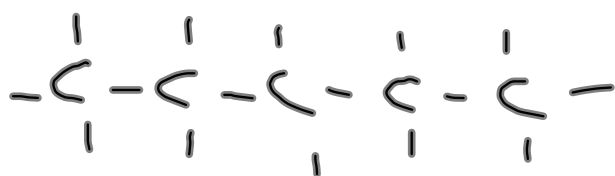
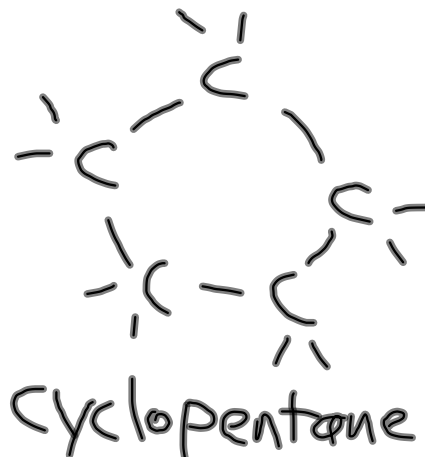


## Hydrocarbon rings

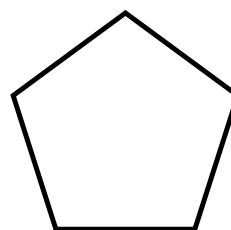
- a hydrocarbon chain that has formed a ring
- named with prefix "**cyclo-**"
- can contain double bonds (called an arene)
- most common arene is **benzene (C<sub>6</sub>H<sub>6</sub>)**

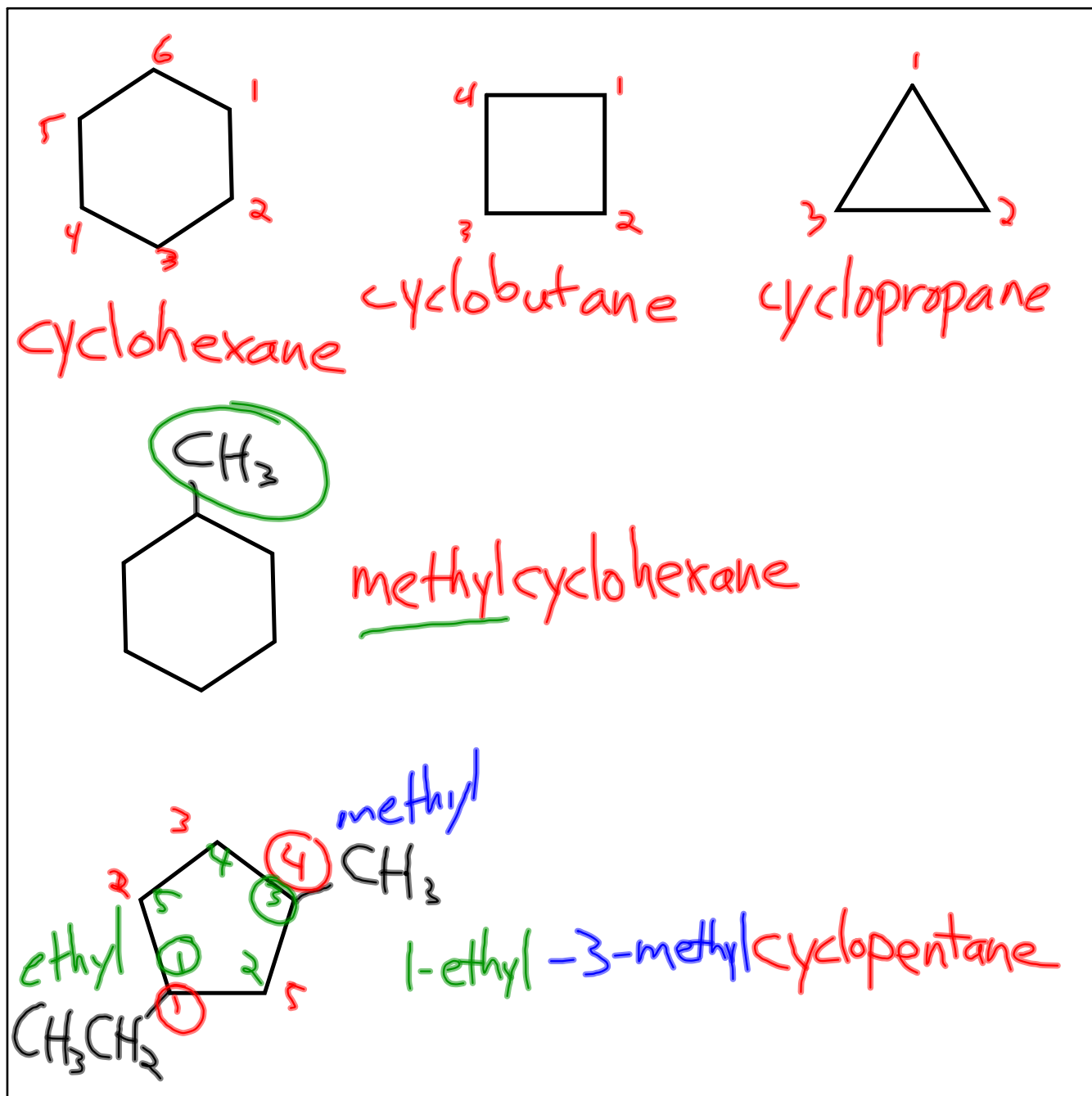


Pentane



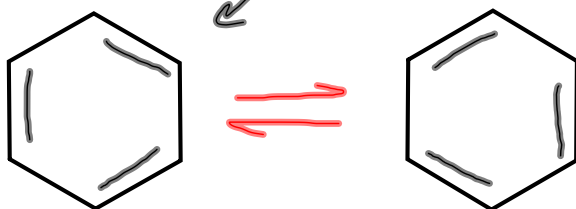
Cyclopentane



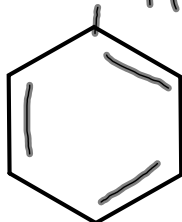
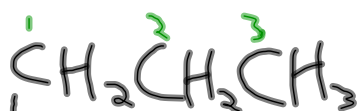


# Benzene

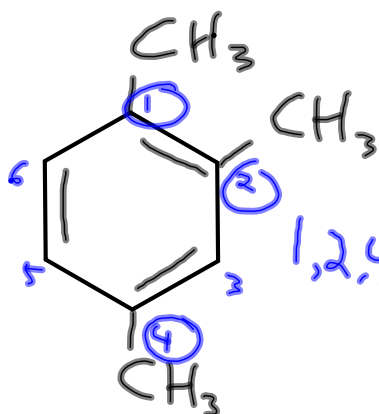
↙ alternating double bonds



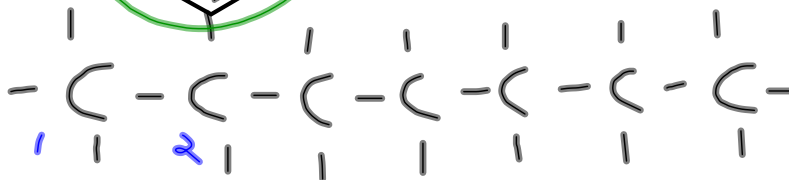
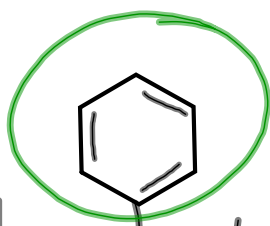
resonance



propyl benzene



1,2,4-trimethylbenzene



2-phenyl heptane

## Functional Groups

- a group of atoms attached to a hydrocarbon chain
- usually O, N & H
- the number of atoms and their arrangement determine the chemical properties of the chain
- **R** and **R'** represent generic hydrocarbon chains

## Halocarbon

- a hydrocarbon chain with a halogen (F, Cl, Br, I) attached to a carbon
- named with appropriate prefix: "fluoro-", "chloro-", "bromo-", "iodo-"

