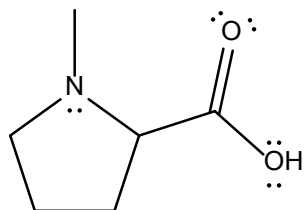


Exercise 10.3

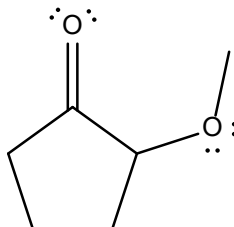
Functional Groups

1. Circle and name the functional groups in each of the following molecules.

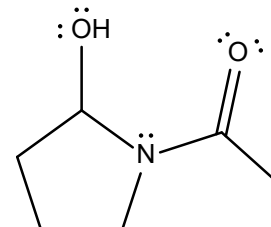
(a)



(b)



(c)



2. Draw a molecule corresponding to each description. Your answer may contain other functional groups in addition to the one listed.

(a) Draw an aldehyde with the molecular formula $C_6H_{12}O_2$.

(b) Draw an ester with the molecular formula $C_6H_{12}O_2$.

(c) Draw an ether with the molecular formula $C_6H_{12}O_2$.

3. Draw a molecule corresponding to each description. Your answer may contain other functional groups in addition to the one listed.

(a) Draw an alkene with the molecular formula C_6H_{10} .

(b) Draw an alkyne with the molecular formula C_6H_{10} .

4. Draw a molecule corresponding to each description. Your answer may contain other functional groups in addition to the one listed.

(a) Draw an amine with the molecular formula $C_6H_{13}NO$.

(b) Draw an amide with the molecular formula $C_6H_{13}NO$.