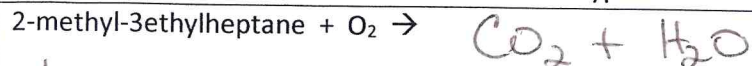


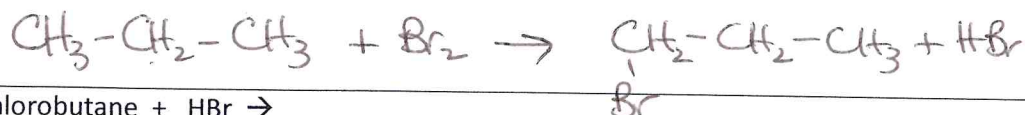
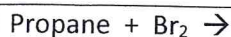
In-Class Assignment: Preparation and Reactions of Organic Compounds

1. Reactions with alkanes, cycloalkanes and benzene

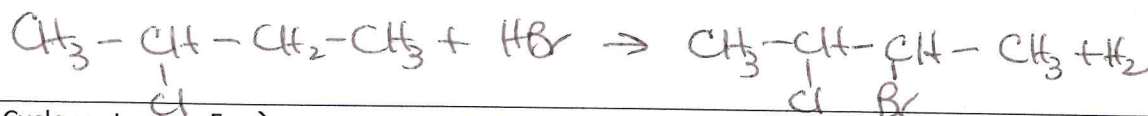
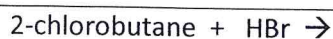
Complete the following reactions and name the type of each reaction.



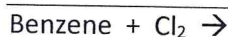
not
bal.



* Br can go on
any of the 3 C's

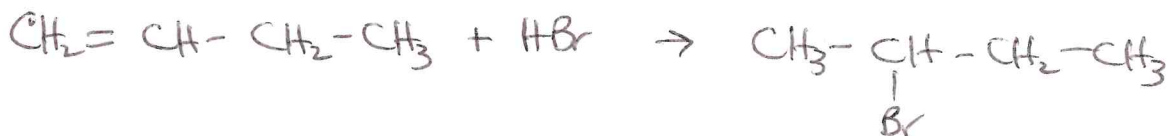
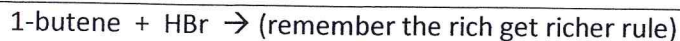
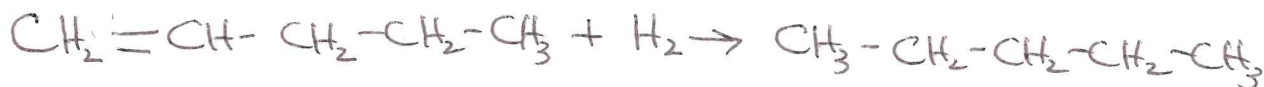
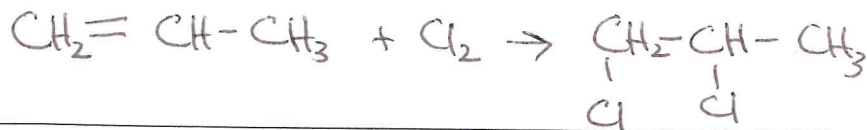
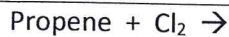


* Br can go on
any of the C's.

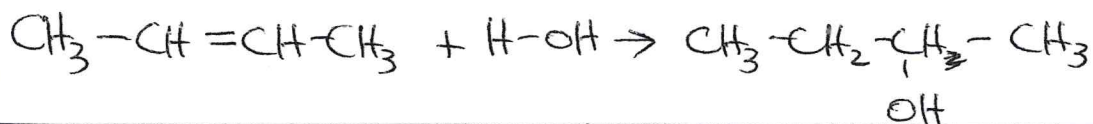


2. Reactions with alkenes and alkynes.

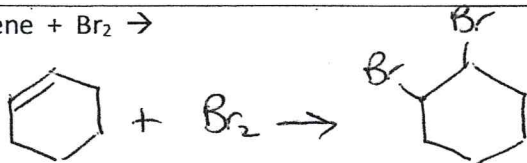
Complete the following reactions and name the type of each reaction.



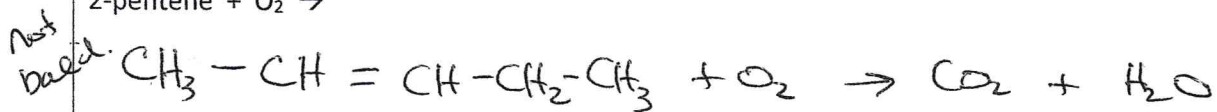
2-butene + H₂O →



Cyclohexene + Br₂ →



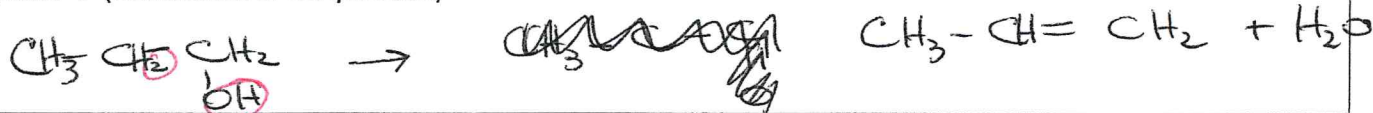
2-pentene + O₂ →



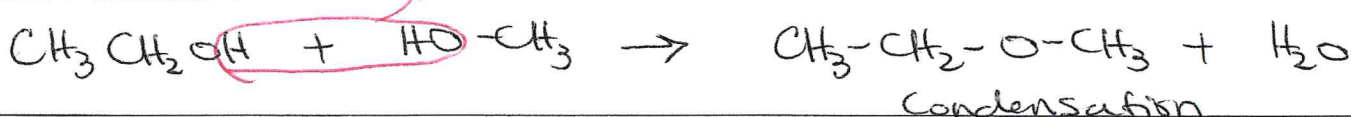
3. Reactions and preparations of alcohols.

Complete the following reactions and name the type of each reaction.

1-propanol → (elimination or dehydration)



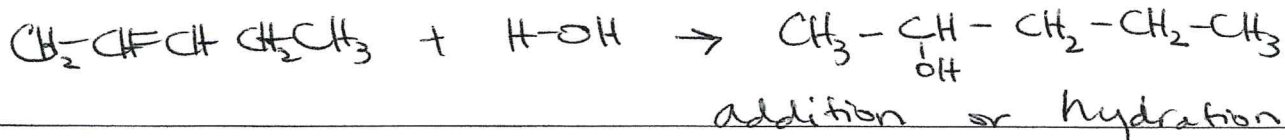
Ethanol + methanol →



1-butanol + O₂ → CO₂ + H₂O

combustion.

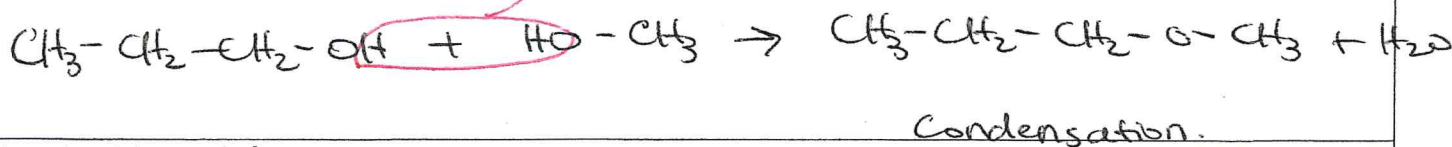
2-pentene + H₂O →



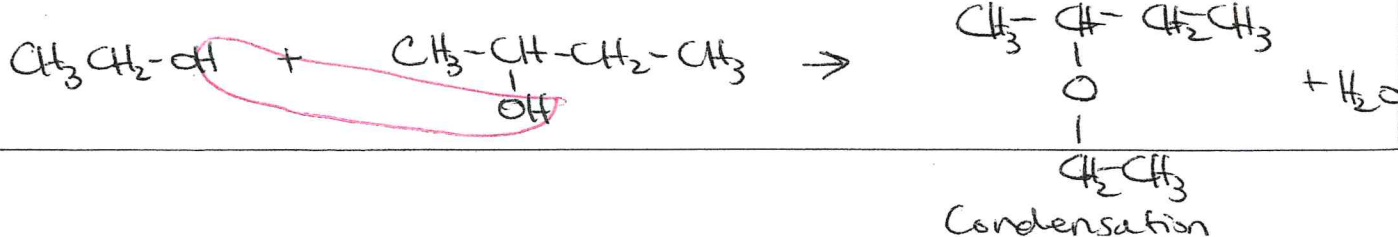
4. Preparation of ethers

Complete the following reactions and name the type of each reaction.

1-propanol + methanol →



Ethanol + 2-butanol →



5. Reactions and preparation of aldehydes and ketones.

Complete the following reactions and name the type of each reaction.

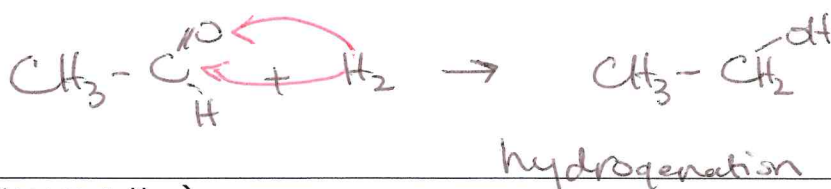
Ethanol + (O) →



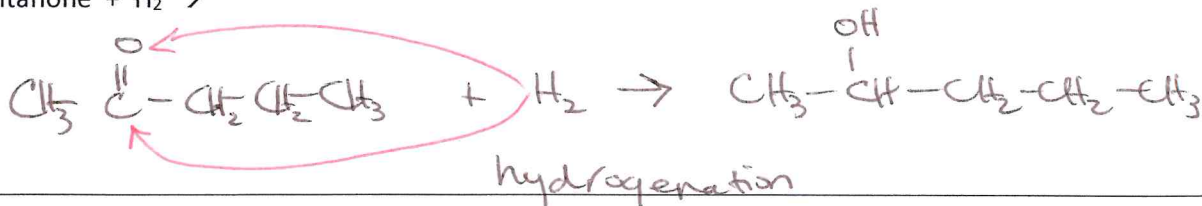
2-butanol + (O) →



Ethanal + H₂ →



2-pentanone + H₂ →



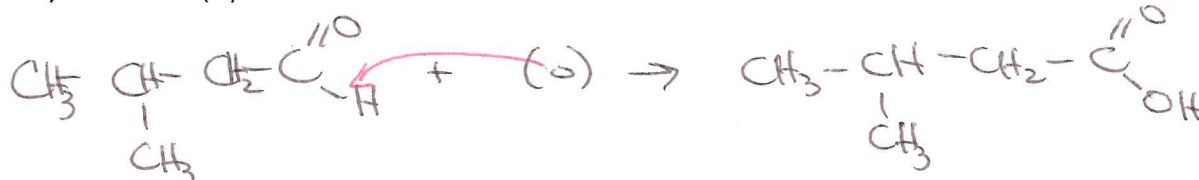
6. Reactions and preparation of carboxylic acid

Complete the following reactions and name the type of each reaction.

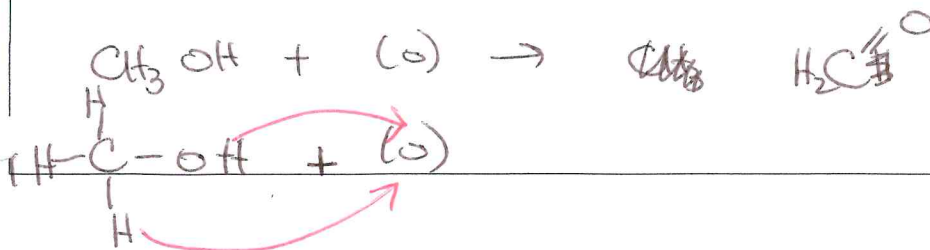
Propanal + (O) →



3-methylbutanal + (O) →



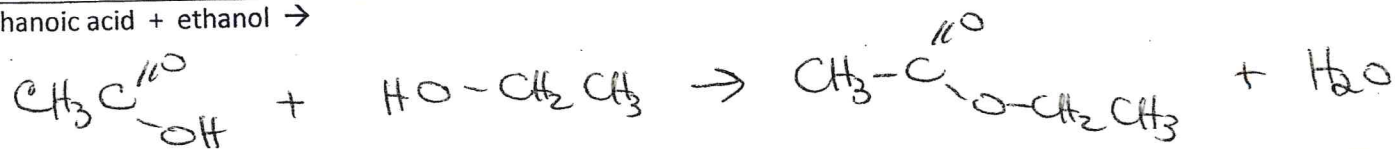
Methanol + (O) →



7. Preparation of Esters

Complete the following reactions and name the type of each reaction.

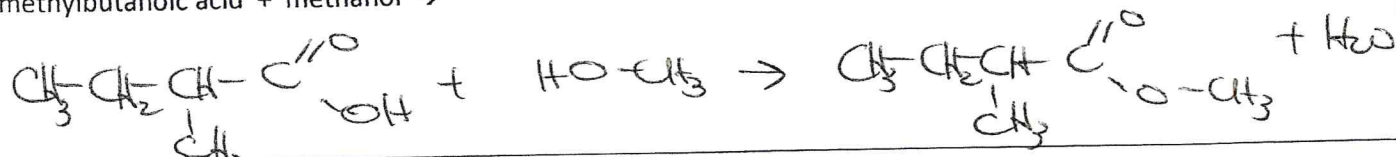
Ethanoic acid + ethanol $\rightarrow$



Propanoic acid + methanol $\rightarrow$



2-methylbutanoic acid + methanol $\rightarrow$



Methanoic acid + 1-propanol $\rightarrow$

