For voting, go to: https://pollev.com/lauriestarke263
or text LAURIESTARKE263 to 37607 to join poll

Happy Earth Day!

Dr. Laurie S. Starkey

Cal Poly Pomona

CHM 3140 Organic Chemistry I
Announcements 4/22/25

Exam III Results

A/B/C… ranges are to give you a rough idea of your course grade **based only on this exam score + max. homework**

200 of 300 total Exam points are complete. Grade going into 100 pt. final: average of your top two midterms!

Still grading…

Exam Wrapper Survey

If you submitted wrappers for Exams 1 & 2, then you've earned max. 16 points reflection credit

FridayFives (4 pts each)	52	**OLC reports** (1 pt each)	10	**Exam Wrappers** (4 pts each, drop one)	8	*Friday5 and OLC reports are due every week (firm due dates)*	**Study/Reflection Course Points**
(13+ reports earns maximum credit)		*(10+ reports earns maximum credit)*		**Exam Corrections** (4 pts each, drop one)	8		**75 (15%)**

(if missing a wrapper for Exam 1 or 2)

due Thu 5/8

CHM 3140 Exam Wrapper - Post-Test Survey (Due 5/2/21) Name:_____

Metacognition By taking a step back and thinking about the way you learn, you can improve your learning! The following survey will guide you through an exercise in self-reflection, with the goal of improving your performance on the next exam. You will earn 3 points credit if you complete this survey, and 3 points for corrections (*include written reflection, if score <55). It analyzes the following three areas

1. How did you prepare for this exam?
2. What kinds of mistakes did you make?
3. How will you prepare differently next time?

** If exam score is below 55, you must submit a written reflection with your exam corrections (what will you do differently to prepare for the final exam?*

What was your score* on the exam? ☐

1. Leading up to the exam, approximately how many hours per week outside of class (on average) did you spend studying Organic Chemistry? ☐

2. Given the approximate # of textbook problems in each chapter (#), about how many did you work on?

Ch. 6 (# problems) **(Chemical Rxns)**		**Ch. 7-1** (# problems) **(Substitution Rxns)**		**Ch. 7-2** (# problems) **(Elimination Rxns)**	
6 SkillBuilders (**28**)		3 SkillBuilders (**31**)		6 SkillBuilders (**54**)	
End-of-Chapter (EOC) (**33**)		EOC (**20**)		EOC (**53**)	

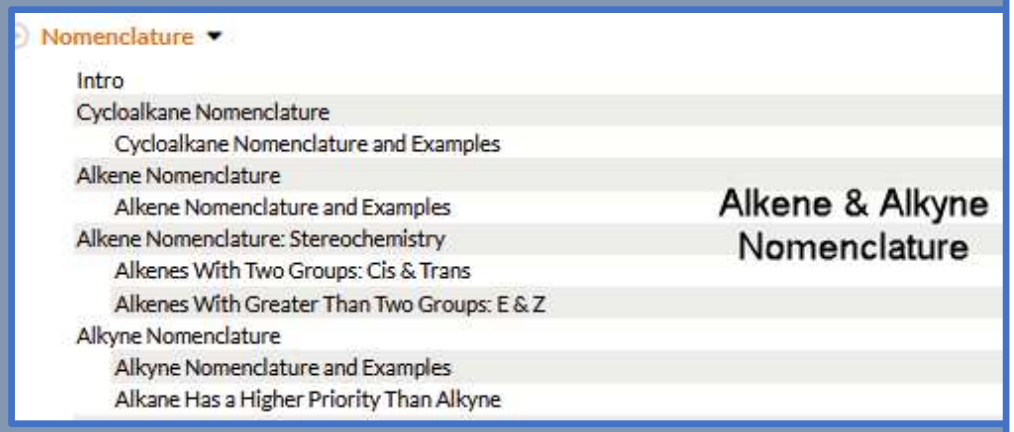
How did you work on textbook problems?

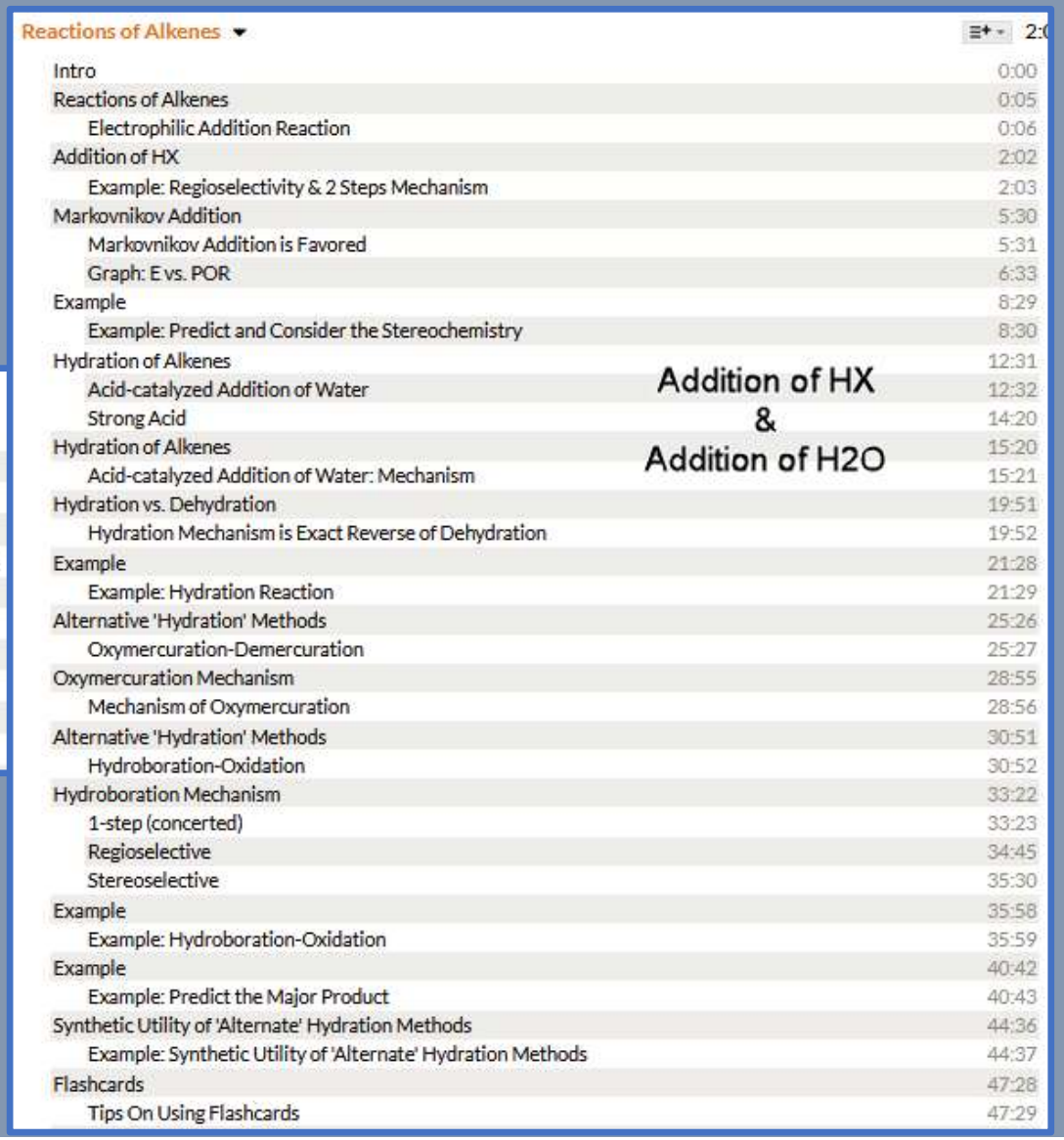
Today's Topic:
Reactions of Alkenes (Ch. 8)

Chapter 8
- ✓ **Watch**
- ✓ **Read**
- ✓ **Practice**

Daily To-Do	Flipped Lectures
Step 1	
• Read Klein Chapter 8 (sections 8.1-8.8), and Chapter 9 (section 9.2) • ~~Watch flipped lectures~~ • Work through **SkillBuilders 9.1, 8.1 - 8.4**	• Part 1a - Alkene & Alkyne Nomenclature **23 minutes**, *skeleton notes pages 8-1 to 8-2* • Part 1b - Reactions of Alkenes - Part 1 **50 minutes**, *skeleton notes pages 8-3 to 8-8*

Flipped Lectures





Advice for "How to Earn an A (or B…)"

1. **Attend Lecture -** Come to class, take g
   questions, try problems presented in
2. **Read the Book -** As soon as possible a
   closely look through any examples tha
   problems you will encounter on exam
   compare two compounds (e.g., Highe
   mechanism, explain something (e.g., r
3. **Work on In-Chapter Problems** - After
   examples (sometimes there are also S
   learned skills to the problem(s) in tha
   problem down onto the page and *wri*
   is the only way to practice and *provid*
   book and/or lecture notes for help as
   Manual (or at the back of the book), a
   a. If your answer was perfect, th
      a break before moving on to t
   b. If you made mistakes, do you
      problem. If there are no mor
      answer perfect, *without referring to your notes or the book*.
   c. If you don't understand the Solutions Manual answer, or you don't even know how to get started on the problem, then go back to your class lecture notes. Read through your notes and try to work on the example(s) we did in class (i.e., copy it down on a blank page and attempt the problem on your own). Next, re-read or skim through the textbook again and work on the

Strategies for Earning an A (or B…) in Organic Chemistry
Dr. Laurie Starkey, Cal Poly Pomona

"Miriam, a freshman calculus student at Louisiana State University (LSU), made 37.5% on her first exam but 83% and 93% on the next two exams. Robert, a first-year general chemistry student at LSU, made 42% on his first exam and followed that up with three 100%s in a row. Matt, a first-year general chemistry student at the University of Utah, scored 65% and 55% on his first two exams and 95% on his third exam. I could go on. I could tell you scores of stories like this from the last 15 years of my teaching career. Something happened to all of the students between their last failing grade and their first good grade. They learned something new. **No Miracles, Just Strategies**" Saundra McGuire, author of *Teach Students How to Learn*

And one more story to share: Laurie, a first-year graduate student at UCLA, scored 12% on her first Organic Synthesis midterm…but then she succeeded in the course, earned her Ph.D. in Organic Chemistry, developed a rewarding teaching career, and even wrote a textbook on Organic Synthesis! So if you are not yet having success in Organic Chemistry, the good news – the GREAT news – is that you can still improve by learning how to learn. Let's explore various strategies that can help you learn Organic Chemistry and reach your desired goal. **Formative Assessment** is the feedback you get while learning and studying. It comes from *writing down* an answer and checking to see if it is right. **Summative Assessment** is what you do at the end of a unit – taking a quiz or exam for a grade. Formative assessment provides *evidence of your learning*…it helps you steer in the right direction and positions you to do well on summative assessments.

Focusing on Successful Strategies

Successful Study Skills

- Working with OLC
- Taking healthy breaks
- Reading textbook
- O-Chem every day
- Creating a study guide
- Doing SkillBuilders
- **FLASHCARDS**!
- Writing out answers
- Planning/Organizing

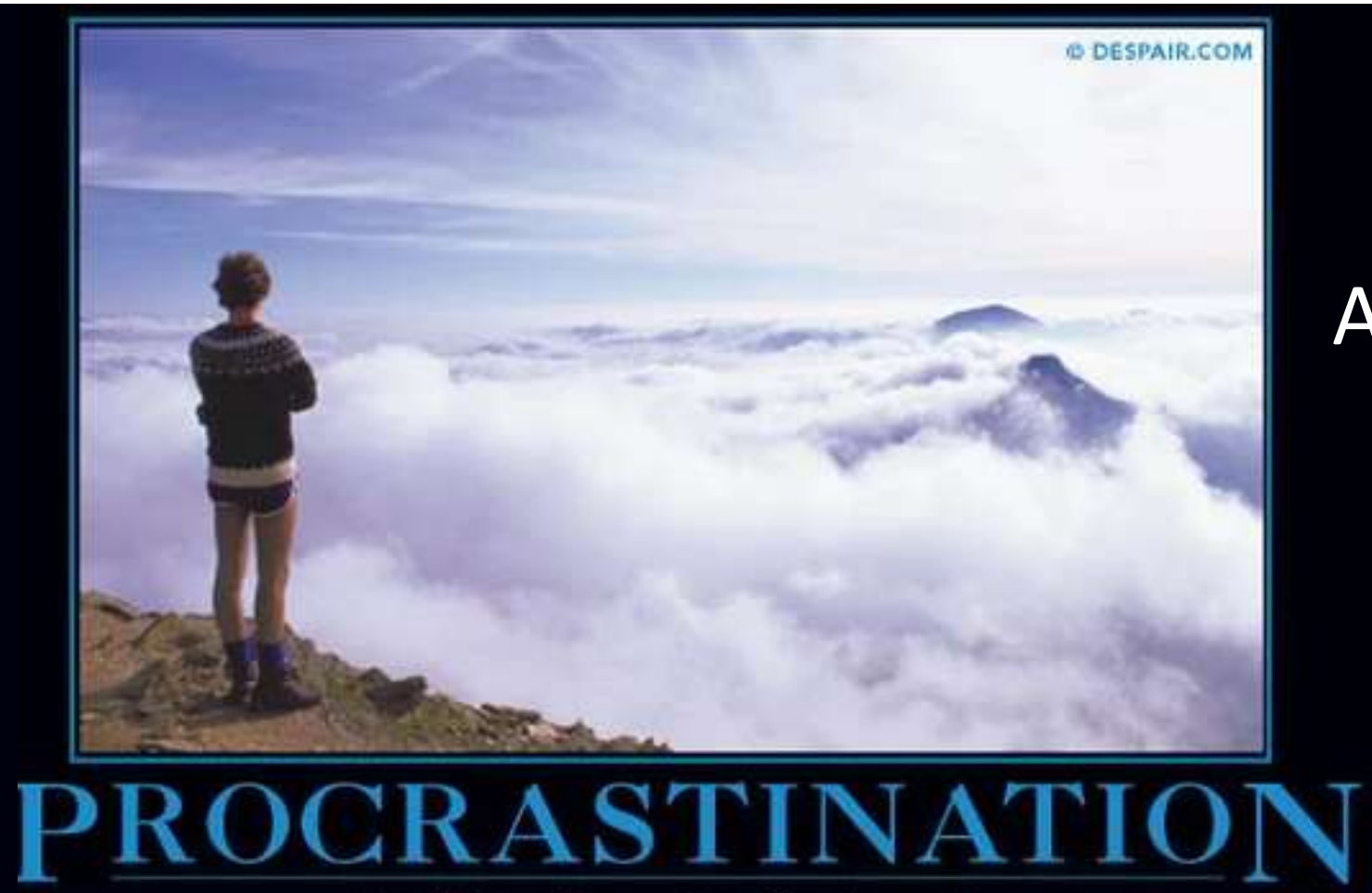
Breaking Bad Habits

- Cramming before exam
- Starting EOC too late
- Not reading textbook
- Re-watching lecture videos
- **Procrastination**

- Pomodoro technique
- Notion App
- Shovel App

SHOVEL

Notion



Practicing free-throws AFTER the game is not the best strategy...

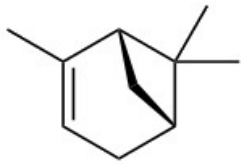
Do Chapter 8 Free Red Ink homework **this weekend!**

Wrapping up CHM 3140!

Week	Mon	Tues	Wed	Thurs	Fri
12	4/14	4/15 Exam Review	4/16	4/17 **Exam III**	4/18
13	You are here	4/22 Ch. 8 *#1*	4/23	4/24 Ch. 8 *#2*	Ch 11 is review
14		4/29 Ch. 9 *#1*	4/30	5/1 Ch. 9/10 *#2*	
15	5/5	5/6 Ch. 10 *#1*	5/7	5/8 Ch. 11 *#1*	5/9
Finals (section)	5/12	**Tue. 5/13** 9:00–10:50 am (05) 3:00–4:50 pm (02) 5:00–6:50 pm (03)	5/14	5/15	5/16

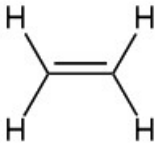
- Ch. 8 **Reactions of Alkenes** (addition reactions, oxidation reactions, synthesis strategies)
- Ch. 9 **Reactions of Alkynes** (addition reactions, ozonolysis, acidity of alkynes, alkylation)
- Ch. 10 **Radical Reactions** (free radical halogenation, radical additions to alkenes, polymerization)
- Ch. 11 **Synthesis Strategies** (and Review of Chapters 7-10)

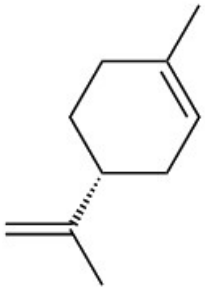
Interesting Alkenes: Can You Match the Structure with the Name?



Limonene
(isolated by zesting lemon peel or steam distillation of peels)

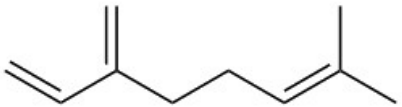
Lycopene
(responsible for the red color in tomatoes)



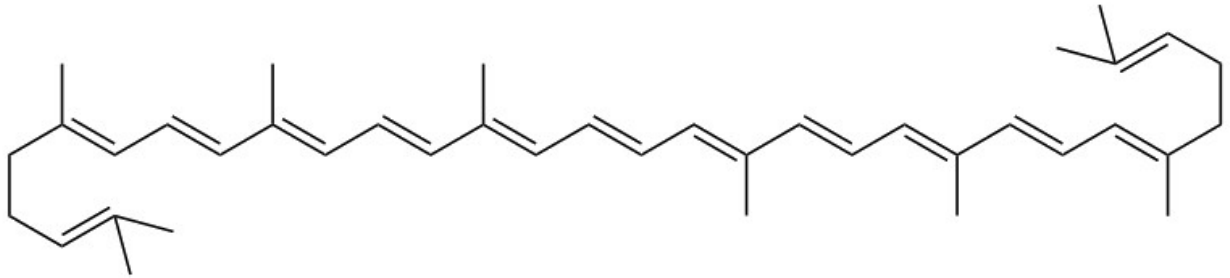


α-Pinene
(oil of turpentine by steam distillation of pine resin)

Myrcene
(primary terpene found in cannibas contributes to sedative effects, i.e., "couch lock")



Ethylene
(involved in fruit-ripening process)



https://www.acs.org/content/acs/en/molecule-of-the-week/archive.html