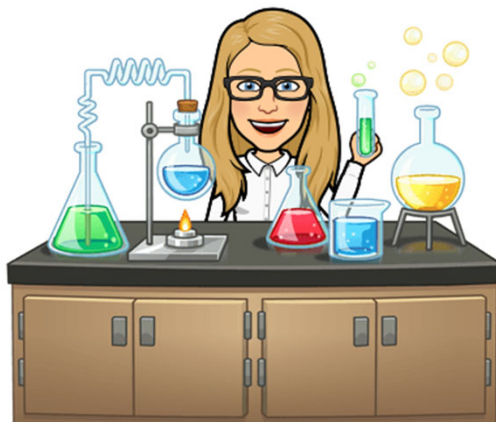


For U.S./California voting info, go to:

<https://www.ballotready.org/>

For clicker question voting, go to:

<https://pollev.com/lauriestarke263>



Dr. Laurie S. Starkey

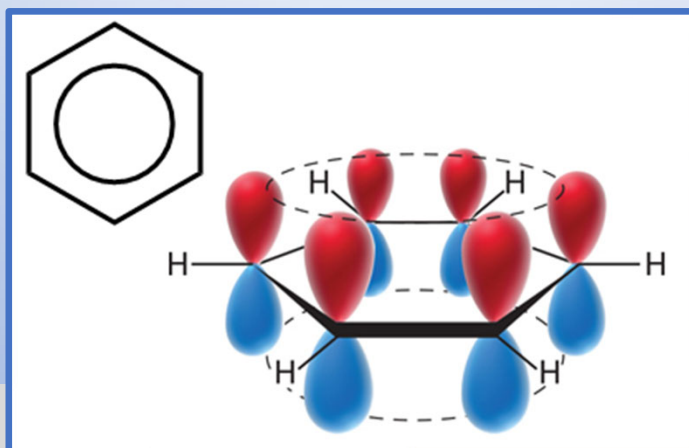
Cal Poly Pomona

CHM 3150 Organic Chemistry II
Announcements 11/4/25

Today's Topic: Introduction to Aromaticity (Ch. 17)

Ch. 17 (Part 1 of 1!)

- ✓ Watch
- ✓ Read
- ✓ Practice



**Daily
To-Do**

**Flipped
Lectures**

Step 1

- Read Klein-Starkey Chapter 17, sections 17.1-17.5
- Work through SkillBuilders 17.1, 17.2, 17.3

[Ch. 17 - Aromaticity](#)

61 minutes

[IUPAC - Aromatic Compounds](#)

12 minutes

---All pages of *skeleton notes*---

Section 9: Aromatic Compounds

Aromatic Compounds: Structure ▾

≡+ ▾ 1:00:59

Intro	0:00
Aromatic Compounds	0:05
Benzene	0:06
3D Sketch	1:33
Features of Benzene	4:41
Features of Benzene	4:42
Aromatic Stability	6:41
Resonance Stabilization of Benzene	6:42
Cyclohexatriene	7:24
Benzene (Actual, Experimental)	8:11
Aromatic Stability	9:03
Energy Graph	9:04
Aromaticity Requirements	9:55
1) Cyclic and Planar	9:56
2) Contiguous p Orbitals	10:49
3) Satisfy Huckel's Rule	11:20
Example: Benzene	12:32
Common Aromatic Compounds	13:28
Example: Pyridine	
Common Aromatic Compounds	
Example: Furan	
Common Aromatic Compounds	
Example: Thiophene	
Example: Pyrrole	
Common Aromatic Compounds	
Cyclopentadienyl Anion	
Cycloheptatrienyl Cation	
Naphthalene	
Determining Aromaticity	27:28
Example: Which of the Following are Aromatic?	27:29
Molecular Orbital (MO) Theory	32:26
What's So Special About '4n + 2' Electrons?	32:27
π bond & Overlapping p Orbitals	32:53

Identifying and Naming Aromatic Compounds

Flipped Lecture: Ch. 17 Aromaticity

Aromatic Nomenclature	65:02
Aromatic Nomenclature and Examples	65:03
Aromatic Nomenclature, cont.	69:09
Ortho, Meta, and Para	69:10
Aromatic Nomenclature, cont.	73:27
Common Names for Simple Substituted Aromatic Compounds	73:28

Aromatic Nomenclature

Aromatic Nomenclature

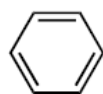
See Ch. 17 lecture notes for names you need to know (in bold)

California State Polytechnic University, Pomona

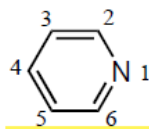
CHM 3150 Organic Chemistry II, Dr. Laurie S. Starkey

Nomenclature for Aromatic Compounds (Klein-Starkey 17.2, SkillBuilder 17.1)

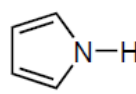
Common names (you will be tested on the ones in bold):



benzene



pyridine



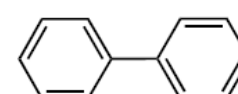
pyrrole



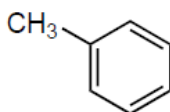
furan



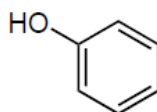
thiophene



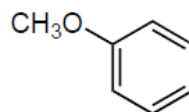
biphenyl
(phenylbenzene)



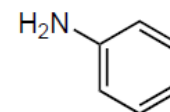
toluene
(methylbenzene)



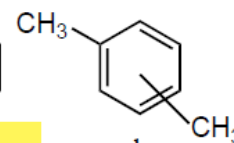
phenol
(hydroxybenzene)



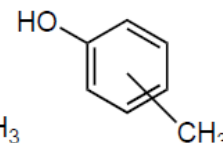
anisole
(methoxybenzene)



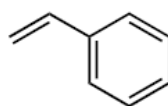
aniline
(benzenamine)



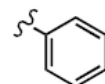
xylene
(dimethylbenzene)



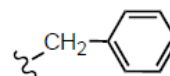
cresol
(hydroxymethylbenzene)



styrene
(vinylbenzene or phenylethene)

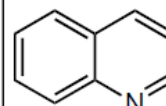


phenyl group (Ph)

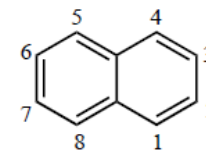


benzyl group (Bn)

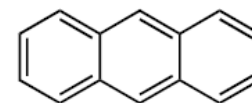
fused aromatic compounds:



quinoline



naphthalene



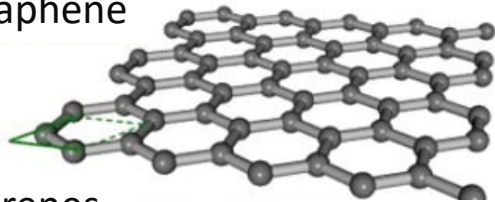
anthracene

Nomenclature:

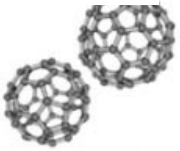
Disubstituted benzenes are usually named as *ortho*, *meta*, or *para*. Otherwise, number the benzene carbons.

Nanotechnology

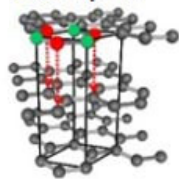
Graphene



Fullerenes
Buckyballs



Nanotubes



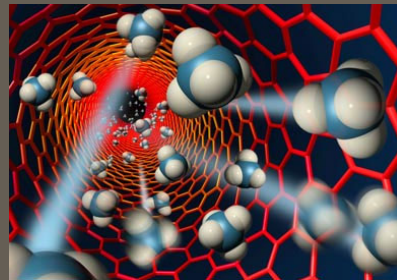
Graphene

Discovered in 2004
2010 Nobel Prize
Strong, Durable



extremetech.com

Medicine



Cosmetics



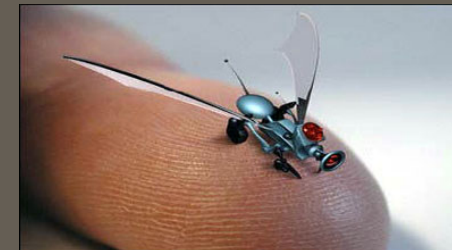
Electronics



Energy



Military



Finishing Strong Exam III Ch. 21 & Aromatic (17/18)

CHM 3150 Organic Chemistry II, Dr. Laurie S. Starkey, Fall 2025

Tentative Schedule (Chapter and Worksheet #)

Week	Mon	Tues	Wed	Thurs	Fri
	10/20	10/21 Ch. 21 #1	10/22	10/23 Ch. 21 #2	10/24
	10/27	10/28 Ch. 21 #3	10/29	10/30 Ch. 21 #4	10/31
	11/3	11/4 Ch. 17 #1	11/5	11/6 Ch. 17/18 #2	11/7
	11/10	11/11 Holiday	11/12	11/13 Ch. 17/18 #3	11/14
12					
13	11/17	11/18 17/18 #4 Ch.22.10, 22.11		11/20 Ch. 16 #1	11/21
14	11/24	11/25 Exam III		11/27 Holiday	11/28 Holiday
15	12/1	12/2 Ch. 16 #2	12/3	12/4 Ch. 22 #1	12/5
Finals (section)	12/8	Tue. 12/9 1:00–2:50pm (02/1pm) 5:00–6:50 pm (03/5:30)		12/10 Thurs. 12/11 3:00–4:50 pm (01/4pm)	12/12

You are
here

IT'S NOVEMBER 1ST...

**WE'RE OFFICIALLY ALLOWED
TO TALK ABOUT CHRISTMAS**