# Esters



- 1)Identify the number of carbons.
- 2) Use the appropriate IUPAC prefix with the ending \_\_\_\_\_.
- 1)Draw the number of \_\_\_\_\_
  identified by the IUPAC prefix. Attach
  them each by a \_\_\_\_\_ bond.

  2) \_\_\_\_\_ each carbon using

#### **EXAMPLES**

Name:

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

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

#### **EXAMPLES**

Draw:

pentane

octane

- Alkanes are characterized by a \_\_\_\_\_ carbon-carbon bond.
- Alkanes are \_\_\_\_\_ and contained no double or triple bonds.
- Alkanes always end with '\_\_\_\_\_\_\_\_'

\* Fill in the Blanks Here

1) Identify the number of carbons.  2) Use the appropriate IUPAC prefix with the ending	1)Draw the number of identified by the IUPAC prefix. Attach them each by a bond.  2) each carbon using a
EXAMPLES	Examples
	i !
Name: CH <sub>3</sub> - CH <sub>2</sub> - CH <sub>3</sub>	Draw: pentane

Alkanes are characterized by a \_\_\_\_\_ carbon-carbon bond.

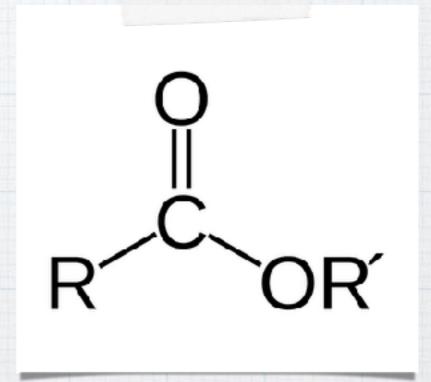
and contained no double or triple bonds.

Alkanes are \_\_\_\_\_

Alkanes always end with '\_

## Esters

- \* Esters are characterized by a double bonded and single bonded oxygen.
- \* The ending is always 'OATE'.



\* Fill in the Blanks Here

1) Identify the number of carbons.  2) Use the appropriate IUPAC prefix with the ending	1)Draw the number of identified by the IUPAC prefix. Attach them each by a bond.  2) each carbon using a
EXAMPLES	Examples
Name: CH <sub>3</sub> - CH <sub>2</sub> - CH <sub>3</sub>	Draw: pentane

Alkanes are characterized by a \_\_\_\_\_ carbon-carbon bond.

CH3 - CH2 - CH2 - CH2 - CH3

Alkanes are \_\_\_

Alkanes always end with '\_

octane

\_\_\_\_\_ and contained no double or triple bonds.

# Naming Esters

- \* Identify the number of carbons.
- \* Identify the main chain (most carbons).
  This will have the ending OATE.
- \* Identify the secondary chain (least carbons). This will be named as a side chain and have a space.
- \* Name any additional side chains with the same numbering system.

Examples

CH3 - CH2 - CH2 - CH2 - C - O - CH2 - CH3

CH<sub>3</sub> 0

CH3 - CH - CH2 - C - O - CH2 - CH2 - CH3

# Examples

CH3 - CH2 - CH2 - CH2 - C - O - CH2 - CH3

Ethyl pentanoate

CH<sub>3</sub> (

Propyl 3-methylbutanoate

CH3 - CH - CH2 - C - O - CH2 - CH2 - CH3

\* Fill in the Blanks Here

1) Identify the number of carbons.  2) Use the appropriate IUPAC prefix with the ending	1)Draw the number of identified by the IUPAC prefix. Attach them each by a bond.  2) each carbon using a
	:

<b>EXAMPLES</b>
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Name:

 $\mathsf{CH}_3 \mathsf{-} \mathsf{CH}_2 \mathsf{-} \mathsf{CH}_3 \mathsf{-} \mathsf{CH}_3$ 

CH3 - CH2 - CH2 - CH2 - CH2 - CH3

### **EXAMPLES**

Draw:

pentane

octane

- Alkanes are characterized by a \_\_\_\_\_ carbon-carbon bond.
- Alkanes are \_\_\_\_\_ and contained no double or triple bonds.
- Alkanes always end with '\_\_\_\_\_\_\_\_'

# Prawing Esters

- \* Draw the number of carbons identified by the IUPAC prefix.
- \* Praw a single bonded and double bonded oxygen off the main chain.
- \* Attach the secondary chain to the single bonded oxygen.
- \* Add any additional side chains.

# Examples methyl octanoate

ethyl 2-ethylhexanoate

## EXAMPles Butanal

CH - CH<sub>2</sub> - CH<sub>2</sub> - CH<sub>3</sub>
II
0

## 2-ethyloctanal

CH - CH2 - CH2 - CH2 - CH2 - CH2 - CH3
II I
O CH2 - CH3

Examples ethan-1-ol

CH3 - CH2
I
OH

4-ethylheptan-2-ol

CH3 - CH - CH2 - CH - CH2 - CH3 - CH3 - CH3 - CH2 - CH3 - CH2 - CH3