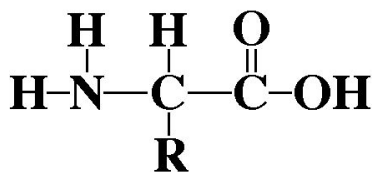


Chp 16: Organic Chem: Lect 3: Drawing Hydrocarbons 1 pt ec printing

<p>Alkanes: Straight Chain Hydrocarbons Draw Methane:</p> <p>Draw Ethane:</p>	<p>Alkanes: Straight Chain Hydrocarbons Draw Propane:</p> <p>Draw Butane:</p>	<p>Alcohols</p> <p>General Formula:</p> <p>R-OH</p> <p>Alcohols: are Straight chain hydrocarbons with an -OH</p>
<p>Draw the Alcohols: Draw Methanol:</p> <p>Draw Ethanol:</p>	<p>Draw the Alcohols: Draw Propanol:</p> <p>Draw 2 Butanol: Remember the 2 is an address where you will find the OH</p>	<p>Carboxylic Acids</p> <p>Characterized by the Carboxyl Group</p> <p>O -C-OH</p> <p>Carboxylic Acids: are Straight Chain Hydrocarbons with a -COOH</p>
<p>Draw the Carboxylic Acids: Draw Methanoic Acid:</p> <p>Draw Ethanoic Acid:</p>	<p>Draw the Carboxylic Acids: Draw Propanoic Acid:</p> <p>Draw Butanoic Acid:</p>	<p>Amines</p> <p>Characterized by Nitrogen joined to at least one alkyl group.</p> <p>-NH₂</p> <p>Amino Group</p> <p>Amines are Straight Chain Hydrocarbons with a -NH₂</p>

Amino Acid Structure



Amino Acids are
Straight Chain Hydrocarbons
with an Amine: $-\text{NH}_2$ and
an Amino Acid: $-\text{COOH}$

Double & Triple Bonds

Double Bonds end in "ene"
Triple Bonds end in "yne"

Double & Triple Bonds

Ethene:

Ethyne:

2-Butene:

n-butyne

Draw These:

Ethane:

Ethanol:

Ethanoic Acid:

Ethyl Amine:

Draw These:

Propane (3 carbons):

Propene:

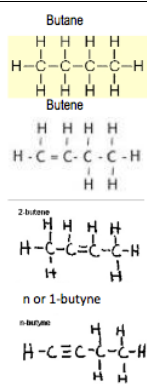
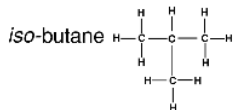
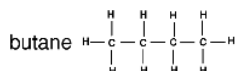
Propyne:

Propanol:

Propanoic Acid:

Propylamine:

Isomers:
Same Formula/
Different Structure



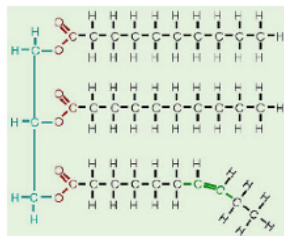
Draw These:

Pentane (5 carbons)

2-isopentane

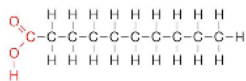
Pentanol

Lipids



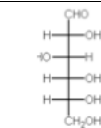
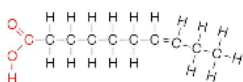
Saturated fat (basic lipid structure)

Saturated

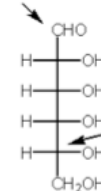


Unsaturated fat (double bond present)

Unsaturated

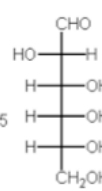


no. 1

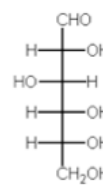


D-Allose

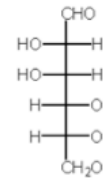
Carbohydrates:
This is the basic Structure



D-Altrose



D-Glucose



D-mannose

Functional Group Review:

Carboxyl basic Structure

Alcohol Basic Structure

Carboxylic Acid Structure

Amine Basic Structure

Amino Acid Structure