

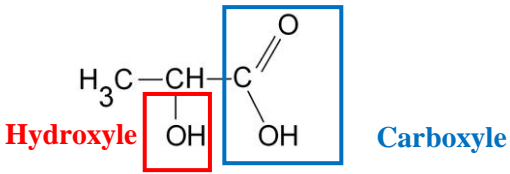
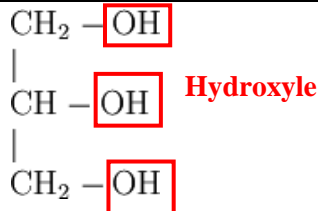
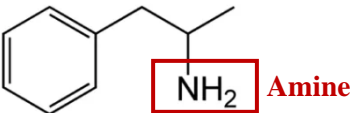
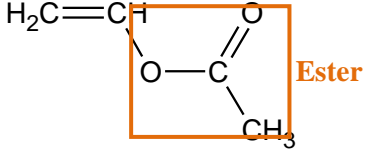
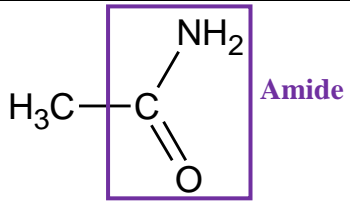
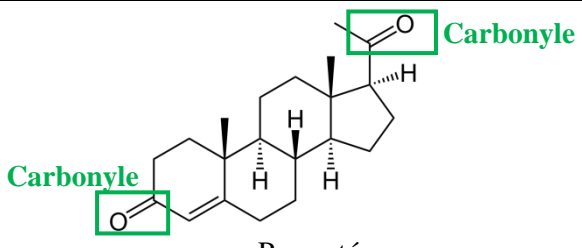
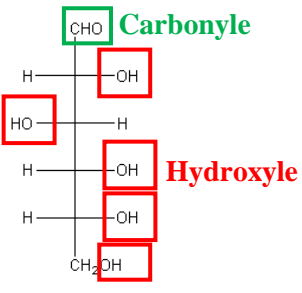
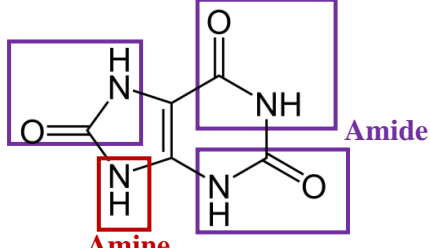
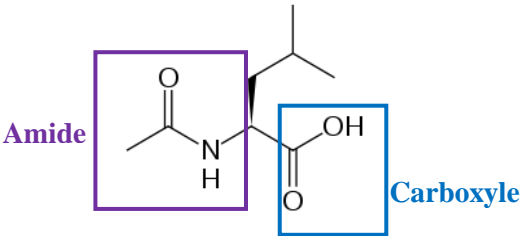
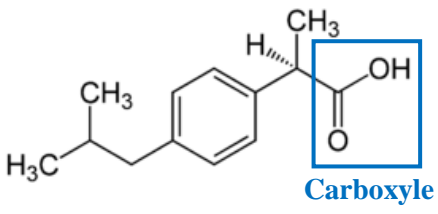
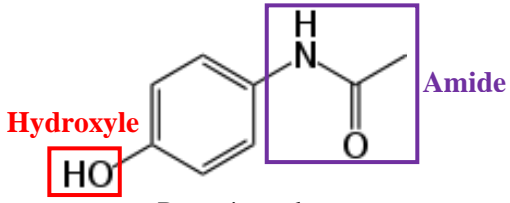
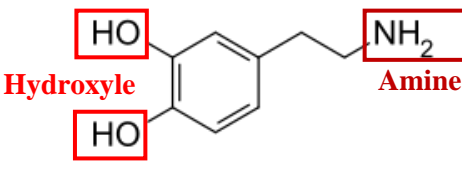
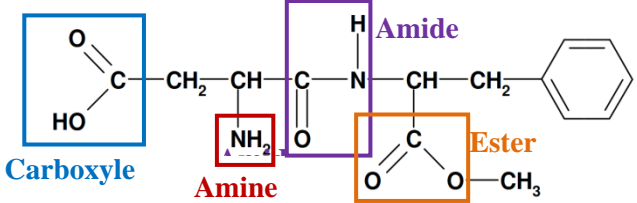
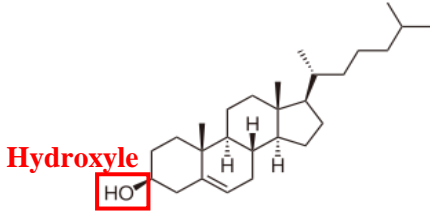
<u>Thème 2</u> <u>Analyser et diagnostiquer.</u> <u>Activité 1</u> <u>Correction</u>	<u>Groupes caractéristique et familles chimiques</u>	<u>1<sup>ère</sup> ST2S</u>
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Un groupe caractéristique est, au sein d'une molécule organique, un enchaînement particulier d'atomes dont au moins un n'est ni du carbone ni de l'hydrogène.

Un groupe caractéristique est un groupe qui confère des propriétés spécifiques aux molécules qui le possèdent. On dit que ces molécules forment une famille chimique.

<u>Famille</u>	<u>Groupe caractéristique</u>	<u>Exemple</u>
Alcool	<u>Hydroxyle</u> - OH	$\text{CH}_3 - \text{CH}_2 - \text{OH}$ <u>Ethanol</u>
Aldéhyde	<u>Carbonyle</u> $\begin{array}{c} \text{O} \\ \parallel \\ -\text{C} \\ \diagdown \\ \text{H} \end{array}$	$\text{CH}_3 - \text{CH}_2 - \text{CH}_2 - \begin{array}{c} \text{O} \\ \parallel \\ \text{C} \\ \diagdown \\ \text{H} \end{array}$ <u>Butanal</u>
Cétone	$\begin{array}{c} \text{O} \\ \parallel \\ -\text{C}- \end{array}$	$\text{CH}_3 - \text{CH}_2 - \begin{array}{c} \text{O} \\ \parallel \\ \text{C} \end{array} - \text{CH}_3$ <u>Butan-2-one</u>
Acide carboxylique	<u>Carboxyle</u> $\begin{array}{c} \text{OH} \\ \diagup \\ -\text{C} \\ \parallel \\ \text{O} \end{array}$	$\text{CH}_3 - \text{CH}_2 - \begin{array}{c} \text{OH} \\ \diagup \\ \text{C} \\ \parallel \\ \text{O} \end{array}$ <u>Acide propanoïque</u>
Amine	<u>Amino</u> -NH <sub>2</sub>	$\text{CH}_3 - \text{NH}_2$ <u>Méthanamine</u>
Ester	<u>Ester</u> $\begin{array}{c} \text{O} \\ \parallel \\ -\text{C}-\text{O}- \end{array}$	$\text{CH}_3 - \text{CH}_2 - \text{CH}_2 - \begin{array}{c} \text{O} \\ \parallel \\ \text{C} \end{array} - \text{O} - \text{CH}_2 - \text{CH}_3$ <u>Propanoate d'éthyl</u>
Etheroxyde	<u>Etheroxyde</u> - O -	$\text{CH}_3 - \text{CH}_2 - \text{O} - \text{CH}_2 - \text{CH}_2 - \text{CH}_3$ <u>1-éthoxypropane</u>
Amide	<u>Amide</u> $\begin{array}{c} \text{O} \\ \parallel \\ -\text{C}-\text{N}- \\   \end{array}$	$\text{CH}_3 - \text{CH}_2 - \begin{array}{c} \text{O} \\ \parallel \\ \text{C} \end{array} - \text{NH}_2$ <u>Propanamide</u>

1. Entourer pour chacune des molécules son ou ses groupes caractéristiques et les nommer.

 <p>Hydroxyle Carboxyle</p> <p>Acide lactique</p>	 <p>Hydroxyle</p> <p>Glycérol ou glycérine</p>
 <p>Amine</p> <p>Amphétamine</p>	 <p>Ester</p> <p>Acétate de vinyle</p>
 <p>Amide</p> <p>Acétanamide</p>	 <p>Carbonyle</p> <p>Progesterone</p>
 <p>Carbonyle</p> <p>Hydroxyle</p> <p>Glucose</p>	 <p>Amide</p> <p>Amine</p> <p>Acide urique</p>
 <p>Amide</p> <p>Carboxyle</p> <p>Acetylleucine</p>	 <p>Carboxyle</p> <p>Ibuprofène</p>
 <p>Hydroxyle</p> <p>Amide</p> <p>Paracétamol</p>	 <p>Hydroxyle</p> <p>Amine</p> <p>Dopamine</p>
 <p>Carboxyle</p> <p>Amine</p> <p>Amide</p> <p>Ester</p> <p>Aspartame</p>	 <p>Hydroxyle</p> <p>Cholestérol</p>