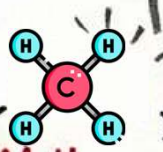
Types of Organic Chemicals

Alkanes

- Saturated Hydrocarbons
- Single C-C Bonds

$CH_4 \longrightarrow CH_4$



Methane

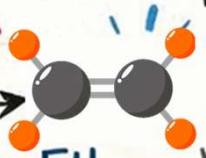
- General Formula: C_nH_{2n+2}

E.g. Ethane: C_2H_6

Alkenes

- Unsaturated Hydrocarbons
- C=C Double Bonds

$C{=}C{=}C{=}C \longrightarrow$



Ethene

- General Formula: C_nH_{2n}
- More Reactive

End in -ene

Alcohols

- Contain the –OH group
- General Formula: $C_nH_{2n+1}OH$

E.g Propanol: C_3H_7OH

End in -ol

Carboxylic Acids

- Contain the –COOH group
- General Formula: $C_nH_{2n+1}COOH$
- E.g. Ethanoic Acid: CH_3COOH

End in -oic acid

Esters

- Formed from Alcohol + Acid
- Functional Group: –COO–

Have Sweet Smells!

Names end in -oate

Ketones & Aldehydes

Ketones

- Contain C=O in the middle

E.g. Propanone

Aldehydes

- Contain CHO group at the end

E.g. Ethanal

Both end in -al or -one