# Name or Draw the Following Organic Compounds:

#### Alkanes:

$$H_3C$$
 —  $CH_3$ 

hexane

3-methylhexane

CH<sub>3</sub>

#### butane

# 2-methylpropane

# Alkenes and Alkynes:

#### but-2-ene

# 3-methylpenta-1,3-diene

## 6-methylhept-3-yne

#### pent-2-yne

## 3,4-dimethylhex-1-yne

# Cyclic Hydrocarbons:

cyclopentane;



1,2-dimethylcyclohexane;

1-ethyl-3-methylcyclopentane

3-propylcyclohex-1-ene;



# Carboxylic Acids:

## 3-methyl-2-propylhexanoic acid

## 3-chlorobutanoic acid

$$\mathsf{H_3C} \underbrace{\hspace{1cm} \overset{\mathsf{CH_3}}{\overset{\mathsf{CH_3}}}{\overset{\mathsf{CH_3}}{\overset{\mathsf{CH_3}}{\overset{\mathsf{CH_3}}{\overset{\mathsf{CH_3}}{\overset{\mathsf{CH_3}}{\overset{\mathsf{CH_3}}{\overset{\mathsf{CH_3}}{\overset{\mathsf{CH_3}}{\overset{\mathsf{CH_3}}{\overset{\mathsf{CH_3}}}{\overset{\mathsf{CH_3}}{\overset{\mathsf{CH_3}}{\overset{\mathsf{CH_3}}{\overset{\mathsf{CH_3}}{\overset{\mathsf{CH_3}}{\overset{\mathsf{CH_3}}}{\overset{\mathsf{CH_3}}{\overset{\mathsf{CH_3}}{\overset{\mathsf{CH_3}}}{\overset{\mathsf{C}}{\overset{\mathsf{C}}}{\overset{\mathsf{C}}}{\overset{\mathsf{C}}}{\overset{\mathsf{C}}}{\overset{\mathsf{C}}}}{\overset{\mathsf{C}}}{\overset{\mathsf{C}}}{\overset{\mathsf{C}}}}{\overset{\mathsf{C}}}{\overset{\mathsf{C}}}{\overset{\mathsf{C}}}}{\overset{\mathsf{C}}}}{\overset{\mathsf{C}}}}{\overset{\mathsf{C}}}{\overset{\mathsf{C}}}}{\overset{\mathsf{C}}}}{\overset{\mathsf{C}}}}{\overset{\mathsf{C}}}{\overset{\mathsf{C}}}}{\overset{\mathsf{C}}}}{\overset{\mathsf{C}}}}{\overset{\mathsf{C}}}{\overset{\mathsf{C}}}}{\overset{C}}}}{\overset{\mathsf{C}}}}{\overset{\mathsf{C}}}}{\overset{\mathsf{C}}}}{\overset{\mathsf{C}}}}{\overset{\mathsf{C}}}}{\overset{\mathsf{C}}}}{\overset{\mathsf{C}}}}{\overset{\mathsf{C}}}{\overset{\mathsf{C}}}}{\overset{\mathsf{C}}}}{\overset{\mathsf{C}}}}{\overset{\mathsf{C}}}}{\overset{C}}}{\overset{C}}{\overset{C}}}{\overset{C}}{\overset{C}}}{\overset{C}}}{\overset{C}}{\overset{C}}}{\overset{C}}{\overset{C}}}{\overset{C}}}{\overset{C}}{\overset{C}}}{\overset{C}}{\overset{C}}}{\overset{C}}}{\overset{C}}{\overset{C}}}{\overset{C}}{\overset{C}}}{\overset{C}}}{\overset{C}}{\overset{C}}}{\overset{C}}{\overset{C}}}{\overset{C}}}{\overset{C}}}{\overset{C}}{\overset{C}}{\overset{C}$$

## 4-iodoheptanoic acid

## Alcohols:

ethanol;

3-methylpentan-2-ol;

butan-1-ol;

4-ethylheptane-2,5-diol;

3-methylbutan-2-ol;

# Ketones and Aldehydes:

#### 3-hydroxypentanal

#### 3-hydroxybutanal;

## ethanal

#### 2-methylpentanal;

## Amides and Esters

N-propylpropanamide;

methyl butanoate;

N-methylbutanamide

N,N-dimethylpropanamide;

N-pentylbutanamide;

H<sub>2</sub>N---CH<sub>3</sub>

ethyl(methyl)propylamine;

$$H_3C$$
 $H_3C$ 
 $H_3C$ 

methyldipropylamine

propan-1-amine

3,4-dimethylpentan-1-amine

#### Haloalkanes and ethers:

$$H_3C$$
 $O$ 
 $CH_3$ 
 $H_3C$ 
 $O$ 
 $CH_3$ 
 $CH_3$ 

$$CI$$
 $CH_3$ 
 $CH_3$ 

$$H_3C$$
 $CI$ 
 $CI$ 
 $CI$ 
 $CI$ 
 $CI$ 

1-methoxypropane;

1-propoxypropane;

2-fluoro-3-methylbutane

1-ethoxybutane;

2-bromo-4-chloropentane;

methoxyethane;

## Nitriles:

3-methylpentanenitrile;