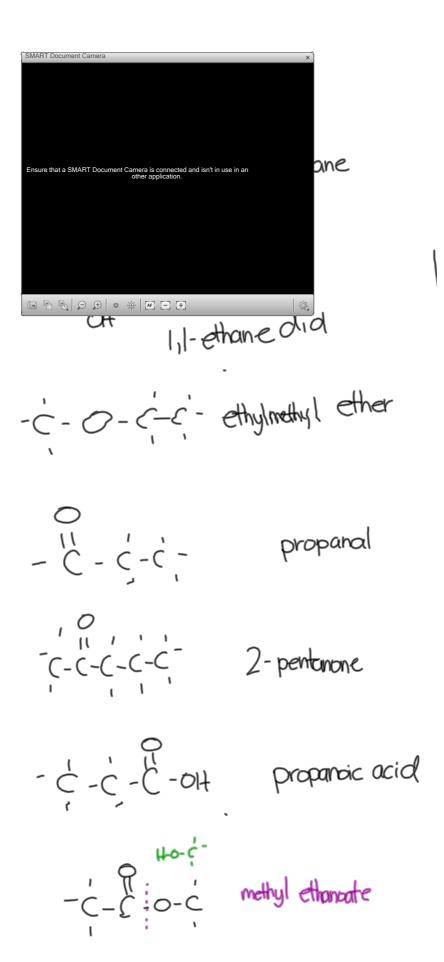
## Lab

## **Unit 1 - Organic Chemistry**

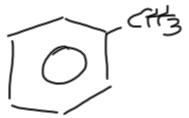
- Characteristics of organic compounds
- Identifying and drawing isomers
- General formulas of alkanes, alkenes, alkynes, and cyclic compounds
- Sigma vs. Pi bonding
- Draw and name hydrocarbons that have alkyl substituents
- Aromatic Compounds
- Name and draw the following hydrocarbon derivatives:
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



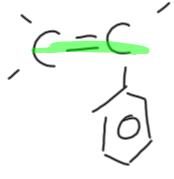
$$-\frac{1}{1}$$

ethane

ethyne

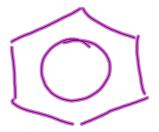


methyl benzene



phony / ethene





Cotto -> CnHzn-z

triple bond

CnHzn+z

Cycloalkene

gr

- diene

## Reactions

- Cracking (break into pieces)
- Reforming (two small ——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

 $(carboxylic\ acid + alcohol \longrightarrow ester)$ 

