

Naming organic molecules

1)

<p>Name</p> $\begin{array}{c} \text{CH}_3 \quad \text{OH} \\   \quad / \\ \text{H}_3\text{C}-\text{C}-\text{CH} \\   \quad   \\ \text{CH}_3 \quad \text{CH}_3 \end{array}$	<p>Name</p> $\begin{array}{c} \text{H} \quad \text{H} \quad \text{H} \\   \quad   \quad   \\ \text{H}-\text{C}-\text{C}=\text{C}-\text{C}-\text{H} \\   \quad   \quad   \\ \text{H} \quad \text{H}-\text{C}-\text{H} \\   \\ \text{H} \end{array}$	<p>Name</p> $\text{CH}_3\text{CH}_2\text{CH}_2\text{C} \begin{array}{l} \nearrow \text{O} \\ \searrow \text{OCH}_2\text{CH}_3 \end{array}$
<p>Name</p> $\begin{array}{c} \text{H} \quad \text{OH} \\   \quad / \\ \text{H}_3\text{C}-\text{C}-\text{CH} \\   \quad   \\ \text{OH} \quad \text{CH}_3 \end{array}$	<p>Name</p> $\begin{array}{c} \text{H} \\   \\ \text{H}-\text{C}-\text{H} \\   \\ \text{H}-\text{C}=\text{C}-\text{C}=\text{C}-\text{H} \\   \quad   \quad   \\ \text{H} \quad \text{H} \quad \text{CH}_3 \end{array}$	<p>Name</p> $\text{CH}_3\text{CH}_2\text{C} \begin{array}{l} \nearrow \text{O} \\ \searrow \text{O}-\text{CH}_2\text{CH}_2\text{CH}_3 \end{array}$
<p>Name</p> $\begin{array}{c} \text{Cl} \quad \text{Cl} \quad \text{H} \\   \quad   \quad   \\ \text{H}-\text{C}-\text{C}-\text{C}-\text{H} \\   \quad   \quad   \\ \text{H} \quad \text{H} \quad \text{HO}-\text{C}-\text{H} \\   \\ \text{H} \end{array}$	<p>Name</p> $\begin{array}{c} \text{H} \quad \text{O} \\   \quad // \\ \text{H}_3\text{C}-\text{C}-\text{C}-\text{C}-\text{OH} \\   \quad   \\ \text{H} \quad \text{CH}_3 \end{array}$	<p>Name</p> $\text{CH}_3\text{C} \begin{array}{l} \nearrow \text{O} \\ \searrow \text{O}-\text{CH}_2\text{CH}_2\text{CH}_2\text{CH}_3 \end{array}$
<p>Name</p> $\begin{array}{c} \text{Cl} \quad \text{Cl} \quad \text{CH}_3 \\   \quad   \quad   \\ \text{H}-\text{C}-\text{C}-\text{C}-\text{CH}_3 \\   \quad   \quad   \\ \text{HO} \quad \text{H} \quad \text{H}-\text{C}-\text{H} \\   \\ \text{H} \end{array}$	<p>Name</p> $\begin{array}{c} \text{CH}_3 \\   \\ \text{CH}_2\text{CH}_2\text{CH}_2\text{C} \begin{array}{l} \nearrow \text{O} \\ \searrow \text{OH} \end{array} \\   \\ \text{CH}_3 \end{array}$	<p>Name</p> $\text{CH}_3\text{CH}_2\text{CH}_2\text{CH}_2\text{C} \begin{array}{l} \nearrow \text{O} \\ \searrow \text{O}-\text{CH}_3 \end{array}$
<p>Name</p> $\begin{array}{c} \text{Br} \quad \text{CH}_3 \\   \quad   \\ \text{CH}_3-\text{C}-\text{CH}-\text{CH}_3 \\   \\ \text{Cl} \end{array}$	<p>Name</p> $\begin{array}{c} \text{CBrH}_2 \\   \\ \text{CH}_2\text{CClCH}_2\text{C} \begin{array}{l} \nearrow \text{O} \\ \searrow \text{OH} \end{array} \\   \\ \text{CH}_3 \end{array}$	<p>Name</p> $\begin{array}{c} \text{CH}_3 \\   \\ \text{CH}_3\text{CHCHC} \begin{array}{l} \nearrow \text{O} \\ \searrow \text{OH} \end{array} \\   \\ \text{CH}_3 \end{array}$

2)

3-methylpent-1-yne	Butan-1,3-diol	2-methylpent-2,3-diene
3-ethylhept-2-ene	Pent-2,3-diene	2,3-dichlorobutanoic acid
1,3-dibromo-4-methylhexane	2-methylbutanoic acid	ethyl hexanoate
2,4-dibromopentanoic acid	Propyl butanoate	2,4-dibromopent-2,3-diene
2,3-dichlorobutanoic acid	4,2-dichlorohexan-2-ol	5-methylhept-3-yne

3) Correct the following names by rewriting them in the correct format.

- i. The compound 1-2,dibromo ethane
- ii. The ester called Hexanol butanoic
- iii. The compound 3-ethylpropan-1-ol
- iv. The compound called 4-methylbutan-2-ol
- v. An ester written as metholbutyric
- vi. A compound named 3,4dimethylpentan-1-ol
- vii. An alkene called prop-2-ene
- viii. An alkene called but-4-ene
- ix. The carboxylic acid 1-pentanoic acid
- x. The compound propan-3-ol

4) Draw the structural formula and name two isomers with the molecular formula  $C_3H_6O_2$

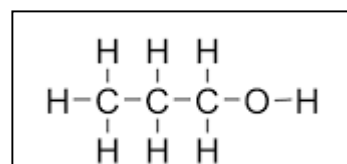
Name
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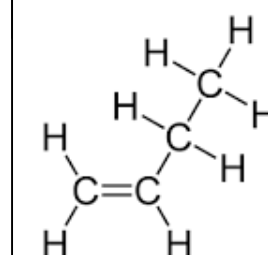
5) Below are the structural formulae of a select number of molecules. Name:

- the functional group present
- the homologous group to which they belong
- the next compound in the series

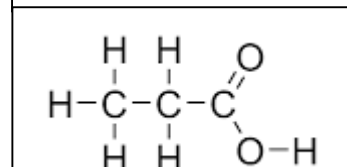
- a) Functional group \_\_\_\_\_
- b) Homologous series \_\_\_\_\_
- c) Next molecule in the series \_\_\_\_\_



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- b) Homologous series \_\_\_\_\_
- c) Next molecule in the series \_\_\_\_\_



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- b) Homologous series \_\_\_\_\_
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- b) Homologous series \_\_\_\_\_
- c) Next molecule in the series \_\_\_\_\_

