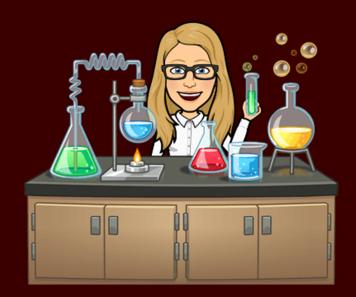
### For clicker question voting, go to: <a href="https://pollev.com/lauriestarke263">https://pollev.com/lauriestarke263</a>





Dr. Laurie S. Starkey Cal Poly Pomona

## CHM 3150 Organic Chemistry II Announcements 11/6/25

## Today's Topic: Introduction to Aromatic Reactions (Ch. 18)

### Ch. 17/18 (Step 2)

- ✓ Watch
- ✓ Read
- ✓ Practice

Flipped Daily To-Do Lectures Step 2 Aromatic Reactions - Part 1 • Read Klein 18.1 Electrophilic Aromatic Substitution (EAS) 38 minutes skeleton notes pages 18-1 through 18-4 Read Klein 18.7 - 18.11 EAS on Substituted Benzenes Work through SkillBuilders o 18.1 ID Effects of a Substituent 18.2 Directing Effects (Multiple Subs.) & Textbook problems 18.12-18.14 Free Red Ink Homework: EAS Homework I

Naromatic Compounds: Reactions, Part 1 ▼		≘+ - 1:2
Intro		0:00
Reactions of Benzene		0:07
N/R as Alkenes		0:08
Substitution Reactions		0:50
Electrophilic Aromatic Substitution		1:24
Electrophilic Aromatic Substitution		1:25
Mechanism Step 1: Addition of Electrophile		2:08
Mechanism Step 2: Loss of H+		4:14
Electrophilic Aromatic Substitution on Substituted Benzenes	Electrophilic	5:21
Electron Donating Group	-	5:22
Electron Withdrawing Group	Aromatic Sub.	8:02
Halogen		9:23
Effects of Electron-Donating Groups (EDG)		10:23
Effects of Electron-Donating Groups (EDG)	Effects of	10:24
What Effect Does EDG (OH) Have?		11:40
Reactivity	EWG & EDG	13:03
Regioselectivity		14:07
Regioselectivity: EDG is o/p Director		14:57
Prove It! Add E+ and Look at Possible Intermediates		14:58
Is OH Good or Bad?		17:38
Effects of Electron-Withdrawing Groups (EWG)		20:20
What Effect Does EWG Have?		20:21
Reactivity		21:28
Regioselectivity		22:24
Regioselectivity: EWG is a Meta Director		23:23
Prove It! Add E+ and Look at Competing Intermediates		23:24
Carbocation: Good or Bad?		26:01
Effects of Halogens on EAS		28:33
Inductive Withdrawal of e- Density vs. Resonance Donation		28:34
Summary of Substituent Effects on EAS		32:33
Electron Donating Group		32:34
Electron Withdrawing Group		33:37
Directing Power of Substituents		34:35
Directing Power of Substituents		34:36
Example		36:41

# Flipped lecture: Ch. 18 Aromatic Rxns (Part 1 of 3)

## Messy Aldol (Ch.21) due ASAP...and first Ch. 18 homework now available!

### California State Polytechnic University, Pomona

Organic Chemistry II CHM 3150, Dr. Laurie S. Starkey "Messy Aldol" Homework

Name: Section (Day/Time):\_\_\_\_

Predict the possible aldol products for the following reaction (**provide 8 structures**). Choose **one final product** ( $\alpha$ , $\beta$ -unsaturated ketone) and show **both** the acid- and base-catalyzed mechanisms.

O base or 4 possible 
$$\Delta$$
 4 final  $\alpha, \beta$ -unsat'd ketones products  $\beta$ -hydroxyketone products  $\beta$ -lydroxyketone  $\beta$ -lydroxyketone products  $\beta$ -lydroxyketone  $\beta$ -lydroxyketone  $\beta$ -lydroxyketone  $\beta$ -lydroxyketone  $\beta$ -lydroxyketone products  $\beta$ -lydroxyketone  $\beta$ -lydro

nu:/E+

nu:/E+

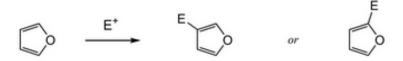
#### California State Polytechnic University, Pomona

Organic Chemistry II CHM 3150, Dr. Laurie S. Starkey Electrophilic Aromatic Substitution (EAS) Homework I

Name: Section: (day/time)

A) Which would you expect to be the major product? Explain, using drawings to support your answer. hint: compare the stabilities of the competing intermediates

### EAS Homework #1



B) Furan is known to give the 2-substituted compound as the major product. Explain why, using drawings to support your answer. hint: compare the stabilities of the competing intermediates

### Chemistry is awesome

