***CHEM-115 Quiz 4 (Chapter 7) October 13, 2017***

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Section: \_\_\_\_\_\_

1. Addition of functional groups to hydrocarbons generally \_\_\_\_\_\_\_\_\_\_\_\_\_ their solubility in water.

a) increasesb) decreasesc) has no effect ond) could increase or decrease

1. Which of the following functional groups does not contain an oxygen atom? ***Circle all that apply***

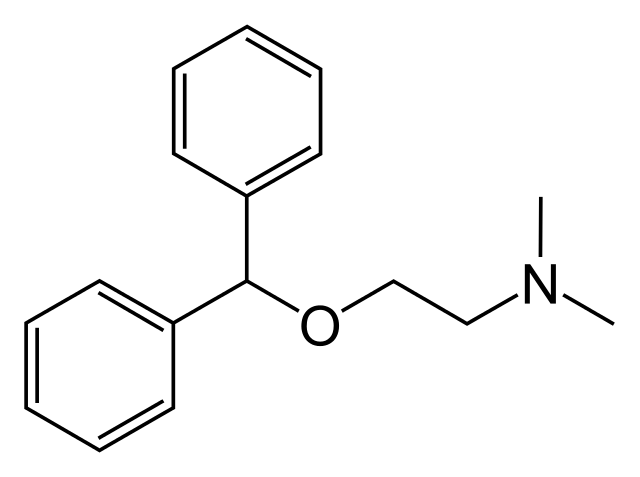
a) ketoneb) amidec) carboxylic acidd) amine e) aldehyde

1. Which of the following functional groups makes the strongest intermolecular hydrogen bonds?

a) esterb) etherc) carboxylic acidd) aldehyde e) amine

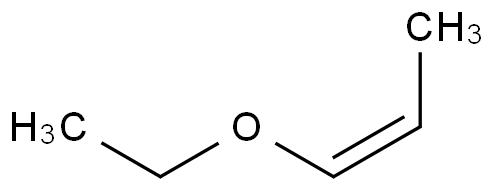
1. Which of the following functional groups has a molecular shape similar to that of water?

a) carboxylic acidb) aminec) ketoned) amine e) alcohol



1. Circle & identify 3 different functional groups in

**Benadryl**, the drug shown to the right.



1. Provide the proper IUPAC name for the compound shown to the right:

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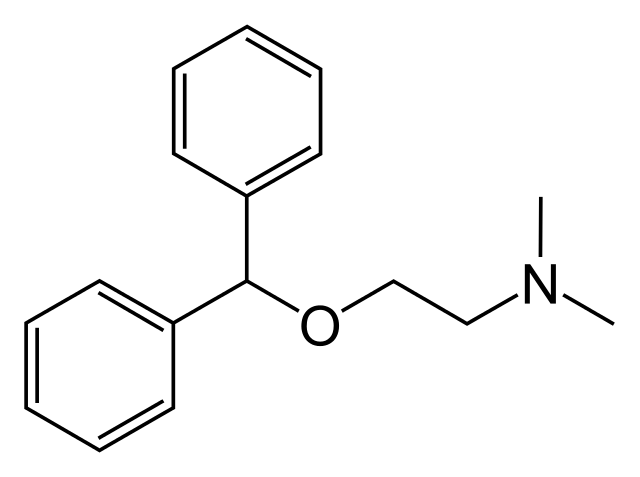
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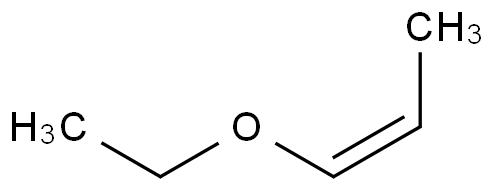
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Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Section: \_\_\_\_\_\_

1. Addition of most functional groups to hydrocarbons \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ their boiling point.

a) decreasesb) increasesc) has no effect ond) could increase or decrease

1. Which of the following functional groups do not contain a nitrogen atom? ***Circle all that apply***

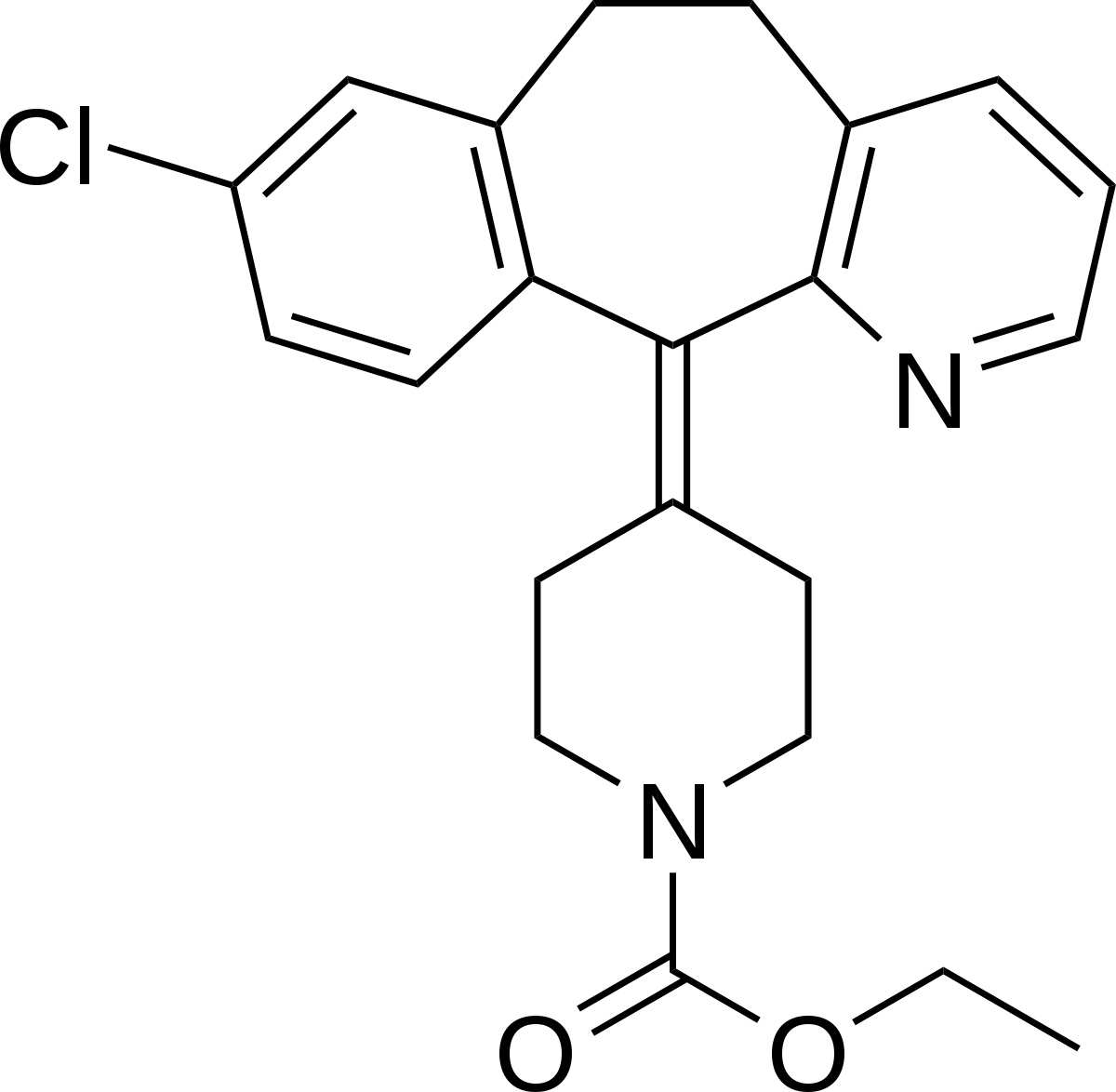
a) thioesterb) amidec) carboxylic acidd) amine e) aldehyde

1. Which of the following functional groups cannot form hydrogen bonds in the absence of water?

a) amideb) aminec) carboxylic acidd) alcohol e) ether

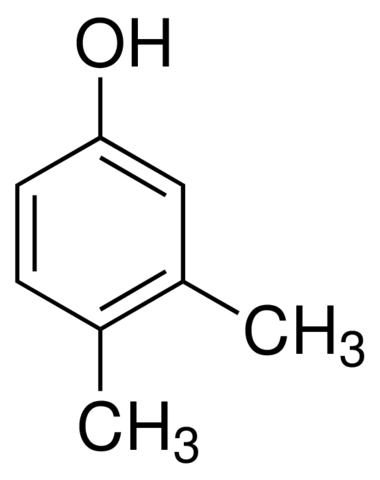
1. The chemistry of sulfur found in a thioester is very similar to that of the \_\_\_\_\_\_found in an ester.

a) oxygenb) carbonc) phosphated) nitrogen e) hydrogen



1. Circle & identify 3 different functional groups in

**Claritin**, the drug shown to the right.



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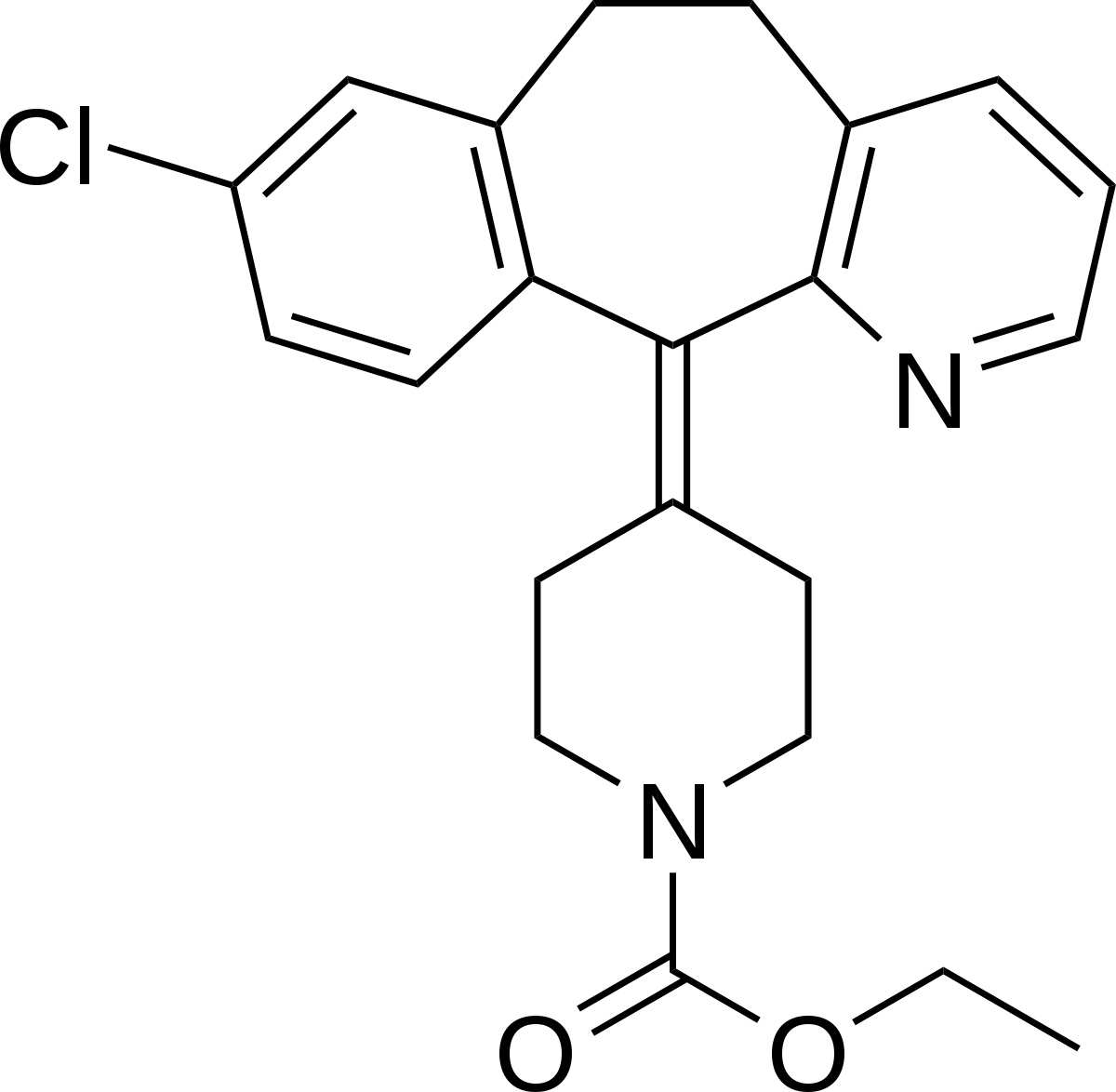
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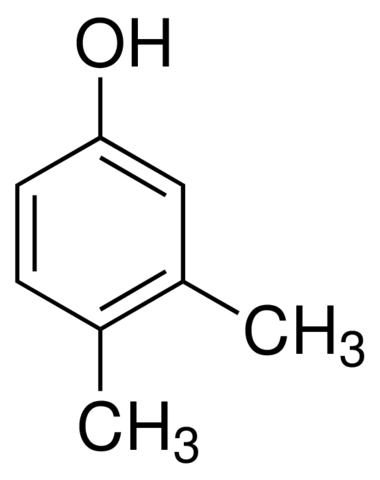
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