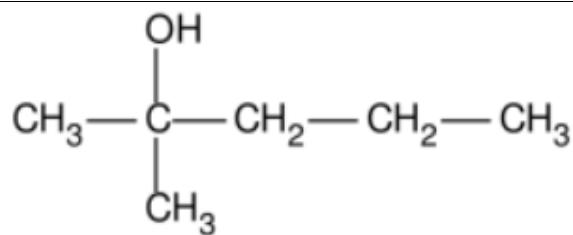


# Exercice : molécules organiques

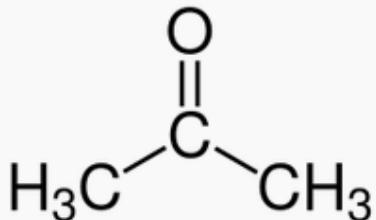
## I) Nomenclature

Donner le nom ou la formule semi-développée des molécules suivante :

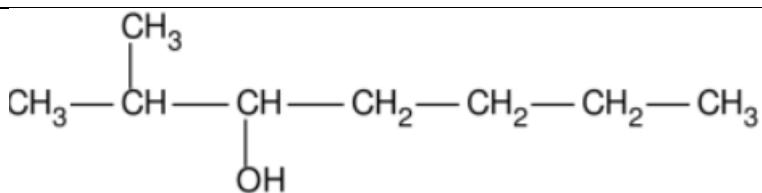
$  \begin{array}{c}  \text{H} & \text{H} & \text{H} \\    &   &   \\  \text{H} - \text{C} - \text{C} - \text{C} - \text{H} \\    &   &   \\  \text{H} & \text{H} & \text{H}  \end{array}  $	<b>propane</b>
	<b>cyclohexane</b>
$  \begin{array}{c}  \text{H}_3\text{C}-\text{CH}_2-\underset{\text{H}_3\text{C}}{\text{CH}}-\text{CH}_2-\text{CH}_3  \end{array}  $	<b>2-méthylbutane</b>
$  \begin{array}{c}  \text{H}_3\text{C}-\underset{\text{H}_3\text{C}}{\text{CH}}-\underset{\text{H}_3\text{C}}{\text{CH}}-\text{CH}_2-\text{CH}_3  \end{array}  $	<b>2,3-diméthylbutane</b>
$  \begin{array}{c}  \text{H}_3\text{C}-\underset{\text{H}_3\text{C}}{\text{CH}}-\underset{\text{CH}_3}{\text{C}}-\text{CH}_2-\text{CH}_3  \end{array}  $	<b>2,2,3-triméthylbutane</b>
$  \begin{array}{c}  \text{CH}_3 \\    \\  \text{CH}_2 \\    \\  \text{H}_3\text{C}-\text{HC}-\text{CH}_2-\text{CH}_2-\text{CH}_3 \\    \\  \text{CH}_3  \end{array}  $	<b>3-éthyl-2-méthylhexane</b>
	<b>1,3-dimethylcyclohexane</b>
$  \begin{array}{c}  \text{H}_3\text{C} \\    \\  \text{CH}_2-\text{CH}_2 \\    \\  \text{CH}-\text{CH}_3 \\    \\  \text{H}_3\text{C}  \end{array}  $	<b>butanol</b>
$  \begin{array}{c}  \text{CH}_3-\underset{\text{OH}}{\text{CH}}-\text{CH}_2-\underset{\text{CH}_3}{\text{CH}}-\text{CH}_2-\text{CH}_3  \end{array}  $	<b>4-méthylhexan-2-ol</b>
$  \begin{array}{c}  \text{OH} \\    \\  \text{CH}_2-\text{CH}_2-\underset{\text{CH}_3}{\text{CH}}-\text{CH}_3  \end{array}  $	<b>3-méthylbutan-1-ol</b>



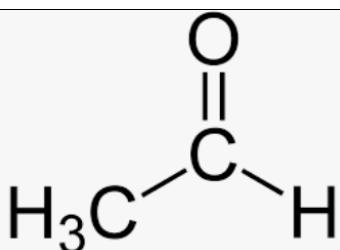
2-méthylpentan-2-ol



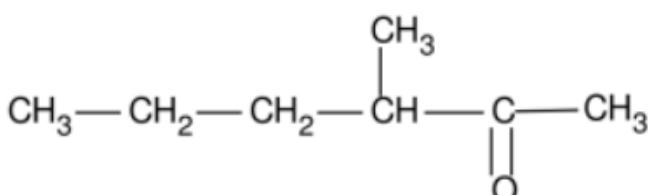
propanone



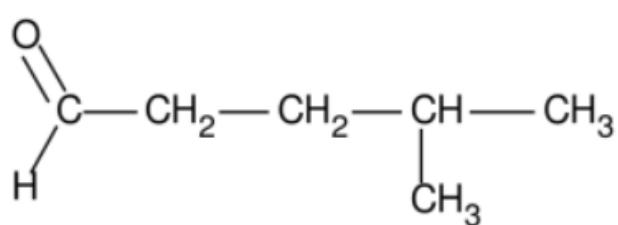
2-méthylheptan-3-ol



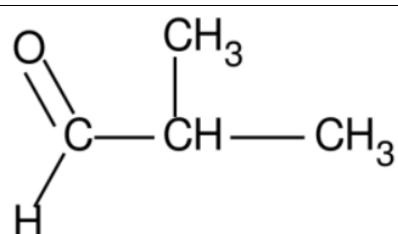
éthanal



3-méthylhexan-2-one



4-méthylpentanal



Méthylpropanal

$\begin{array}{c} \text{CH}_3 \\   \\ \text{CH}_3-\text{C}-\text{CH}-\text{CH}_3 \\    \\ \text{O} \end{array}$	3-méthylbutanone
$\begin{array}{c} \text{CH}_3-\text{CH}_2-\text{CH}-\text{C}(=\text{O})\text{H} \\   \\ \text{CH}_3 \end{array}$	2-méthylbutanal
$\begin{array}{c} \text{OH} \\ \diagdown \\ \text{H}_3\text{C}-\text{C}=\text{O} \end{array}$	Acide éthanoïque
$\begin{array}{c} \text{CH}_3-\text{CH}-\text{CH}_2-\text{CH}_2-\text{C}(=\text{O})\text{OH} \\   \\ \text{CH}_3 \end{array}$	Acide 4-méthylpentanoïque
$\begin{array}{c} \text{CH}_3 \\   \\ \text{CH}_3-\text{C}-\text{CH}_2-\text{C}(=\text{O})\text{OH} \\   \\ \text{CH}_3 \end{array}$	Acide 3,3-diméthylbutanoïque
$\begin{array}{c} \text{CH}_3-\text{CH}-\text{CH}-\text{C}(=\text{O})\text{OH} \\   \quad   \\ \text{CH}_3 \quad \text{CH}_3 \end{array}$	Acide 2,3-diméthylbutanoïque
$\begin{array}{c} \text{H} \quad \text{H} \quad \text{H} \\   \quad   \quad   \\ \text{H}-\text{C}-\text{C}-\text{C}-\text{C}(=\text{O})\text{O}-\text{H} \\   \quad   \quad   \\ \text{H} \quad \text{H} \quad \text{H} \end{array}$	Acide butanoïque