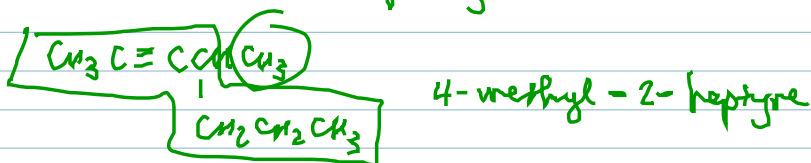
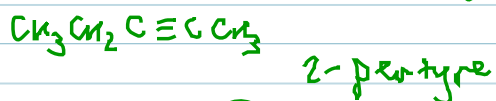
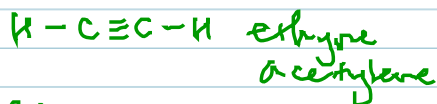


ALKYNES $\sim C \equiv C \sim$ $C_n H_{2n-2}$

very reactive

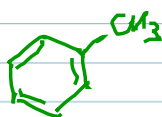


BENZENE + AROMATICS



3 delocalized π bonds
→ great stability
low reactivity

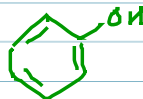
C_6H_6



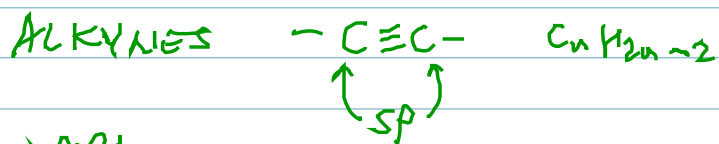
toluene



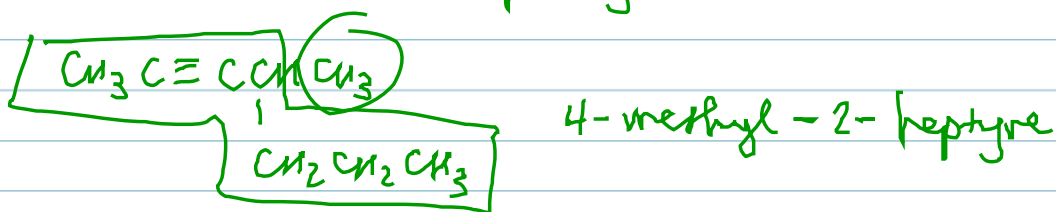
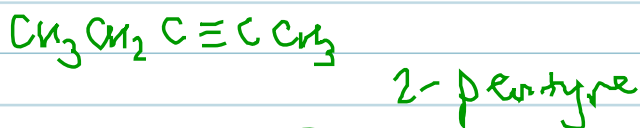
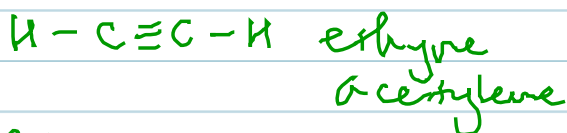
aniline



phenol



very reactive



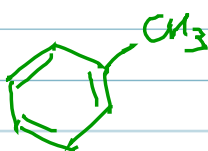
BENZENE + AROMATICS



benzene



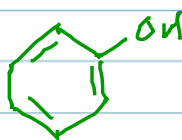
3 delocalized π bonds
 \rightarrow great stability
 low reactivity



toluene



aniline



phenol

OPTICAL ISOMERS

→ compounds with non-superimposable mirror images (right or left handed)

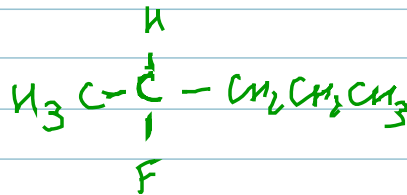
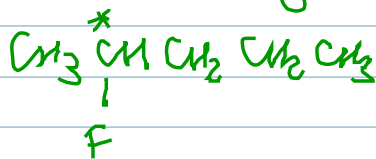
→ chemically similar
→ different biological activity

→ rotate polarized light differently

"chiral" compounds → occur in pairs
"enantiomers"

chiral carbon

↳ sp^3 w/ four different attached groups

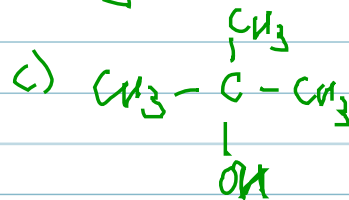


FUNCTIONAL GROUPS

A) ALCOHOLS $R-OH$ - weakly acidic
↳ hydroxyl group - no reaction w/ bases

nomenclature → change ending to "ol"

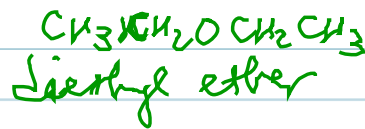
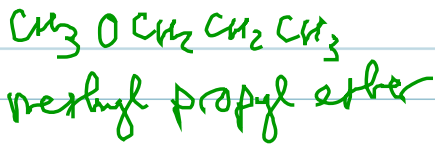
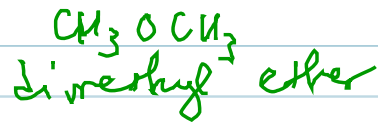
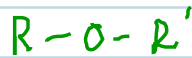
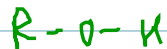
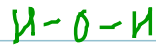
a) $\text{CH}_3\text{CH}_2\text{OH}$ ethanol
"primary" alcohol 1°



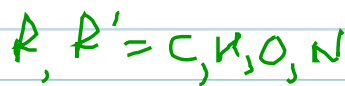
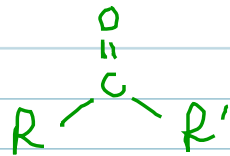
b) $\text{CH}_3\text{CH}(\text{OH})\text{CH}_3$ 2-propanol
OH secondary alcohol 2°
(isopropyl alcohol)

2-methyl-2-propanol
t-butyl alcohol
tertiary alcohol 3°

B) ETHERS



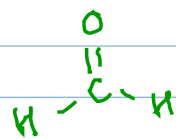
C) CARBONYL GROUP



I. ALDEHYDES → end of the chain

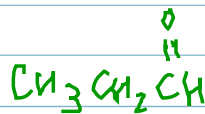
- one or both $R, R' = H$

"-al"



methanal

"formaldehyde"



propanal