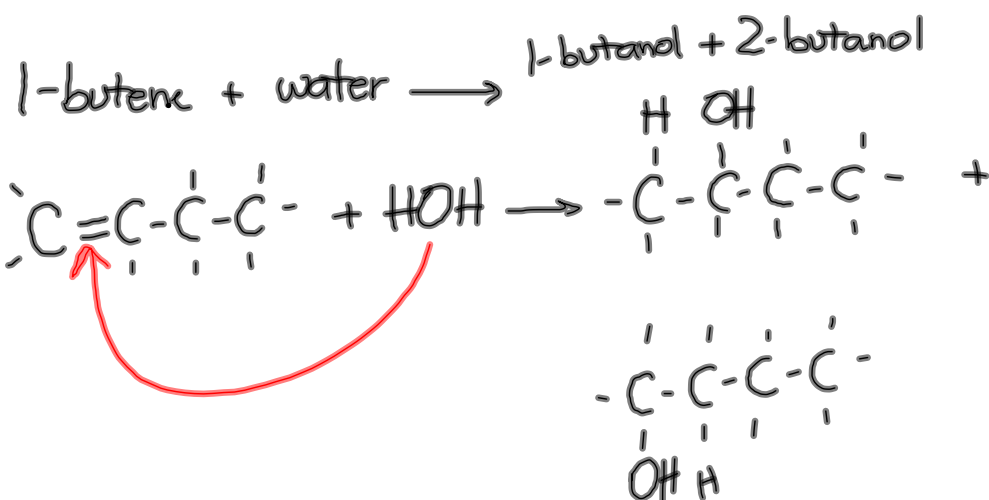
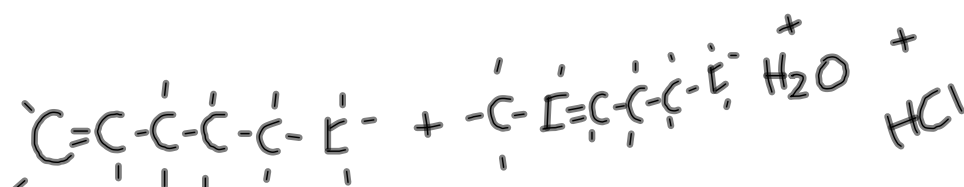
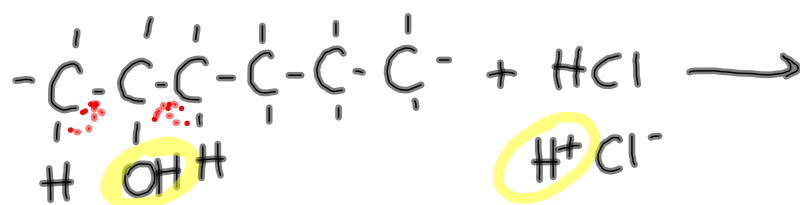
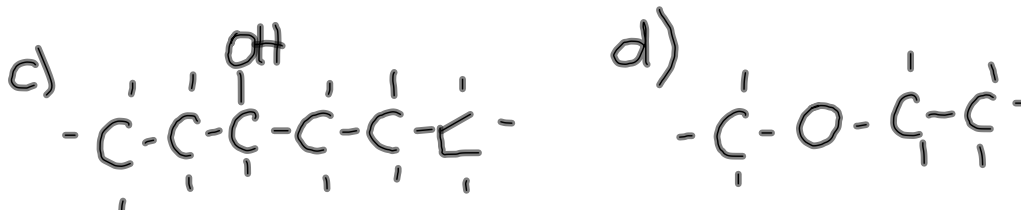
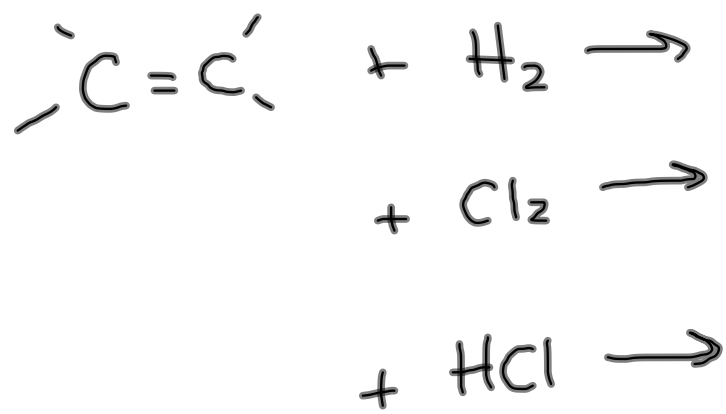


Alcohols and Ethers Worksheet

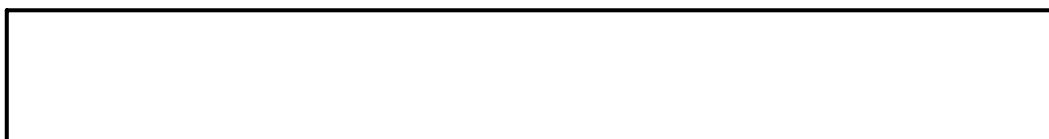




Carboxylic Acids



Carboxylic Acid - contain a carbonyl and a hydroxyl functional group together (**carboxyl group**)

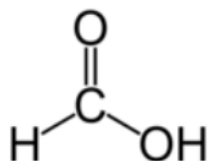


Naming

- carboxylic acids are named by replacing the "e" in the alkane name by oic and adding acid.

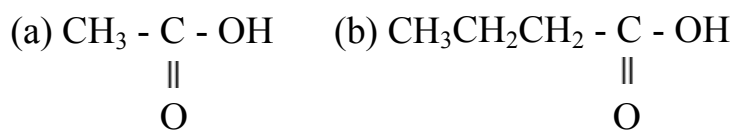
- compounds with more than one carboxyl group are usually identified with a common name.

Ex.



methanoic acid

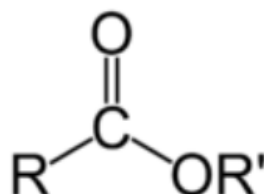
SAMPLE PROBLEM - Name the following:



(c) propanoic acid (d) pentanoic acid

Esters

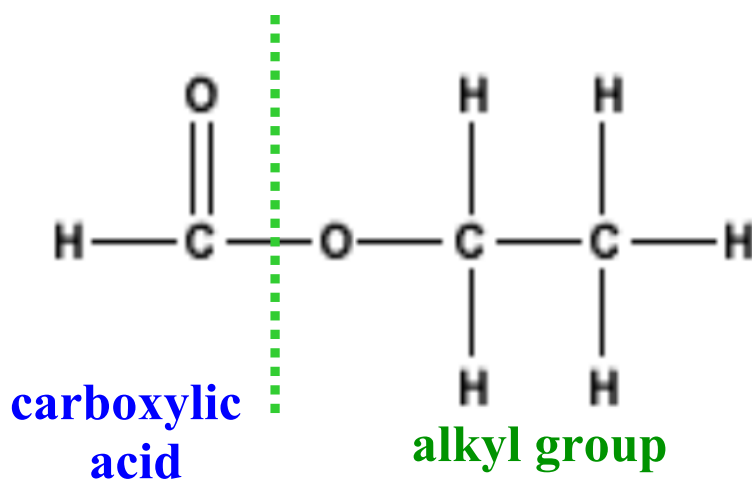
General Formula for ester:



-the functional group is similar to the carboxylic acid functional group but with the H of the carboxyl group replaced with a hydrocarbon branch (R)

Naming esters - two parts

- I. name the alkyl group in the alcohol used in the esterification.
- II. name of the acid but change the " oic acid " to oate.

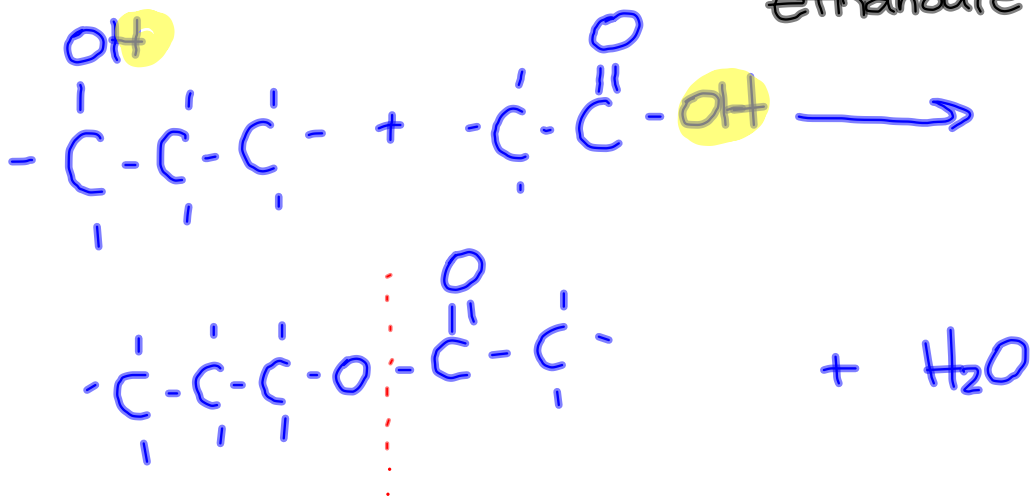


ethyl methanoate

Uses of Esters

Esters are often used as adhesives, perfumes, flavourings and painkillers.

1-propanol + ethanoic acid \rightarrow propyl ethanoate + water



Worksheet 48
