

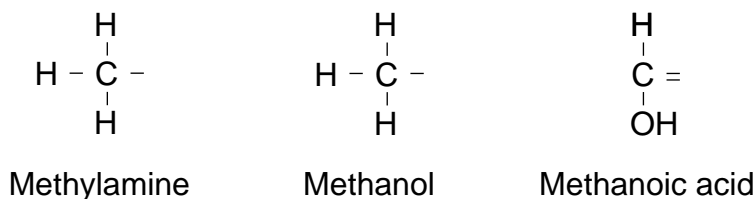
CHAPTER REVIEW**Chapter 10****Organic Chemistry****I. Vocabulary Review**

In the blank, write the word or words that best complete the sentence.

- All organic compounds contain the element _____.
- Saturated organic compounds contain only _____ bonds.
- Bee stings cause pain because they inject _____.
- A carboxylic acid is formed when $-\text{CH}_3$ is displaced by _____.
- An amine is formed when _____ replaces a hydrogen atom in a hydrocarbon.
- When both $-\text{NH}_2$ and $-\text{COOH}$ replace hydrogen atoms on the same carbon atom in a hydrocarbon, a(n) _____ is formed.
- Rubbing alcohol is a(n) _____ of propyl alcohol.
- Linking together amino acids forms _____.
- Substituting a hydroxyl group for a hydrogen atom in a hydrocarbon forms a(n) _____.
- Sugars and starches are known as _____.

II. Concept Review

In the blank at the left, write the letter of the choice that best completes the statement or answers the question.

FIGURE 1

- _____ 11. The missing part of the methylamine molecule in Figure 1 is _____.
- a.** H **b.** C **c.** NH_2 **d.** OH
- _____ 12. The missing part of the methanol molecule in Figure 1 is _____.
- a.** OH **b.** O **c.** H **d.** C
- _____ 13. The missing part of the methanoic acid molecule in Figure 1 is _____.
- a.** OH **b.** NH_2 **c.** H **d.** O
- _____ 14. Organic compounds _____.
- a.** cannot be made in the laboratory
- b.** are not as plentiful as inorganic compounds
- c.** occur only in living organisms
- d.** all contain carbon

Chapter Review 10 (continued)

- _____ **15.** Saturated hydrocarbons contain _____.
- only single bonds
 - at least 1 double covalent bond
 - all the water they can absorb
 - 3 hydrogen atoms attached to each carbon atom
- _____ **16.** Which of the following formulas represents a carbohydrate?
- $C_{12}H_{12}O_{12}$
 - $C_{12}H_{22}O_{11}$
 - C_2H_5OH
 - CO_2

III. Skills/Process Review

- 17.** Draw an isomer of $H - \begin{array}{c} H \\ | \\ C \\ | \\ H \end{array} - \begin{array}{c} H \\ | \\ C \\ | \\ H \end{array} - \begin{array}{c} H \\ | \\ C \\ | \\ H \end{array} - \begin{array}{c} H \\ | \\ C \\ | \\ H \end{array} - H$.

Answer the following questions in phrases or complete sentences.

- 18.** One way to represent sucrose is $C_{12}(H_2O)_{11}$. How does this formula explain the results of the experiment in your text where sulfuric acid and sugar were mixed together? _____
- _____
- _____

- 19.** Saturated fats are usually solid at room temperature. In Figure 2, is fat A or B more likely to be a solid? Explain why. _____
- _____
- _____

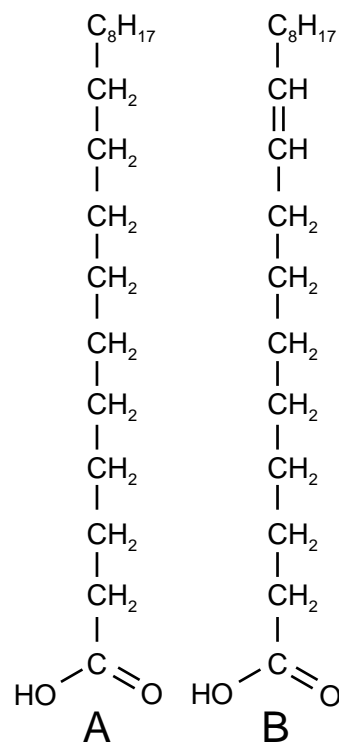


FIGURE 2

IV. EYV Review

- 20. Science and Society: Pile It On** Why is anaerobic composting faster than aerobic?
- _____
- _____