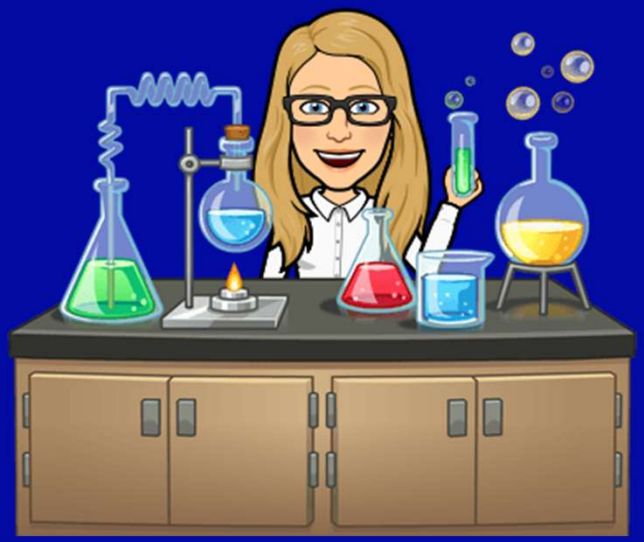
For voting, go to: https://pollev.com/lauriestarke263
or text LAURIESTARKE263 to 37607 to join poll

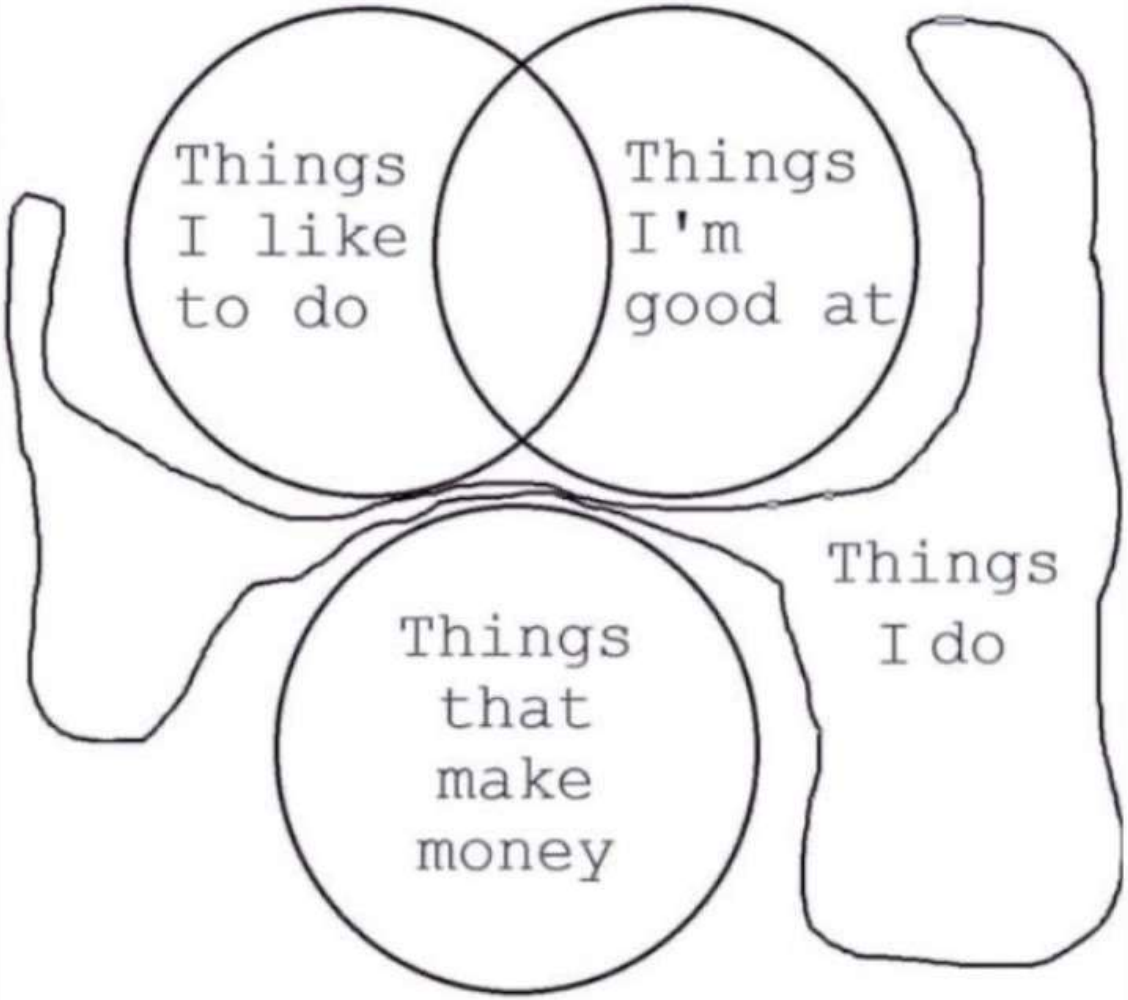


Dr. Laurie S. Starkey

Cal Poly Pomona

CHM 3140 Organic Chemistry I
Announcements 4/8/25

I hope you had a good Spring Break!



Today's Topic: E2 Mechanism (Chapter 7, Part 2 - Step 1)

Chapter 7
- ✓ Watch
- ✓ Read
- ✓ Practice

Daily To-Do	Flipped Lectures
Step 1	
• Read Klein Chapter 7, sections 7.5-7.7 • Watch flipped lectures • Work through **SkillBuilders 7.3, 7.4 & 7.5**	• Part 1a - Introduction to Alkenes: Structure and Stability **18 minutes**, *skeleton notes page 7-13* • Part 1b - E2 Elimination: Mechanism and Stereochemistry **19 minutes**, *skeleton notes page 7-14* • Part 1c - E2 Regiochemistry **25 minutes**, *skeleton notes page 7-15* • Part 1d - E2 vs. Sn2 Mechanisms **20 minutes**, *skeleton notes page 7-16* [BONUS sample problems, *page 7-17*]

Introduction to Alkene Structure and Stability

ChemistryConnected

E2 Elimination: Mechanism & Stereochemistry

ChemistryConnected

E2 Elimination: Regiochemistry (Zaitsev vs. Hofmann)

ChemistryConnected

E2 Elimination vs. Sn2 Substitution

ChemistryConnected

YouTube Lectures

E2 vs. Sn2 Mechanism: Examples

ChemistryConnected

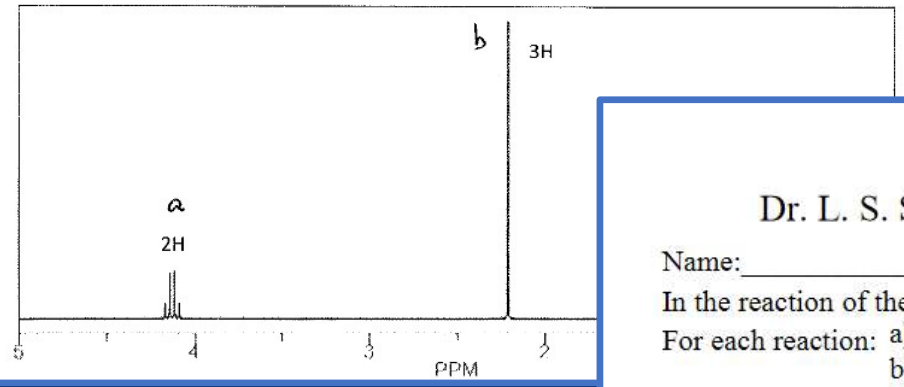
bonus material

Due ASAP: NMR, Sn1/Sn2 Mech.

California State Polytechnic University, Pomona Name:_____

Dr. Laurie S. Starkey, Organic Chemistry Laboratory, CHM 3140 NMR Problem Set #1

Assign structures to the following spectra, which all have a molecular formula of $C_4H_8O_2$. Calculation of sites of unsaturation and careful examination of chemical shifts, integration and splitting patterns will be helpful. Once you have proposed a structure, be sure to calculate the expected chemical shifts to verify your answer. **Show your work!**



California State Polytechnic University, Pomona

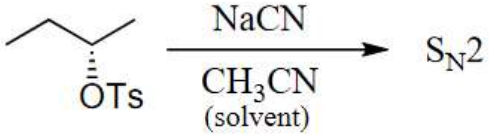
Dr. L. S. Starkey, Organic Chemistry I, CHM 3140, **S_N2 vs. S_N1 Homework**

Name:_____

In the reaction of the tosylate shown and sodium cyanide, both S_N2 and S_N1 mechanisms are possible.

For each reaction: a) predict the major product(s) expected. (stereochemistry?)
b) provide a complete mechanism. (watch details: lone prs, formal charges, arrows)
c) provide an E vs. POR diagram. (give structures for the transition states)

Complete Lewis structure for NaCN	Bond-line structure for $TsO^{\ominus}$ (tosylate LG) (see Klein 7.10)



Exam III Thursday, 4/17, Chapters 15, 6, 7

75-minute written exam

- no Scantron, no lecture after

Sample exams on course homepage

- See typical length, format

No notes/calculators/model kits allowed

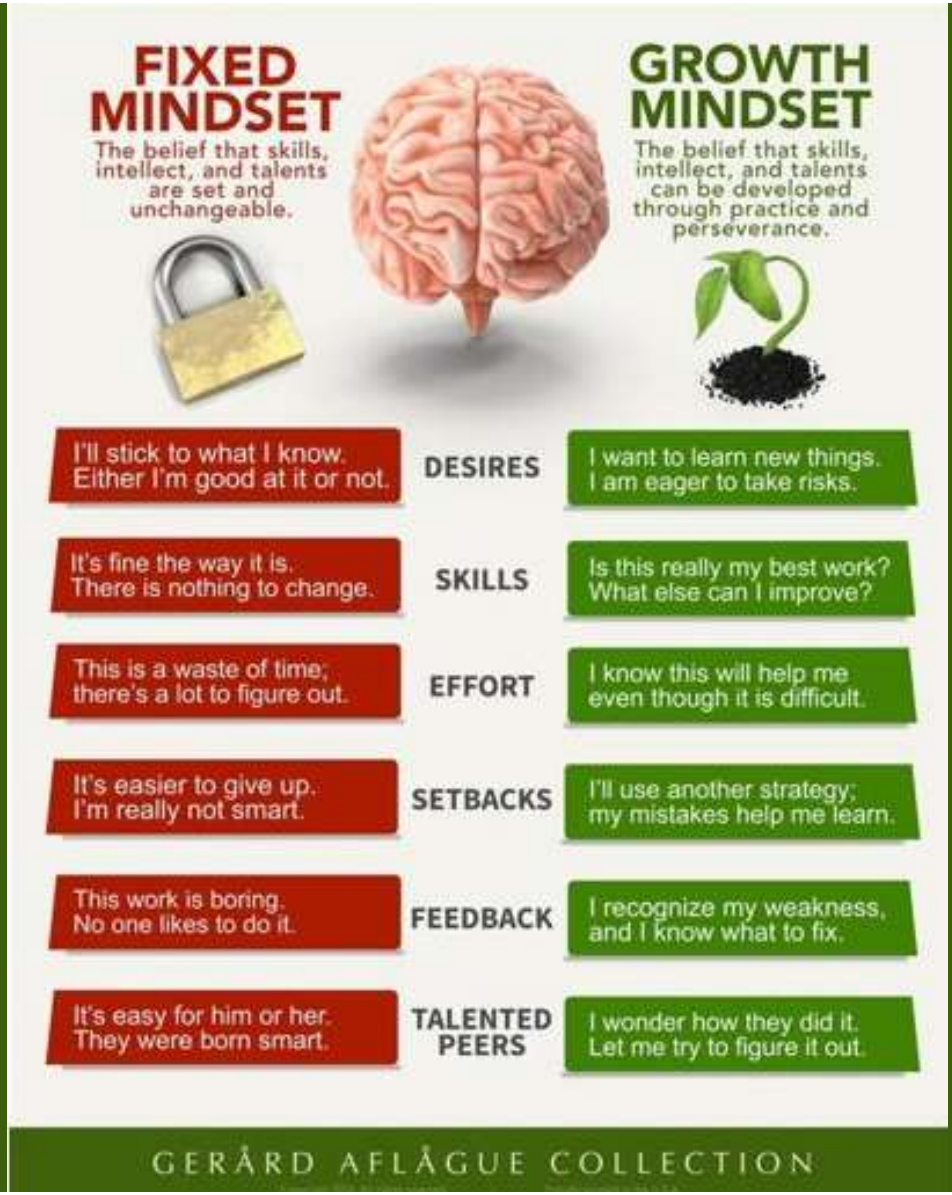
- Bring pencil(s), eraser

You must come to your registered section

- 10 am, 3 pm, or 5 pm

Week	Mon	Tues	Wed	Thurs	Fri
9	3/17	3/18 Ch.15 #2	3/19	3/20 Ch. 6 #1	3/21
10	3/24	3/25 Ch. 7 #1	3/26	3/27 Ch. 7 #2	3/28
SPRING BREAK 3/31 – 4/4					
11	4/7	4/8 Ch. 7 #3	4/9	4/10 Ch. 7 #4	4/11
12	4/14	4/15 Exam Review	4/16	4/17 **Exam III**	4/18

MINDSETS


FIXED MINDSET
The belief that skills, intellect, and talents are set and unchangeable.
GROWTH MINDSET
The belief that skills, intellect, and talents can be developed through practice and perseverance.
I'll stick to what I know. Either I'm good at it or not.
DESIRES
I want to learn new things. I am eager to take risks.
It's fine the way it is. There is nothing to change.
SKILLS
Is this really my best work? What else can I improve?
This is a waste of time; there's a lot to figure out.
EFFORT
I know this will help me even though it is difficult.
It's easier to give up. I'm really not smart.
SETBACKS
I'll use another strategy; my mistakes help me learn.
This work is boring. No one likes to do it.
FEEDBACK
I recognize my weakness, and I know what to fix.
It's easy for him or her. They were born smart.
TALENTED PEERS
I wonder how they did it. Let me try to figure it out.
GERÅRD AFLÅGUE COLLECTION