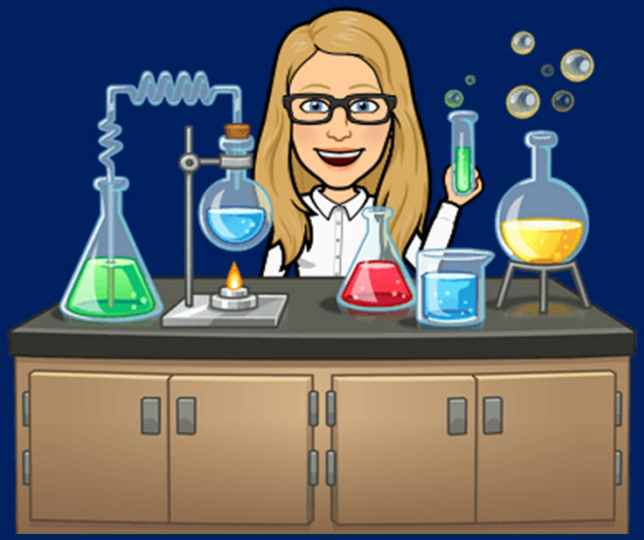
For voting, go to: https://pollev.com/lauriestarke263
or text LAURIESTARKE263 to 37607 to join poll



Dr. Laurie S. Starkey

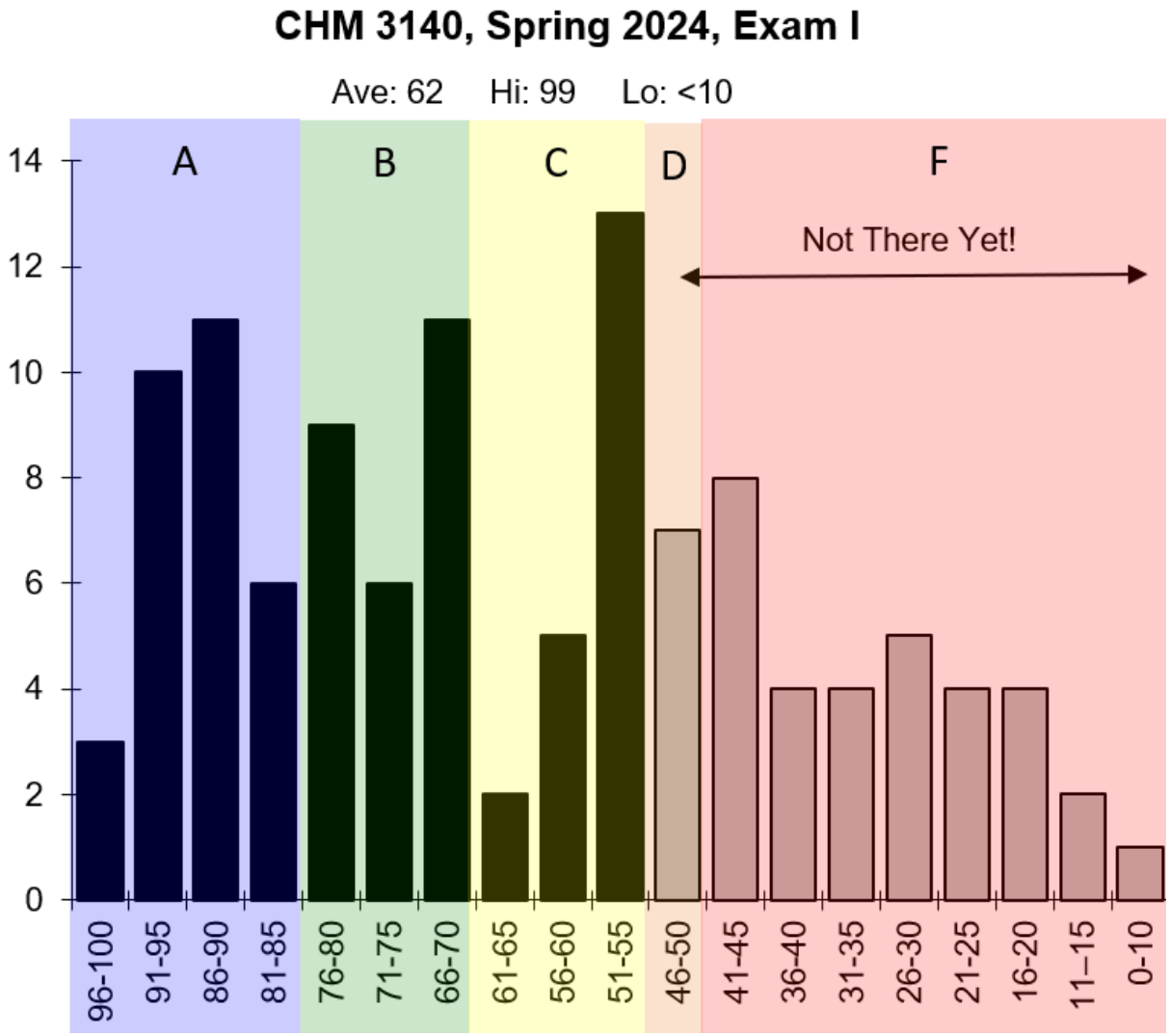
Cal Poly Pomona

CHM 3140 Organic Chemistry I
Announcements 2/20/24

Exam I Results

A/B/C… ranges are to give you a rough idea of projected CHM 3140 grade **based only on this exam score + full homework credit.**

Note: lowest midterm score will be dropped!



Exam Wrapper Survey

due Sunday 2/25

CHM 3140 Exam Wrapper - Post-Test Survey 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 4 points credit if you complete this survey, and 4 points for corrections (*include written reflection, if score <50). 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 50, you must submit a written reflection with your exam corrections (what will you do differently for the rest of the semester?)*

What was your score* on the exam? ☐

What was your grade in CHM 1220? ☐ Are you repeating CHM 3140? Y / N

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 number of textbook problems in each chapter (#), about how many did you work on?

Ch. 1 (# problems) **(Lewis, hybridization, bp)**		**Ch. 2** (# problems) **(Resonance)**		**Ch. 3** (# problems) **(Acid/Base)**	
10 SkillBuilders (**34**)		10 SkillBuilders (**33**)		11 SkillBuilders (**33**)	
End-of-Chapter (EOC) (**47**)		EOC (**51**)		EOC (**40**)	

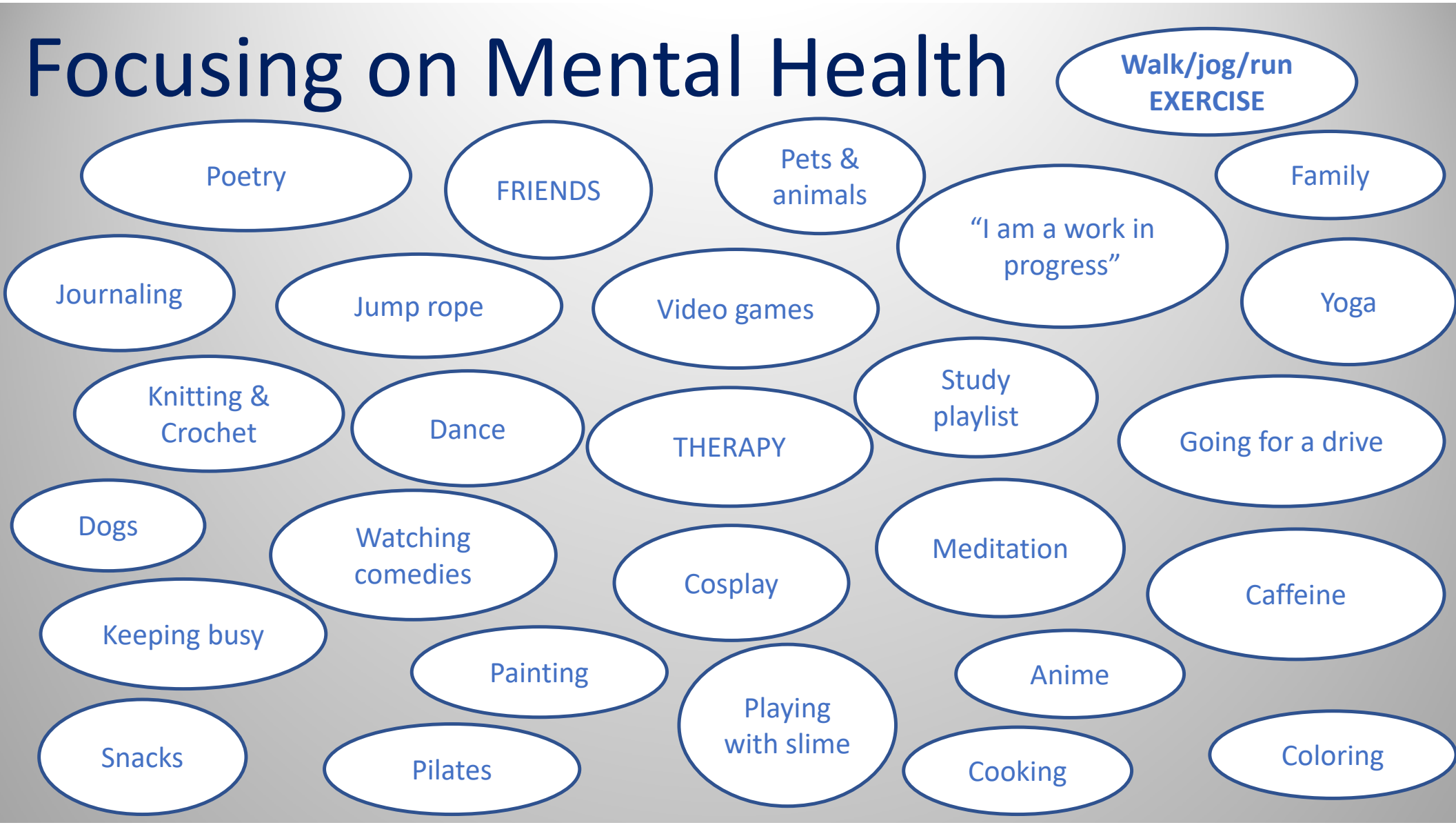
Advice for "How to Earn an A (or B…)"

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 Mental Health
Walk/jog/run EXERCISE
Poetry
FRIENDS
Pets & animals
Family
"I am a work in progress"
Journaling
Jump rope
Video games
Yoga
Knitting & Crochet
Dance
THERAPY
Study playlist
Going for a drive
Dogs
Watching comedies
Cosplay
Meditation
Caffeine
Keeping busy
Painting
Anime
Playing with slime
Snacks
Pilates
Cooking
Coloring

Where are you on the Mental Health Spectrum? #studentlife

https://delphis.org.uk/mental-health/continuum-mental-health/

Making progress, CHM 3140

CHM 3140 Organic Chemistry I, Dr. Laurie S. Starkey, Spring 2024

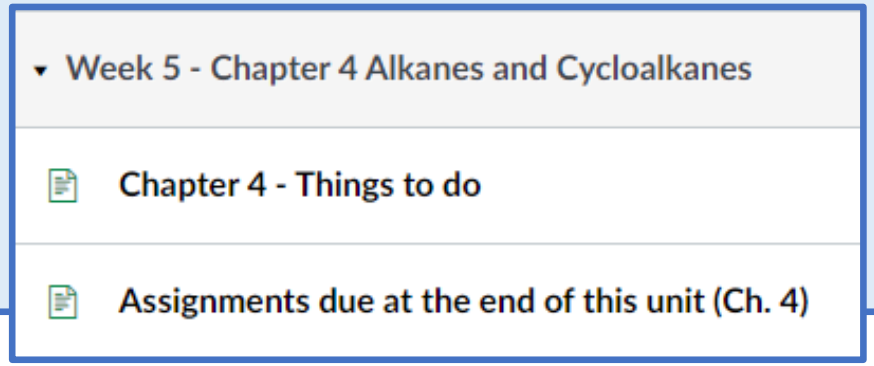
Tentative Schedule (Chapter and *Worksheet/Step #* given for each day)

Week	Mon	Tues	Wed	Thurs	Fri
1	1/22	1/23 Ch. 1 ***#1***	1/24	1/25 Ch. 1 ***#2***	
2	1/29	1/30 Ch.1 ***#3*** Ch.2 ***#1***	1/31	2/1 Ch. 2 ***#2***	2/2
3		2/6 Ch. 3 ***#1***	2/7	2/8 Ch. 3 ***#2***	2/9
4	2/12	2/13 Exam Review	2/14	2/15 **Exam I**	2/16
5	2/19	2/20 Ch. 4 ***#1***	2/21	2/22 Ch. 4 ***#2***	2/23
6	2/26	2/27 Ch. 5 ***#1***	2/28	2/29 Ch. 5 ***#2***	3/1
7	3/4	3/5 Ch. 5 ***#3***	3/6	3/7 Ch.15 ***#1***	3/8
8	3/11	3/12 Exam Review	3/13	3/14 **Exam II**	3/15

You are here

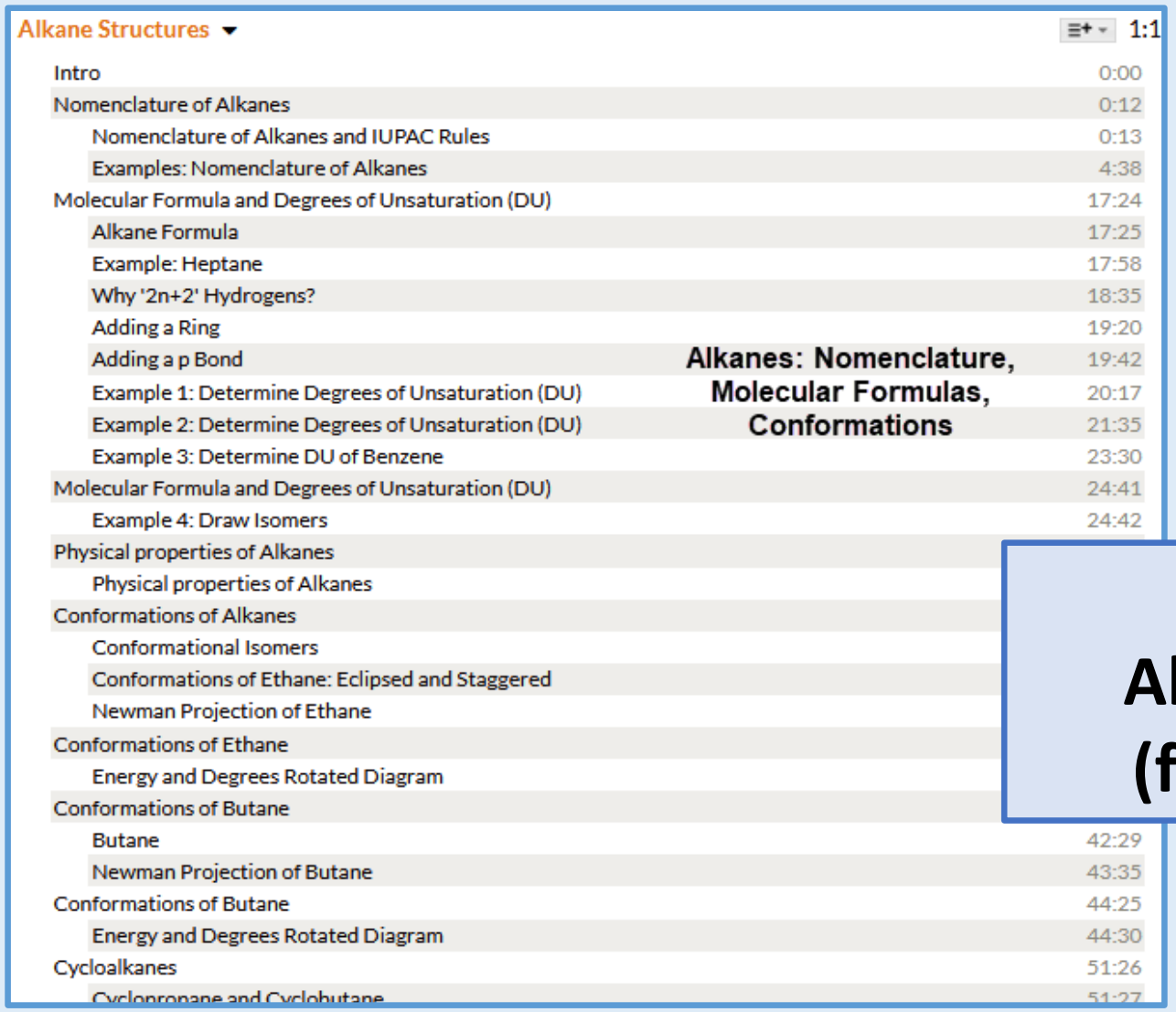
Today's Topic: Alkanes (Chapter 4, Step 1)

Canvas Module
Chapter 4
- ✓ **Watch**
- ✓ **Read**
- ✓ **Practice**



Step 1:

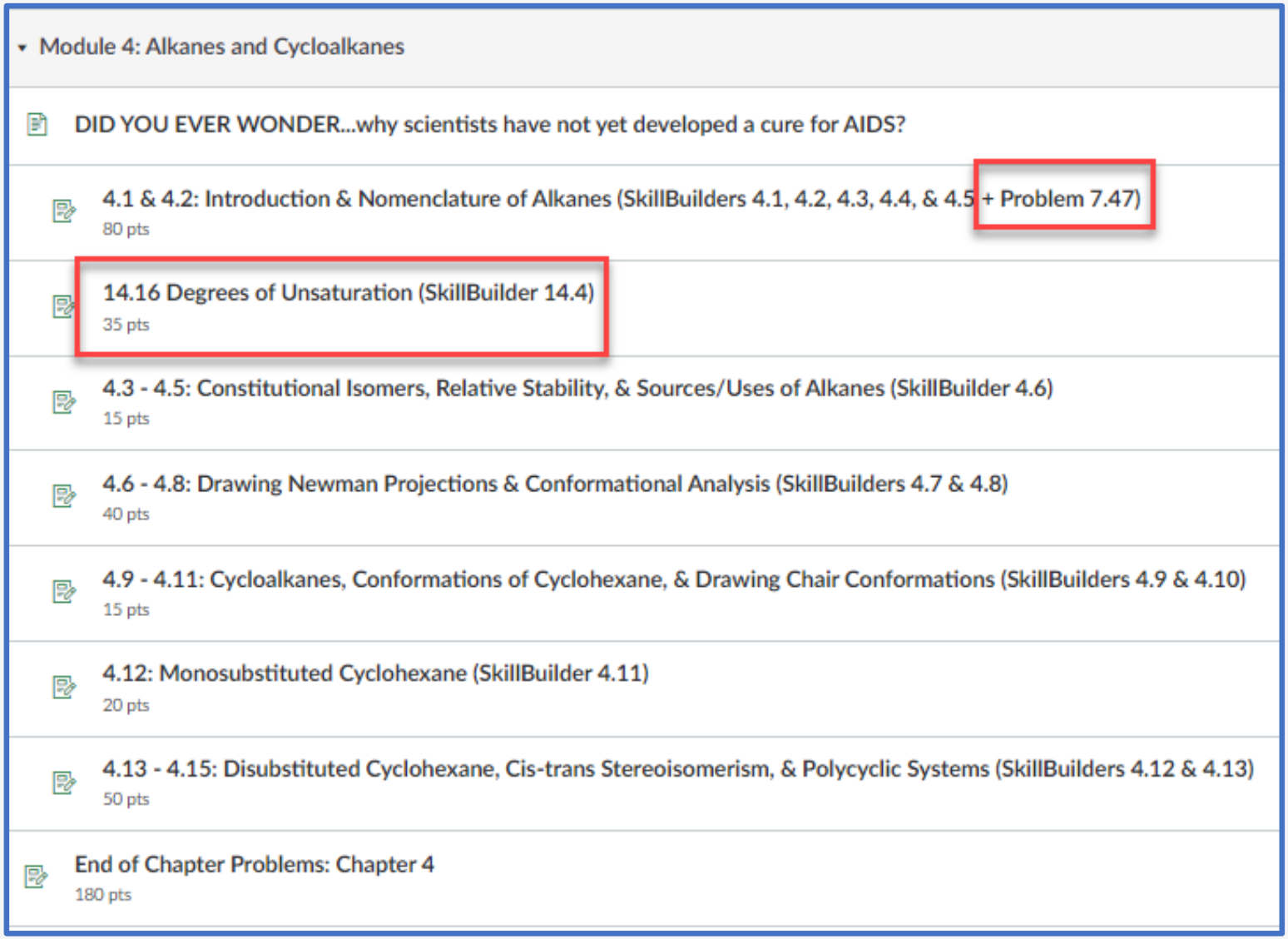
- For an overview of the chapter, see the last page of the Ch. 4 skeleton notes on course homepage.
  - ~~Watch Educator Section 1~~
  - **Watch** Part 1 of Alkane Structures (51 minutes, *pages 4-1 to 4-5*)
  - **Read** Klein Chapter 4, sections 1-3 and 5-8 (and Ch. 14.16) and work through **SkillBuilders 4.1-4.4, 4.6-4.8 and 14.4**



Educator Lecture

Section 1: Alkane Structures (first 52 minutes)

WileyPLUS includes all recommended textbook problems



4.6 - 4.8: Drawing Newman Projections & Conformational Analysis (SkillBuilders 4.7 & 4.8)

Readings & Interactive:

- 4.6: Drawing Newman Projections
- 4.7: Conformational Analysis of Ethane and Propane
  - Energy Diagram: Conformations of Ethane
  - Conformations of Propane
- 4.8: Conformational Analysis of Butane
  - Energy Diagram: Conformations of Butane
  - Conformations of Butane
  - Conformations of Ethane and Butane

Solved Problem Videos:

SkillBuilder 4.7, Problem 4.17

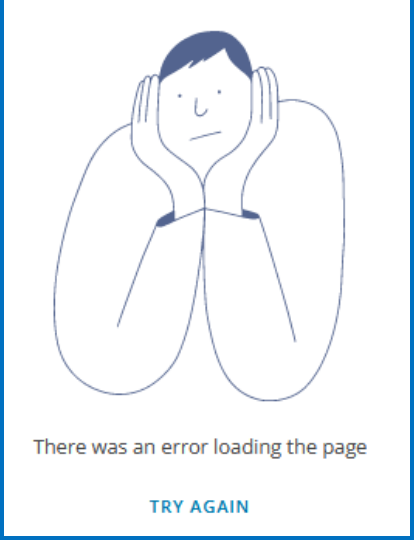
SkillBuilder 4.8, Problem 4.20

Legend: Reading, Video, Interactive, Lightboard

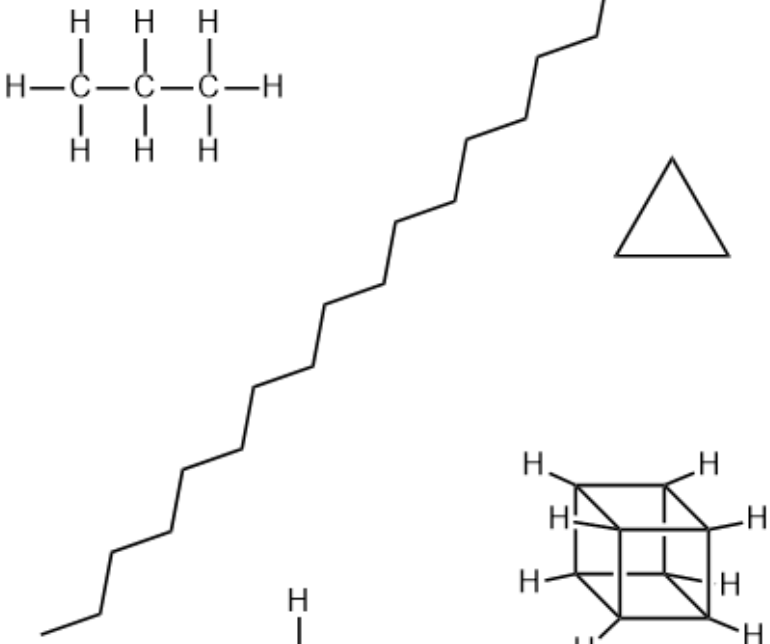
WileyPLUS for Videos, Interactive Graphics, Textbook Problems

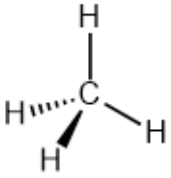
Browser error!

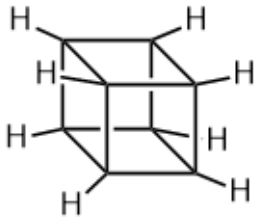
- **Clear cache**
- **Try Chrome, etc.**
- **Restart laptop**



Interesting Alkanes: Can You Match the Structure with the Property?







highly strained molecule
was first synthesized in 1964

fuel for grilling burgers

this wax, eicosane, is a paraffin
(derived from the Latin words for
"not much" and "affinity")

fracking & farts

use as an anesthetic circa 1900
discontinued because it is explosive

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