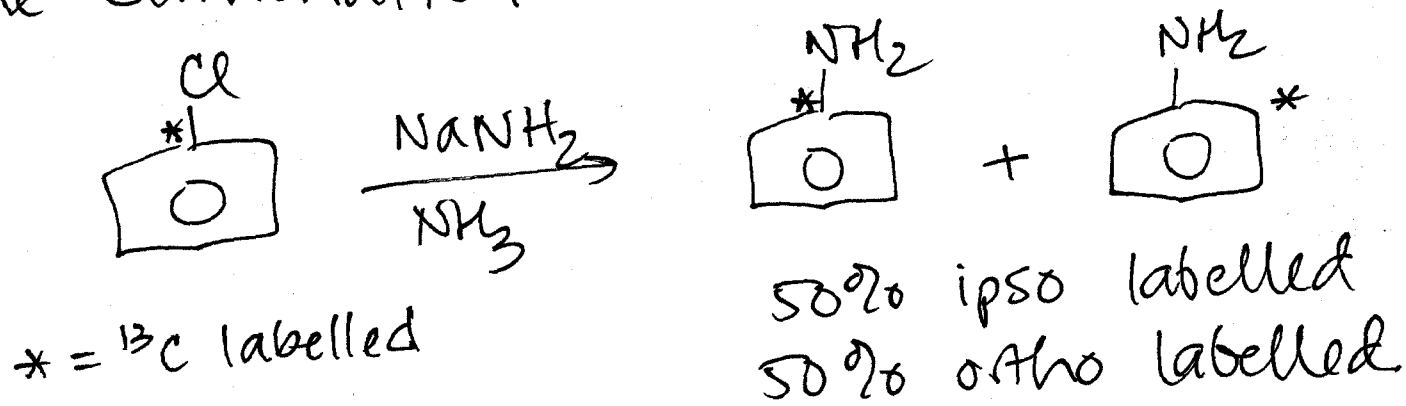
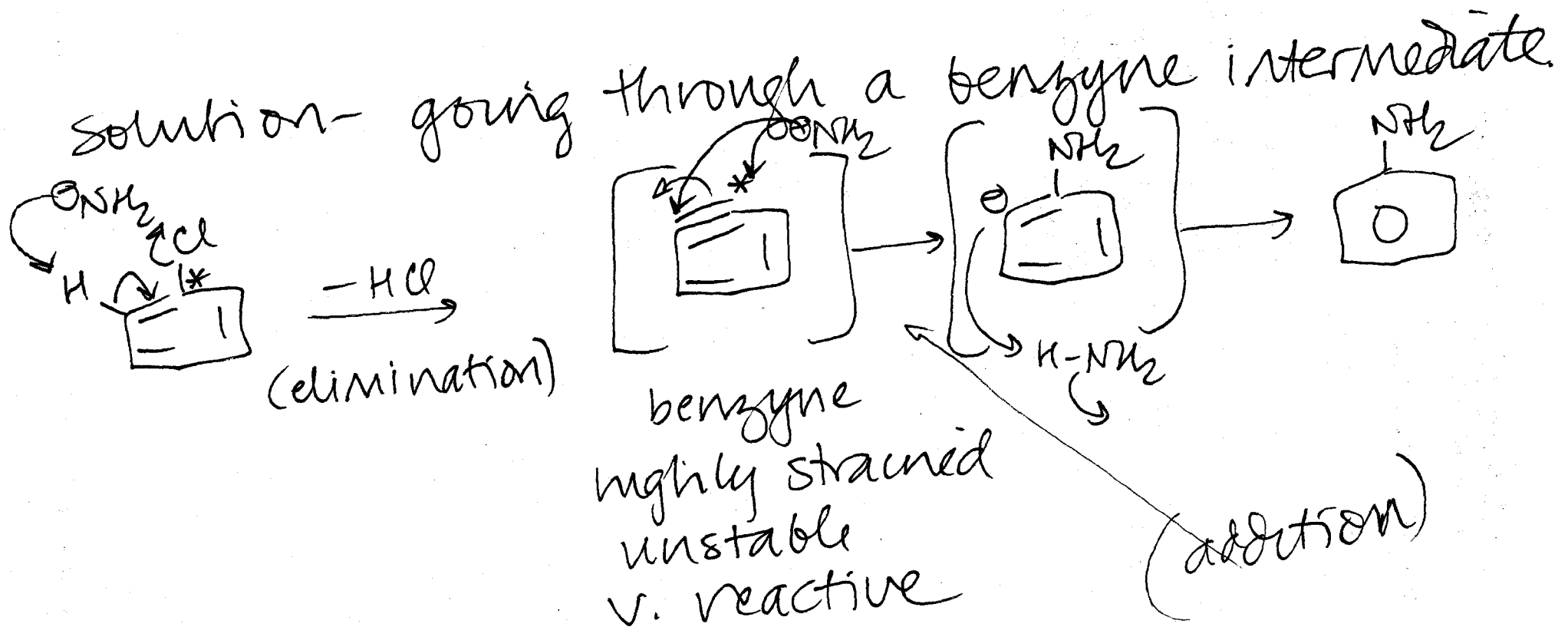


# The elimination-Addition mechanism

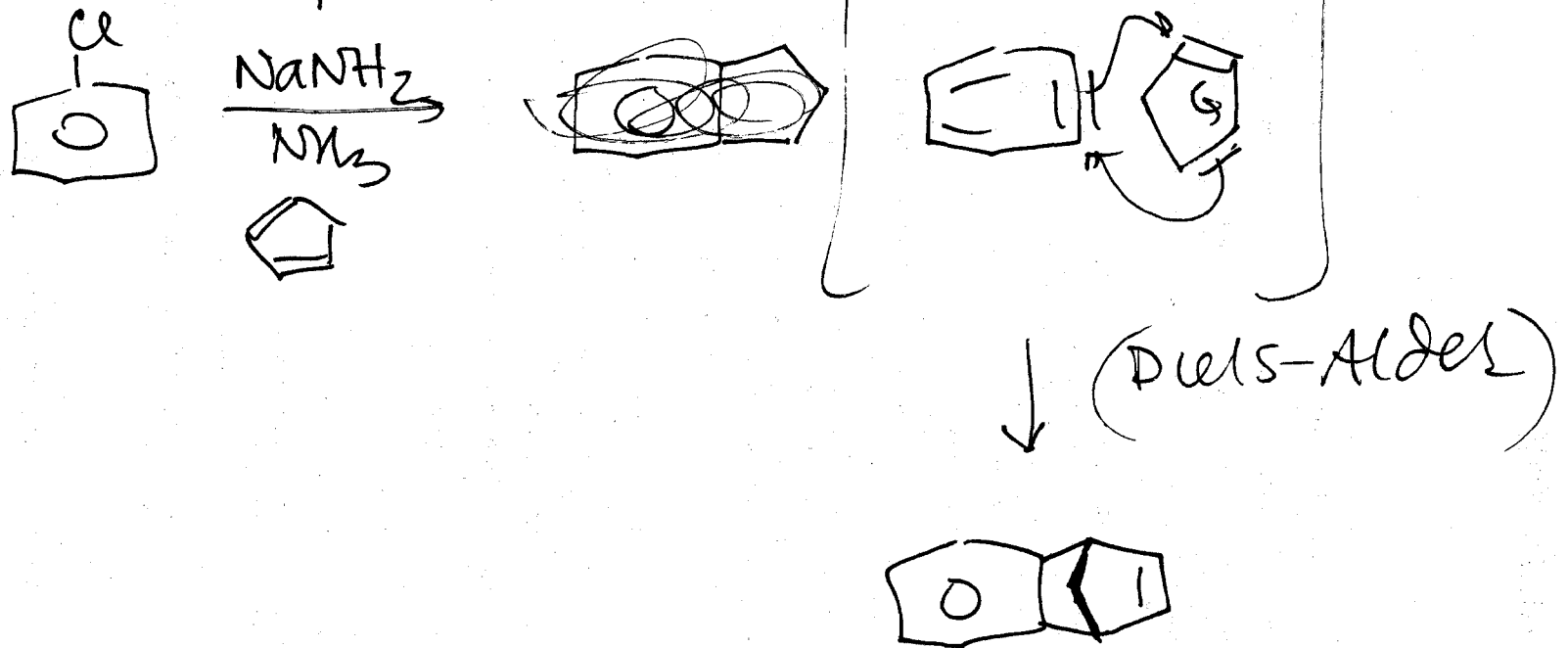


Why?



How do we know benzyne exists?

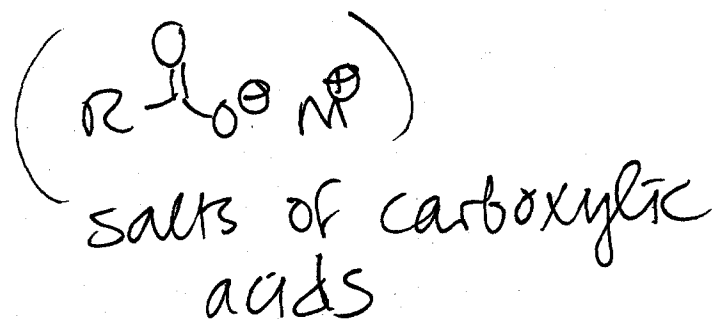
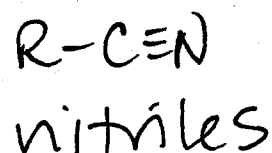
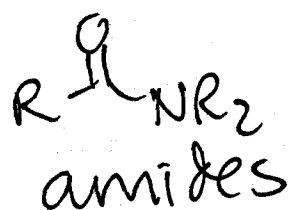
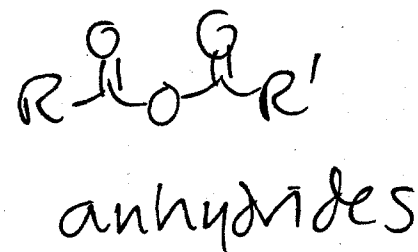
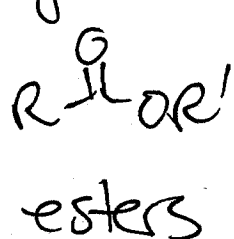
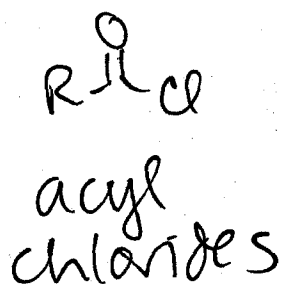
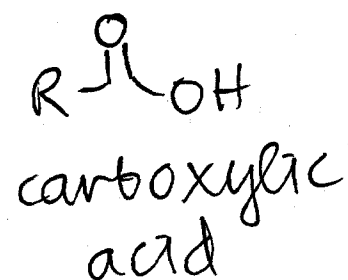
1. we can trap it.



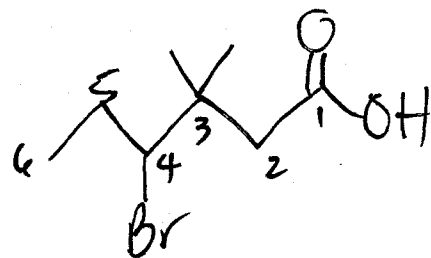
2. we can see it.

(low temp spectroscopy)

# chapter 16 - Carboxylic Acids + Friends



## Nomenclature - Carboxylic Acids



1. carbonyl carbon is always #1.
2. Find longest chain starting w) C=O  $\Rightarrow$  base name.

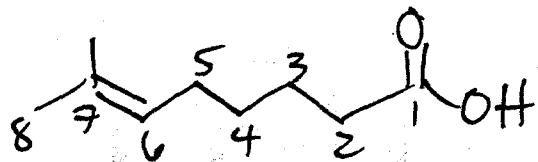
3. change "e" to "oic acid"

4. Add in substituents as always.

hexane

hexanoic acid

4-bromo-3,3-dimethylhexanoic acid

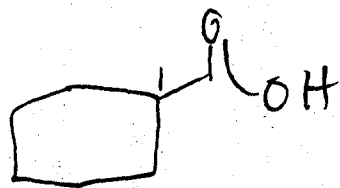


octane

octanoic acid

6-octenoic acid

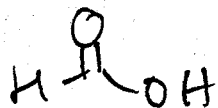
7-methyl-6-octenoic acid



cyclohexanecarboxylic acid

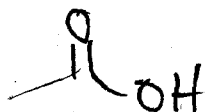
IUPAC

common



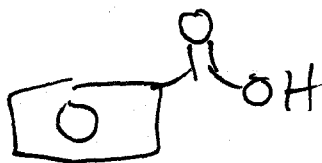
methanoic acid

formic acid



ethanoic acid

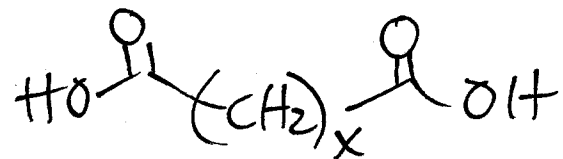
acetic acid



benzenecarboxylic  
acid

benzoic acid

Diacids:



x

0

1

2

3

4

5

name

oxalic acid

malonic acid

succinic acid

glutaric acid

adipic acid

pimelic acid

oh

my

such

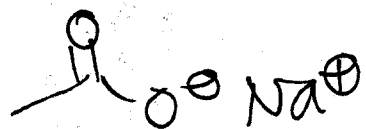
good

apple

pie!

---

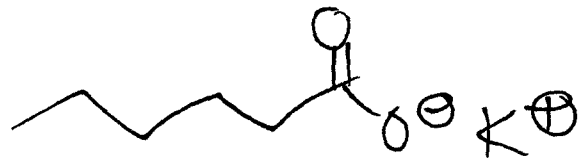
Salts of carboxylic acids



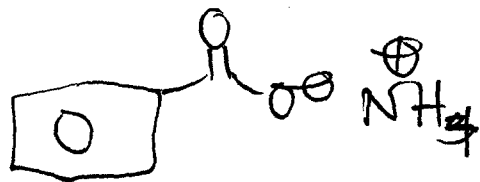
(cation)

(acid - change  
"ic acid" to "ate")

sodium acetate



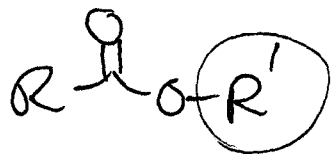
potassium hexanoate



ammonium benzoate

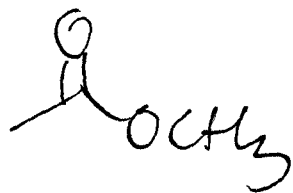
---

esters

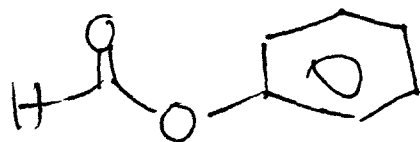


(alkyl)

(acid - same  
change as  
salts)



methyl acetate



phenyl formate