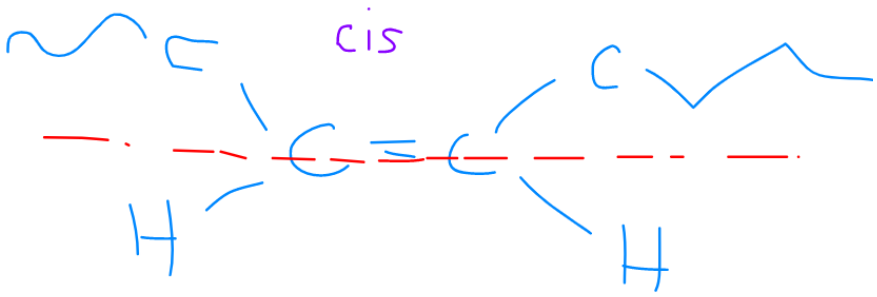
Benzene cuz its scary

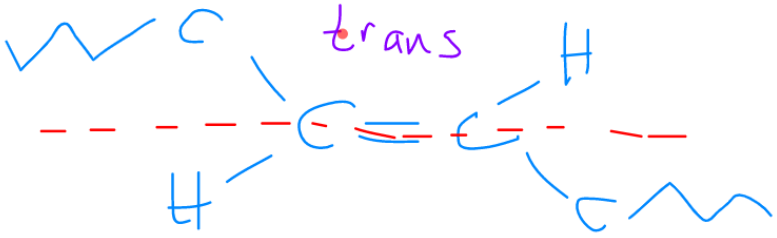
Aromatic Hydrocarbons

- Contain benzene C6H6 → resonance structure meaning 3 single bonds + 3 double bonds on the benzene result in 6 1.5bonds
- Most are volatile (easily vaporized) and associated with good and bad aromas
- When benzene is considered a side group → called a phenyl group
- Benzene prefixes can be classified on how other carbon
    - Ortho- → 1, 2
    - Meta- → 1, 3
    - Para- → 1, 4

Day 4 - Sept 25

- Cis vs trans double bond





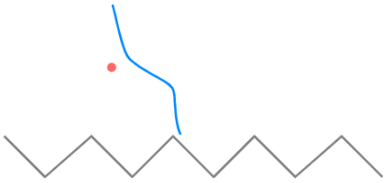
Side Group Isomers

- Propyl isomers

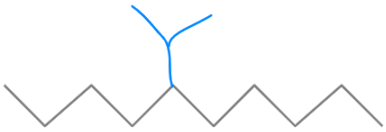
SIDE-GROUP ISOMERS

Propyl isomers:

n-propyl group



isopropyl group

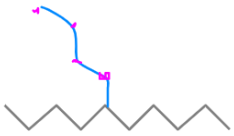


- Butyl isomers

SIDE-GROUP ISOMERS

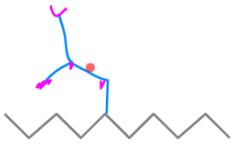
Butyl isomers:

n-butyl group



sec-butyl group
(*s*-butyl)

isobutyl group



tert-butyl group
(*t*-butyl)

- Terms
  - Iso → middle
  - Sec → secondary
  - Tert → tertiary
  -

Alkenes

- When there is more than 1 double bond, add the letter a to the end of the prefix
  - I.e. buta
- Review the R - alkene part

Alkynes

- Practice with 4-alkynl type stuff
- Add -a to the root (octa) if theres a double and triple bond

- CANNOT BEND TRIPLE BONDS IN LINE DIAGRAMS

Day 5 - Sept 28

Alcohols
- Longest chain with -OH and receives lowest number possible
- Ends in -ol

Ketone
- C = O
- End in -one

Aldehyde
- A ketone on the end
- C = O
- End in -al

ASK TMRW: go over ambiguity of the 1 on an pent-1-ol

Day 6 - Sept 29

- CHO is aldehyde
- COH is terminal alcohol

Cis-4-hydroxy-3,6-dioxo-2-phenyloct-4-en-1,8-dial
Dont need to put 1,8 for aldehydes cuz they automatically terminal

- Carbonyl is polar → dipole-dipole + london dispersion