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 ——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

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

$$H - C = C - H + Br Br -> H - C - C - H$$
(excess)

Br Br

I

I

Br Br

Br

Br

Br

Reactions Worksheet

EUMWATION