

Organic Chem Problem Set #1

0-1

Name each molecule, or draw them if the name is provided.

H atoms don't have to be drawn.

Draw pentane

Draw 2butene

Draw 3heptyne

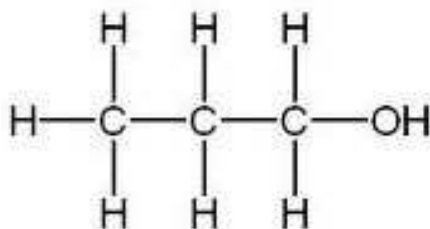
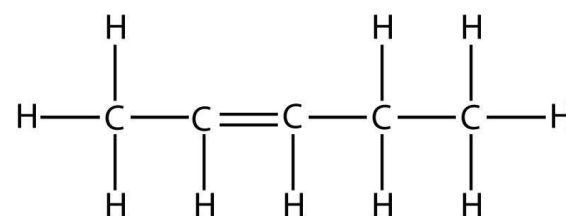
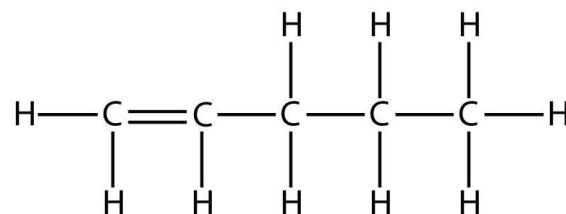
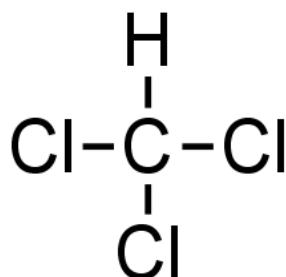
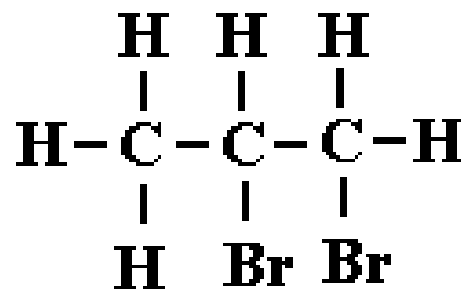
Draw 2bromo,1,1 dichloropropane

Draw 3,4dichloro, 1pentyne

Draw fluoroethyne

Draw 1,1,1 tribromo,2,8 dichoro, 3,9,10 triflouro, 5 iodo-2decene

Name these 5



Organic Chem Problem Set #2



Name each molecule, or draw them if the name is provided.

H atoms don't have to be drawn.

Draw ethyl propyl ether

Draw butanal

Draw 2propanol

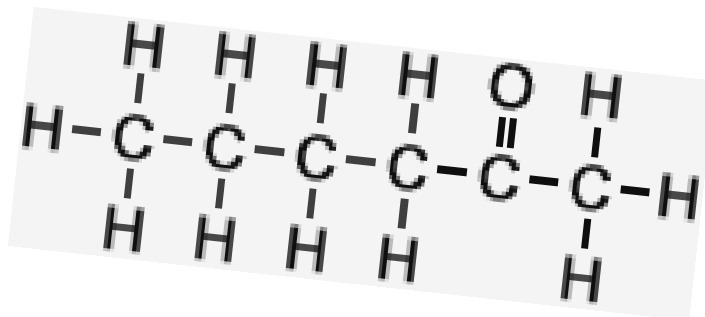
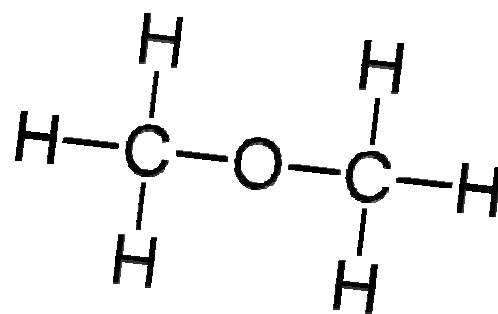
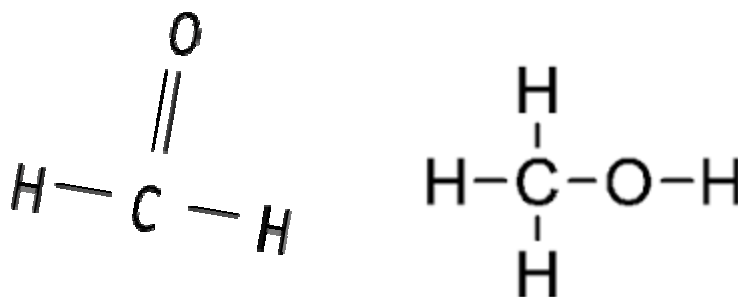
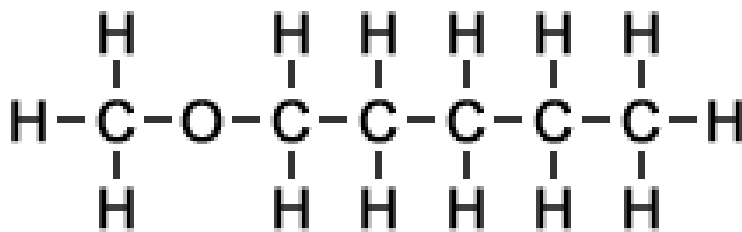
Draw 2butanone

Draw diethyl ether

Draw ethanal

Draw 3hexanol

Circle the functional groups and name these 5



Draw 3pentanone

Organic Chem Problem Set #3

O-3

Name each molecule, or draw them if the name is provided.

H atoms don't have to be drawn.

Draw methyl hexanoate (banana oil)

Draw ethanoic acid (but put the functional group on the left side!)

Draw propyl butanoate

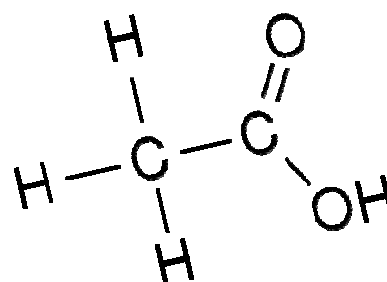
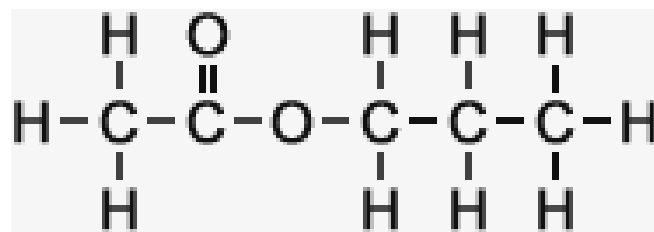
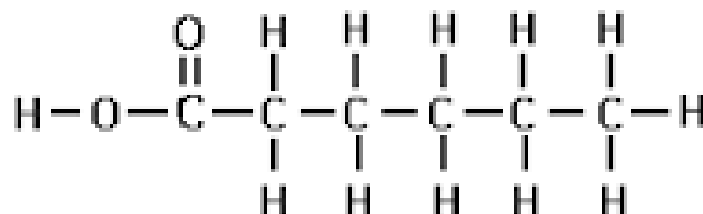
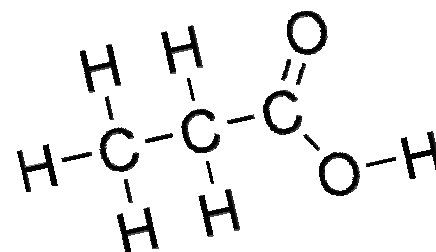
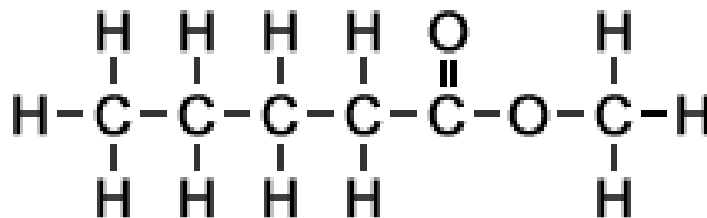
Draw methanoic acid

Draw ethyl ethanoate

Draw methyl methanoate (put the "oxygen tail to the left!")

Draw butyl ethyl ether

Circle the functional groups and name these



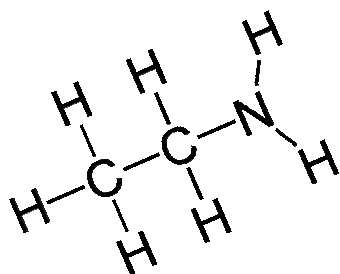
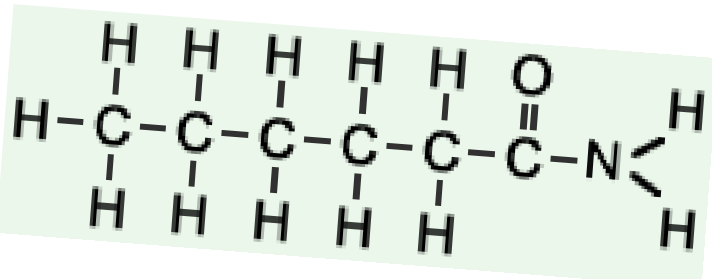
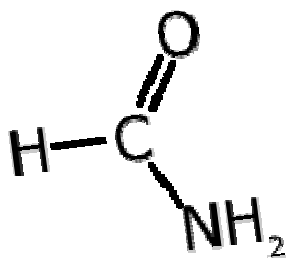
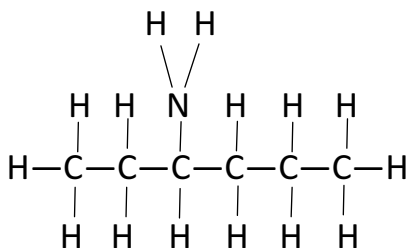
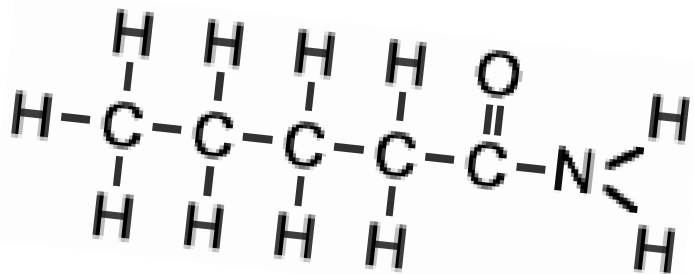
Organic Chem Problem Set #4

O-4

Name each molecule, or draw them if the name is provided.

H atoms don't have to be drawn.

Circle the functional groups and name these



Draw 2 propanamine

Draw 1 propanamine

Draw propanamide

Draw 3 pentanone

Draw ethanamine

Draw ethyl butanoate

Draw ethanamide

Organic Chem Problem Set #5

O-5

Draw out these reactions.

H atoms don't have to be drawn.

Show the structural diagrams of the molecules propyne + bromine in an addition reaction, and name the big product

Show the structural diagrams of the molecules propane + chlorine in a substitution reaction (name the big product)

Show the esterification reaction between methanol and butanoic acid (name the big and small products)

Show the substitution reaction between butane and bromine (name the big product)

Show the esterification reaction between propanol and methanoic acid (name the big products properly)

Make up an esterification reaction, name both reactants and both products properly (not one from above)

Show the substitution reaction between IODINE and ethane (name the bigger product)

Show the addition reaction between 2butyne and fluorine (name the product)

Organic Chem Problem Set #6

O-6

Change these condensed structural formulas into diagrams, or change these diagrams into condensed structural formulas. H atoms don't have to be drawn.

| Name | DRAW all MOLECULES here |
|---|-------------------------|
| CH ₃ CH ₂ CH ₂ CHCHCH ₂ CH ₂ CH ₃ | |
| CH ₃ (CH ₂) ₃ CH ₃ | |
| CH ₃ CH ₂ CH ₂ CH ₂ COOCH ₂ CH ₃ | |
| CH ₃ CH ₂ COOH | |
| CH ₃ CH ₂ CH ₂ CH ₂ CH ₂ CH ₂ NH ₂ | |
| CH ₃ COCH ₂ CH ₂ CH ₂ CH ₃ | |
| CH ₃ OCH ₂ CH ₃ | |
| CH ₃ CH ₂ CH ₂ CH ₃ CHO | |
| CH ₃ CHOCH ₂ CH ₂ CH ₃ | |
| CH ₃ CH ₂ CHN ₂ CH ₂ CH ₂ CH ₃ | |