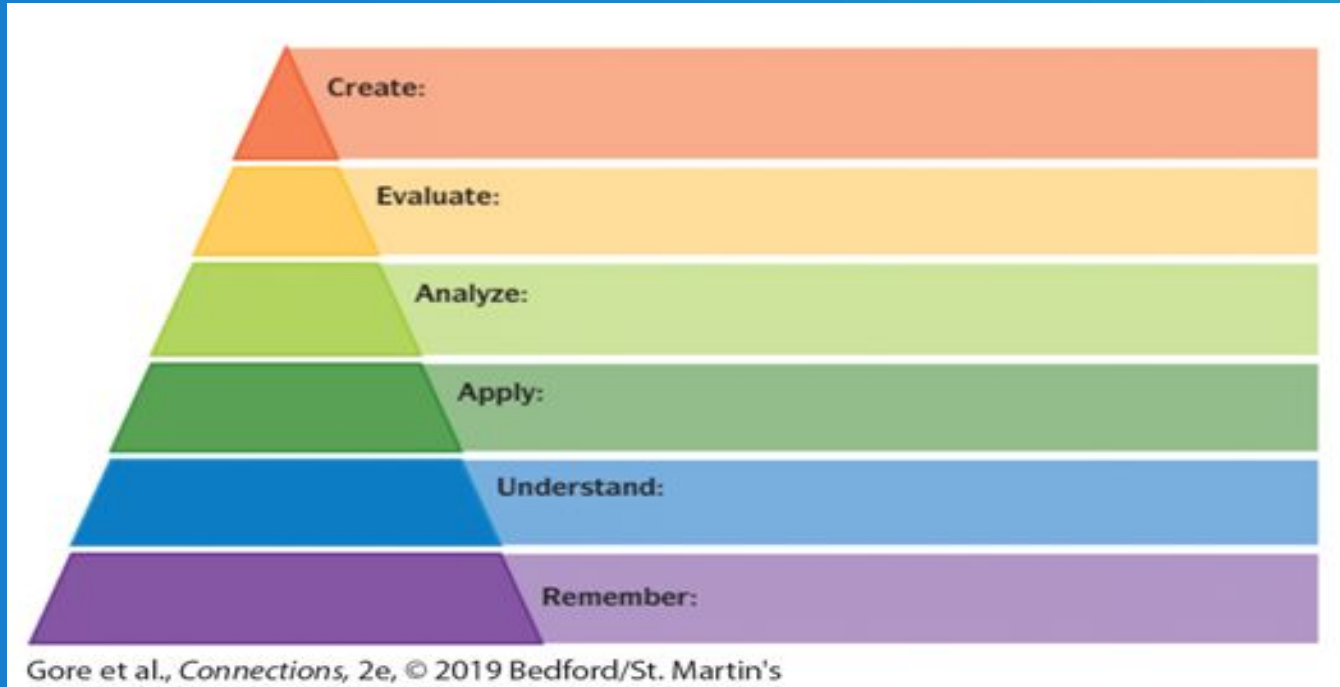
**C.** Online Only - Asynchronous

**D.** Online Only - Synchronous

**E.** I'm not teaching this term



Select the level of Bloom's Taxonomy that represents separating a concept into its parts and learning how they relate to one another.

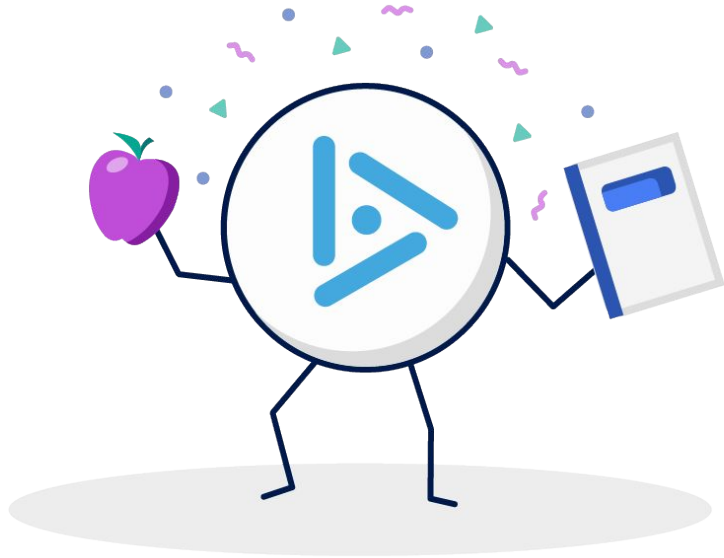


# Short Answer

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How do you define active learning?

# Passive Learning vs. Active Learning



## Passive Learning:

- Instructors present information
- Students listen and take notes
- Class is a one-way conversation

## Active Learning:

- Instructors involve students in the lesson
- Students learn by solving problems
- Class is a two-way conversation

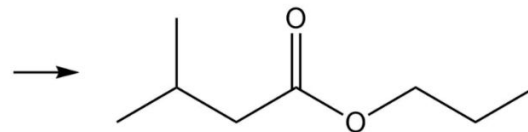
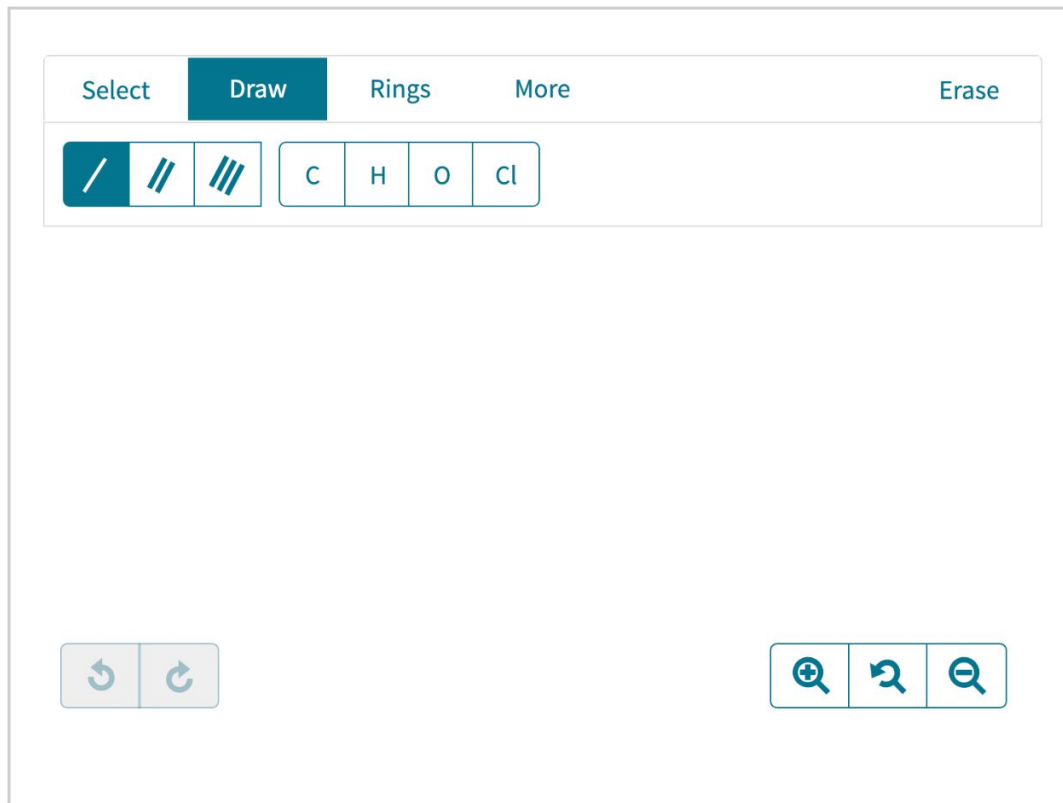
# Pedagogical iClicker Activities

- Icebreaking
- Entrance/Exit Tickets
  - “What do you remember most from our last class?”
- Think-Pair-Share
- Virtual Hand Raising
- “On the Fly” Questions



**Achieve Demonstration**

The ester shown is synthesized from an acid chloride via nucleophilic acyl substitution. Draw the two neutral organic starting materials needed to synthesize the ester.



Give the expected major product from the reaction of five alkenes with  $\text{Br}_2$ . The starting materials have been drawn for you. Amend the structures to show the major organic product. Show chirality where indicated and only draw one enantiomer if more than one is possible. Include hydrogen atoms on chirality centers.

1. Reaction of  $\text{Br}_2$  with 1-hexene.

Select

Draw

Rings

More

Erase



2. Reaction of  $\text{Br}_2$  with 2-methyl-1-pentene.

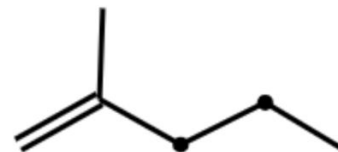
Select

Draw

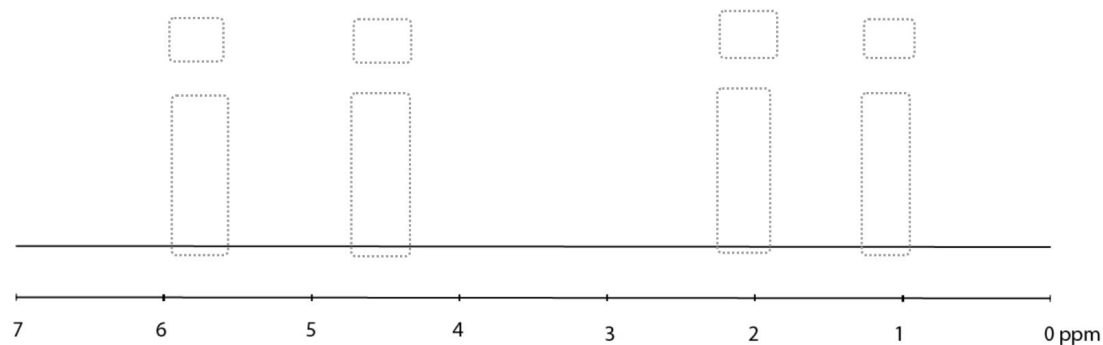
Rings

More

Erase



Construct a simulated  $^1\text{H}$  NMR spectrum, including proton integrations, for  $\text{ClCH}_2\text{CHCl}_2$ . Drag the appropriate splitting patterns to the approximate chemical shift positions; place the integration values in the small bins above the associated chemical shift. Splitting patterns and integrations may be used more than once, or not at all, as needed. Likewise, some bins might remain blank. Note that peak heights are arbitrary and do not indicate proton integrations.

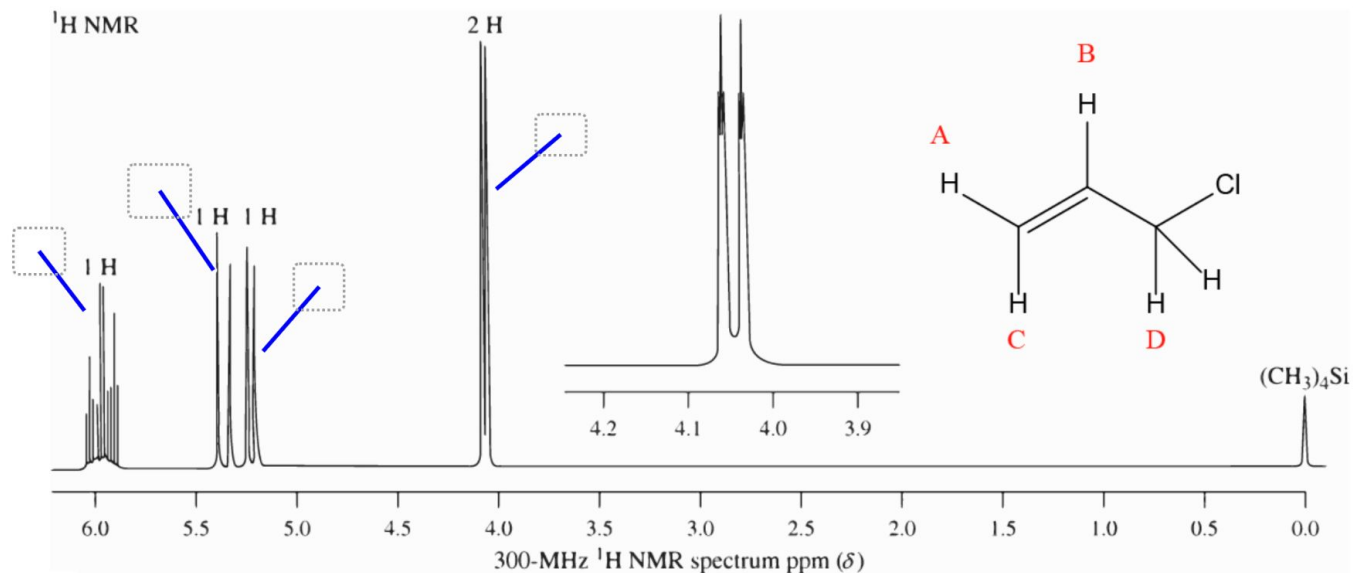


Answer Bank

<div>2H</div>	<div>4H</div>	<div></div>	<div></div>	<div></div>	<div></div>	<div>1H</div>	<div></div>	<div></div>	<div>3H</div>	<div></div>
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Analyze the spectrum and using the integrations and chemical shifts, assign the protons for the structure shown.



Answer Bank

C

D

A

B

# Target Question

How confident do you feel about using  
iClicker & Achieve in your classes?



# iClicker & Achieve Training & Support

- We have a huge support library for admins, instructors and students
- Live support available via chat, email and phone
- Meet with us for a training!
  - <https://bit.ly/3e9W0dh>



**Questions? Comments?**



Student ▾

Search



Filter

%

pts

Sync &amp; Export ▾

+ Add Column

Gradebook Settings

Sync iClicker

## — Assignments

## Ungraded

Name	Course Total	Introductory Assig... Writing Assignment Due Date: Jan 21, 2021	Narrative Essay Writing Assignment Due Date: Feb 1, 2021	Category Total	Category Total
Average		0%	0%		
Student Eight lindsey.thomas+student8@macmillan...	0%	-	-	0%	0 completed
Student Five lindsey.thomas+student5@macmillan...	0%	-	-	0%	0 completed
Student Four lindsey.thomas+student4@macmillan...	0%	-	-	0%	0 completed
Student One lindsey.thomas+student1@macmillan...	0%	-	-	0%	0 completed
Student Seven lindsey.thomas+student7@macmillan...	0%	-	-	0%	0 completed
Student Six lindsey.thomas+student6@macmillan...	0%	-	-	0%	0 completed
Student Three lindsey.thomas+student3@macmillan...	0%	-	-	0%	0 completed
Student Two lindsey.thomas+student2@macmillan...	0%	-	-	0%	0 completed

**Thank You!**