

Unit 1 - Organic Chemistry

- Characteristics of organic compounds
- Identifying and drawing isomers
- General formulas of alkanes, alkenes, alkynes, and cyclic compounds
- Sigma vs. Pi bonding
- Draw and name hydrocarbons that have alkyl substituents
- Aromatic Compounds
- Name and draw the following hydrocarbon derivatives:
 - ⇒ Organic Halides
 - ⇒ Alcohols
 - ⇒ Ethers
 - ⇒ Aldehydes
 - ⇒ Ketones
 - ⇒ Carboxylic Acids
 - ⇒ Esters
- Reactions



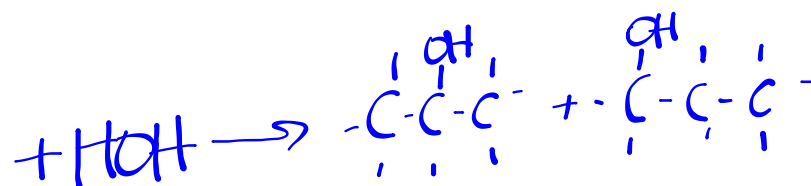
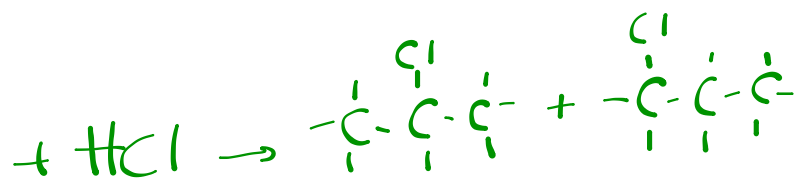
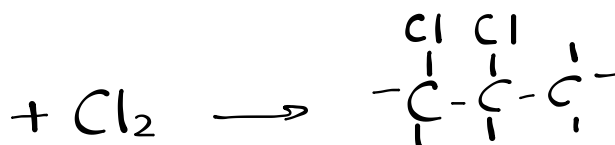
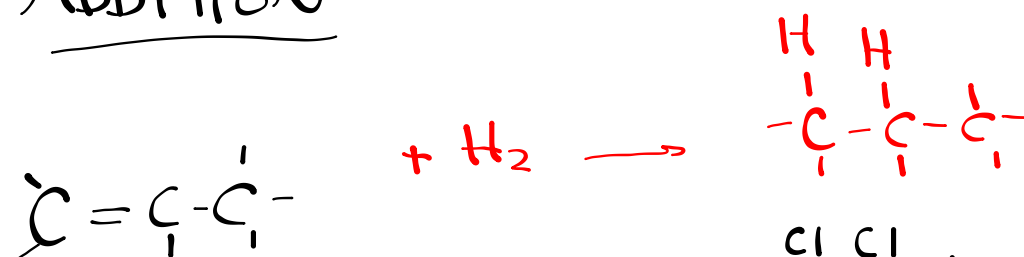
Reactions

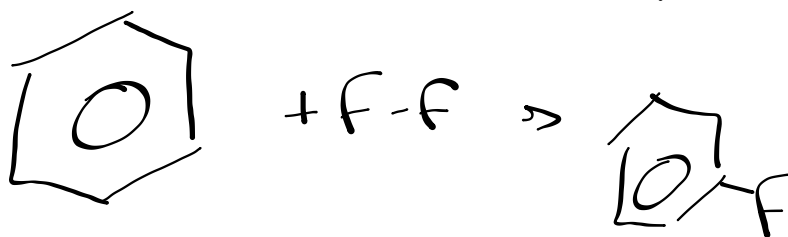
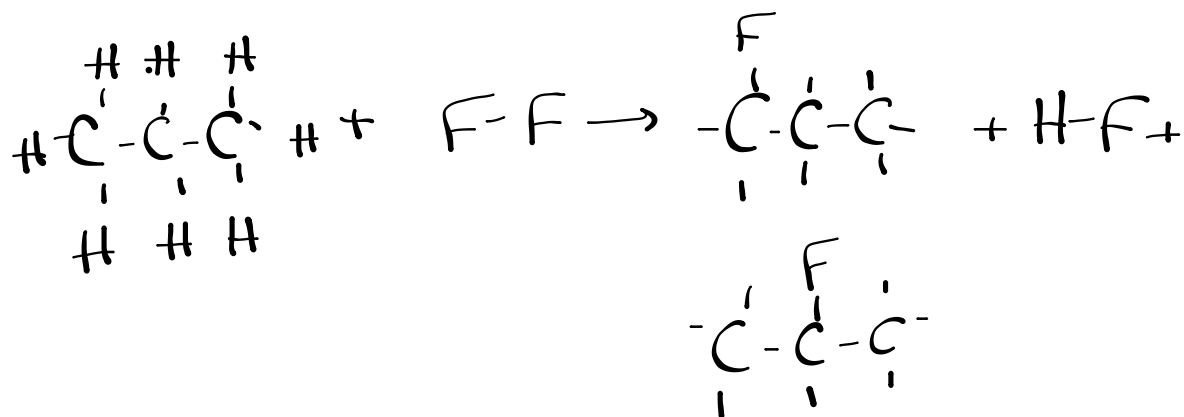
- Cracking (*break into pieces*)
- Reforming (*two small \longrightarrow one big*)
- Combustion (*burned, common oxides*)
- Addition (*breaking a pi bond(s)*)
- Substitution (*break a C-H bond and
replace with halide*)
- Elimination (*adding a pi bond*)
- Esterification (*alcohol + carboxylic acid*)
(*carboxylic acid + alcohol \longrightarrow ester*)

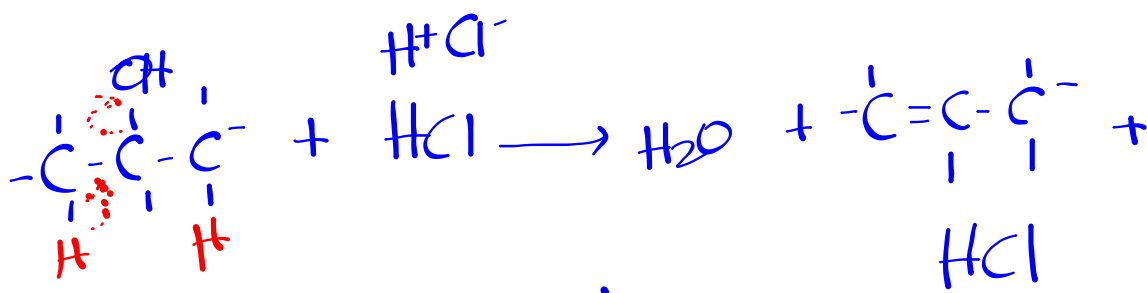
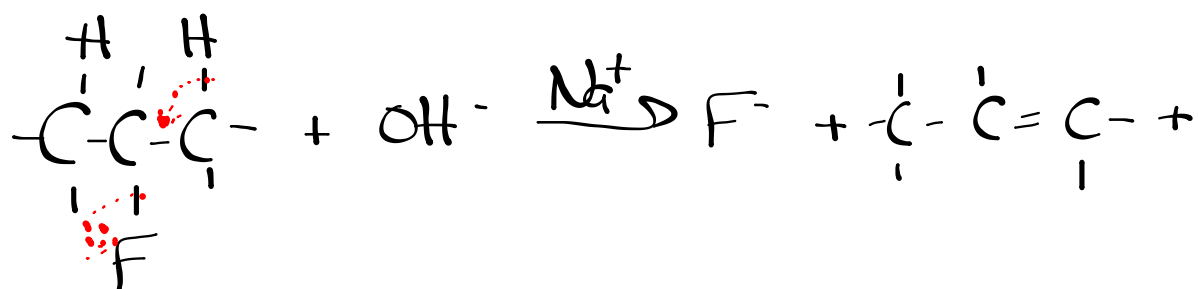
p. 719-720 #37-46, 49, 50, 54-56, 59-61,
63, 64

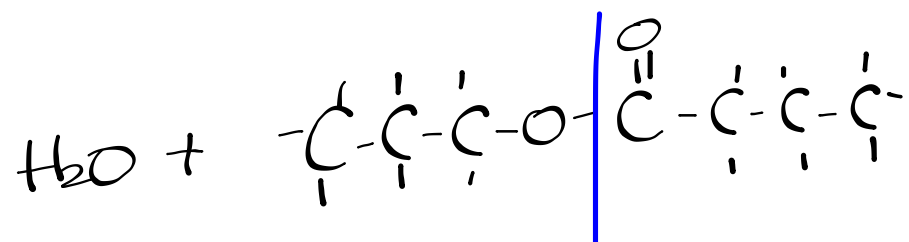
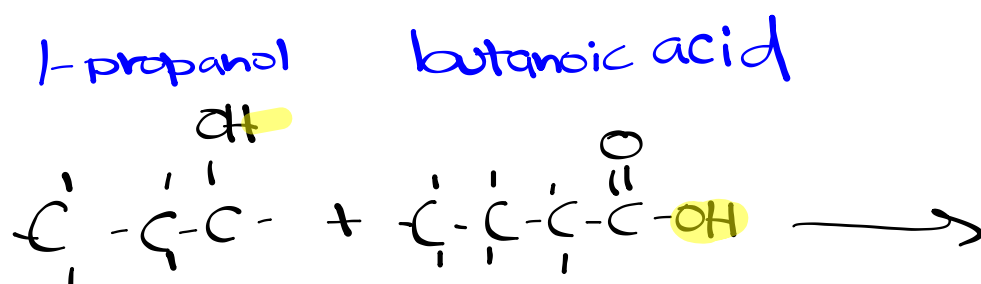
p. 757-758 #26-35, 38, 40, 43-45

Reactions Worksheet

ADDITION

SUBSTITUTION

ELIMINATION



propyl butanoate

methylbutane + $O_2 \rightarrow$ carbon dioxide + water vapour

