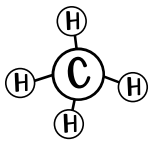
Name: _____

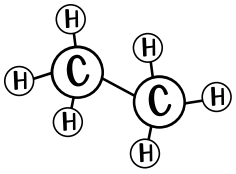
Organic Molecules

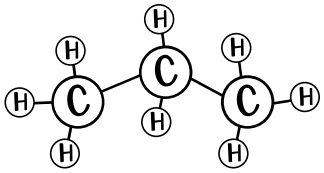
Examples of hydrocarbons



Methane

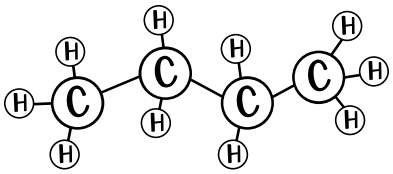
Ethane





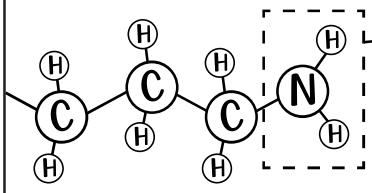
Propane

Butane

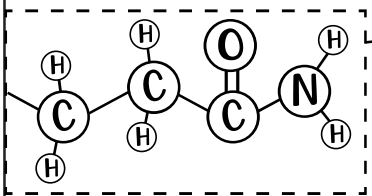


- Organic molecules are made of carbon chains with hydrogens called _____.
- These carbon-hydrogen chains, without any oxygen or nitrogen atoms, are _____ and do not dissolve well in water.
- Carbon-hydrogen chains can have other groups of atoms attached to them. These groups are called _____.
- With functional groups, these molecules can have different properties and totally different functions.
- If they have many oxygens and nitrogens attached, they usually dissolve better in _____

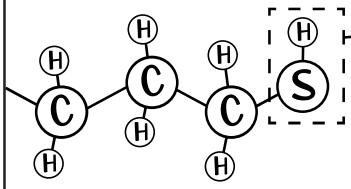
Functional Groups



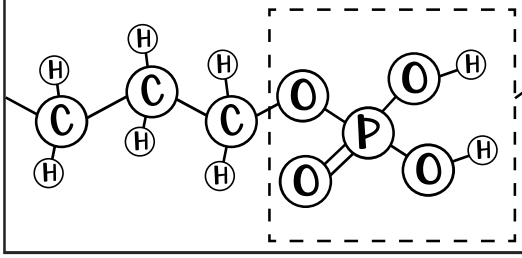
Amine Group



Amide

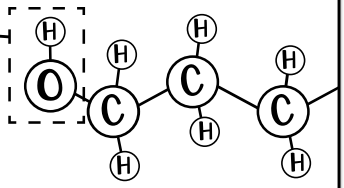


Sulfhydryl Group

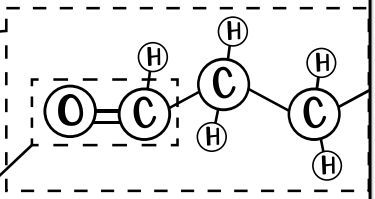


Phosphate Group

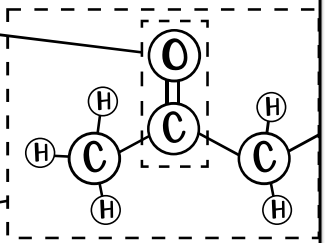
Hydroxyl Group



Aldehyde

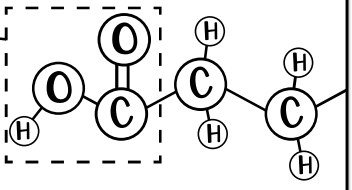


Carbonyl Group



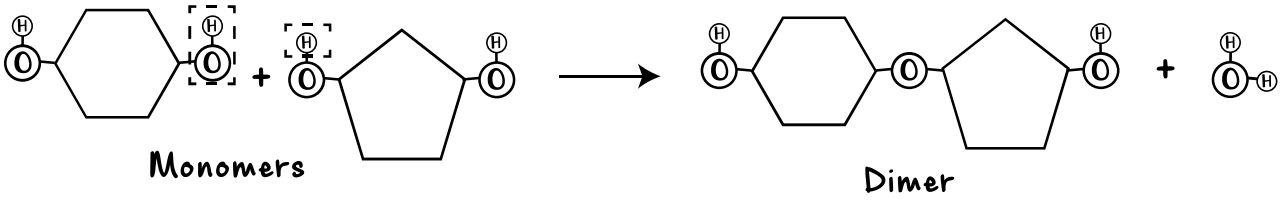
Ketone

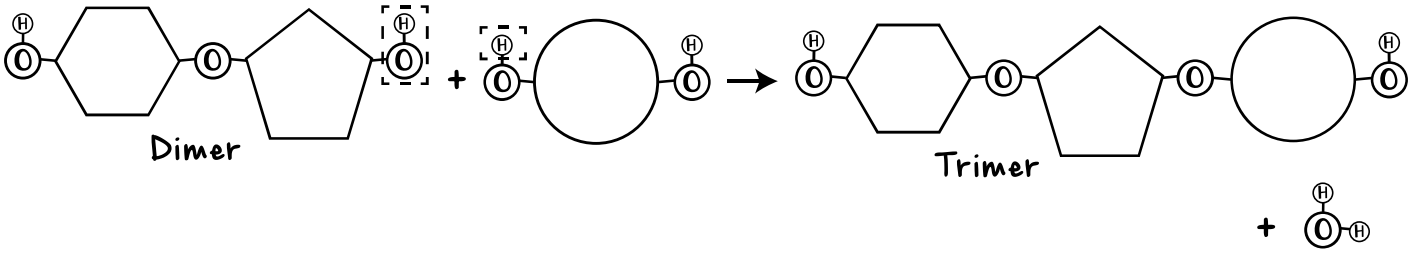
Carboxylic Acid Group



Dehydration Synthesis

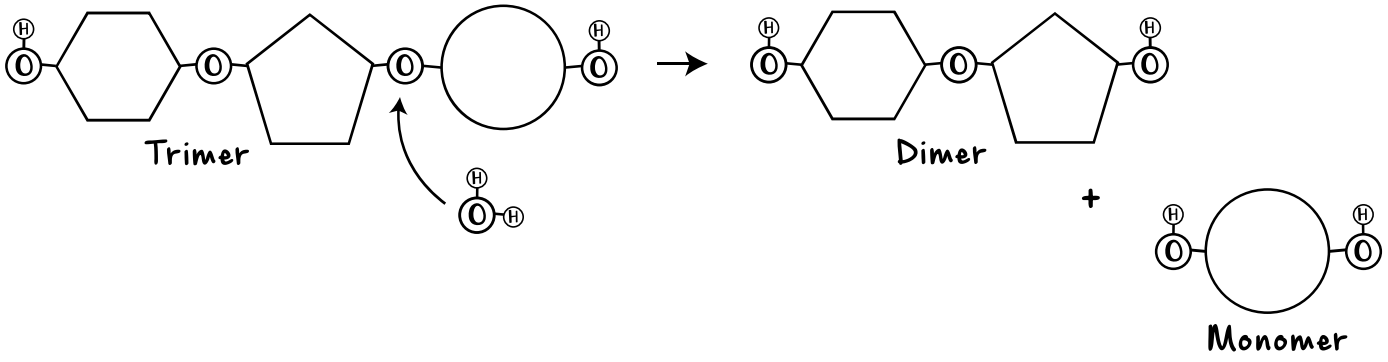
Name: _____





- This reaction is a very common reaction used to connect _____ (small hydrocarbon molecules) to build a dimer, trimer, or _____ (longer than 3 monomers)
- During the reaction, an _____ from one molecule and a_____ from another molecule break off and form water.
- The bond formed in between the two molecules has an _____.

Hydrolysis



- Hydrolysis is the reaction that occurs when one monomer is broken off a _____.
- One _____ is used up in this reaction. It breaks apart and an _____ goes to one monomer, and the other _____ goes to the rest of the polymer chain left after the _____ breaks off.