

# Organic Chemistry

## *Major Topics*

- Drawing / Naming Compounds



- Isomers



- Reactions



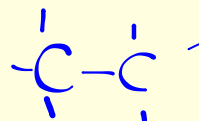
## **You Should Know...**

- General formulas of alkanes, alkenes, alkynes, and cyclic compounds
- Aromatic compounds
- Pi bonds
- Characteristics of organic compounds

## Families of Organic Compounds (p.294)

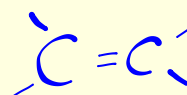
Alkanes

ethane



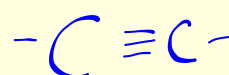
Alkenes

ethene

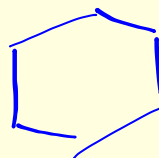


Alkynes

ethyne

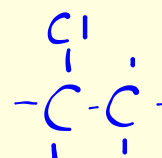
Aromatics and  
Cyclic Compounds

cyclohexane



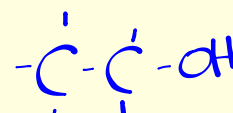
Organic Halides

chloroethane



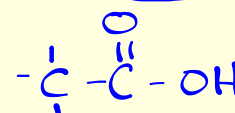
Alcohols

ethanol



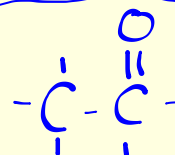
Carboxylic Acids

ethanoic acid



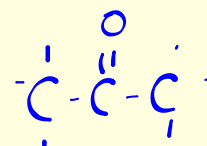
Aldehydes

ethanal

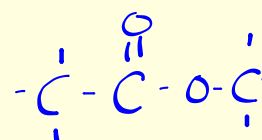


Ketones

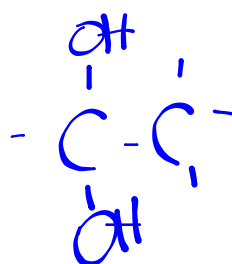
propanone



Esters

methyl  
ethanoate

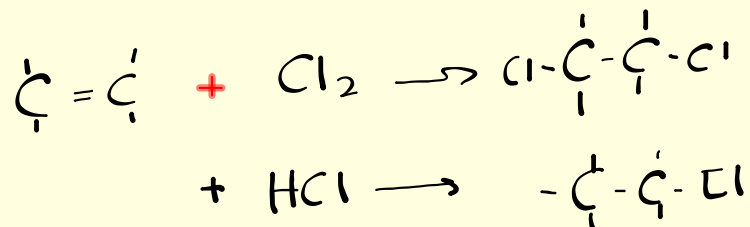
1,1-ethanediol



## Reactions

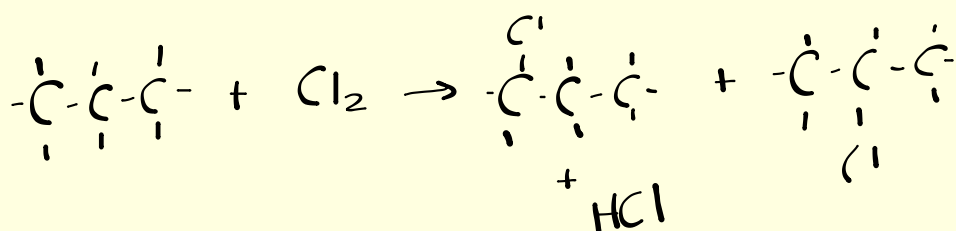
### Addition

alkene/alkyne + H<sub>2</sub> or HX or X<sub>2</sub>



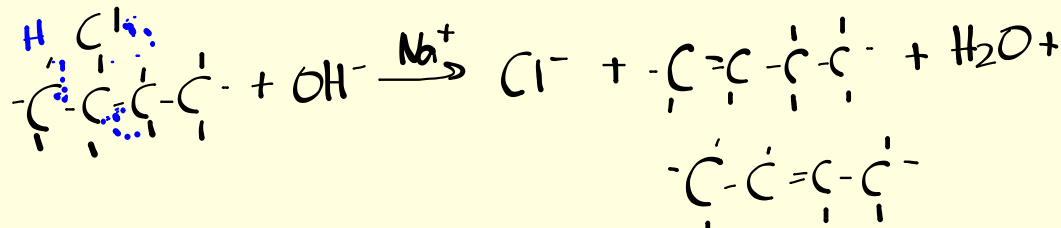
### Substitution

alkane/aromatic + halogen



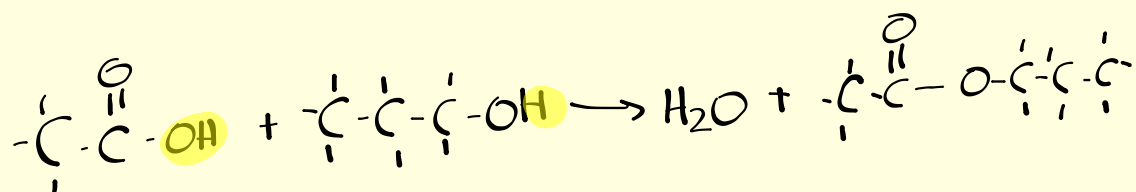
### Elimination

alkyl halide + OH<sup>-</sup>  
alcohol + acid



### Esterification

carboxylic acid + alcohol



### Cracking

### Formation