

HYDROCARBONS

ALKANE

- HAVE ONLY SINGLE BONDS AND CONTAIN NO FUNCTIONAL GROUPS
- CONTAINS ONLY C-H AND C-C SINGLE BONDS
- NAME ENDING -ANE
- EX: CH₃CH₃ ETHANE
- GENERAL FORMULA C_nH_{2n+2}

ALKENE

- CONTAIN A CARBON-CARBON DOUBLE BOND FUNCTIONAL GROUP



- NAME ENDING -ENE
- EX: H₂C=CH₂ ETHYLENE
- GENERAL FORMULA C_nH_{2n}

ALKYNE

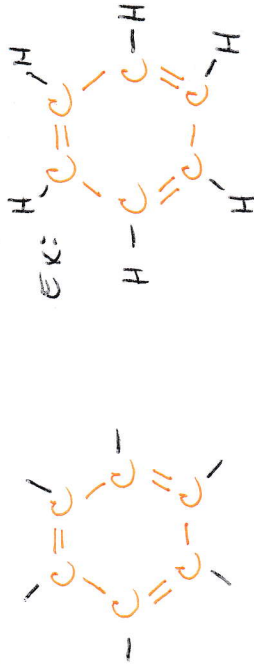
- CONTAIN A CARBON-CARBON TRIPLE BOND FUNCTIONAL GROUP



- NAME ENDING -YNE
- EX: H-C≡C-H ACETYLENE (ETHYNE)
- GENERAL FORMULA C_nH_{2n-2}

AROMATIC

- CONTAIN A SIX-MEMBERED RING OF CARBON ATOMS WITH THREE ALTERNATING DOUBLE BONDS



BENZENE

FUNCTIONAL GROUPS THAT CONTAIN ONLY SINGLE BONDS AND HAVE A CARBON ATOM BONDED TO AN ELECTRONEGATIVE ATOM

ALKYL HALIDE



- HAVE A CARBON-HALOGEN BOND
- EX: CH_3-Cl METHYL CHLORIDE

ALCOHOL



- HAVE A CARBON-OXYGEN BOND
- EX: CH_3-OH METHYL ALCOHOL (METHANOL)
- NAME ENDING -OL

ETHER



- HAVE TWO CARBONS BONDED TO THE SAME OXYGEN
- EX: $\text{CH}_3-\text{O}-\text{CH}_3$ DIMETHYL ETHER

AMINE

- HAVE A CARBON-NITROGEN BOND



- EX: CH_3-NH_2 METHYLAMINE
- NAME ENDING -AMINE

FUNCTIONAL GROUPS THAT CONTAIN A CARBON-OXYGEN DOUBLE BOND

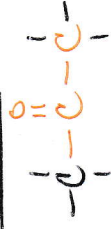
ALDEHYDE



• EX: $\text{CH}_3-\overset{\text{O}}{\parallel}{\text{C}}-\text{H}$ ACETALDEHYDE (ETHANAL)

• NAME ENDING -AL

KETONE



• EX: $\text{O}=\text{C}-\text{CH}_2-\text{C}-\text{CH}_3$

• NAME ENDING -ONE

• NAME ENDING -ONE

CARBOXYLIC ACID



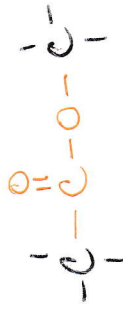
• EX: $\text{CH}_3-\overset{\text{O}}{\parallel}{\text{C}}-\text{OH}$ ACETIC ACID

• NAME ENDING -IC ACID

ANHYDRIDE

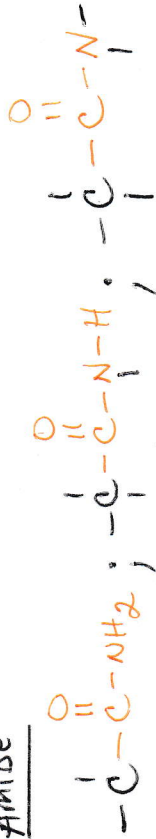


ESTER



• NAME ENDING -ATE

AMIDE



• NAME ENDING -AMIDE