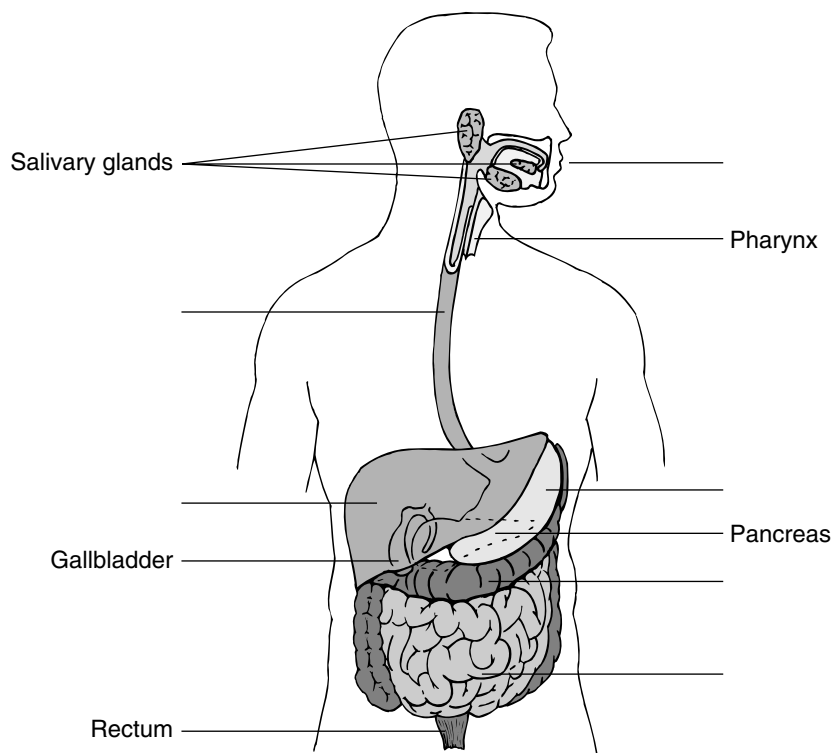


## Section 38–2 The Process of Digestion (pages 978–984)

*This section describes the organs of the digestive system and explains their functions.*

### The Mouth (pages 978–979)

1. What is the function of the organs of the digestive system? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
2. The physical breakdown of large pieces of food into smaller pieces is referred to as \_\_\_\_\_ digestion.
3. The breakdown of large food molecules into smaller molecules that can be absorbed into the bloodstream is called \_\_\_\_\_ digestion.
4. Label the drawing of the digestive system with the following structures: mouth, esophagus, stomach, liver, small intestine, and large intestine.



5. What is the role of teeth in digestion? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

### The Esophagus (page 980)

Match each term with its definition.

Term	Definition
_____ 6. bolus	a. Contractions of smooth muscle that aid in swallowing
_____ 7. esophagus	b. Clump of chewed food
_____ 8. peristalsis	c. Food tube connecting the mouth and stomach

9. Is the following sentence true or false? The pyloric valve prevents the contents of the stomach from moving back up into the esophagus. \_\_\_\_\_

### The Stomach (pages 980–981)

10. Circle the letter of each sentence that is true about the stomach.

- a. It produces hydrochloric acid.
- b. It produces trypsin.
- c. It helps in the mechanical digestion of food.
- d. It produces amylase.

11. Is the following sentence true or false? Pepsin cannot work under the acidic conditions present in the stomach. \_\_\_\_\_

12. A mixture of stomach fluids and food is referred to as \_\_\_\_\_.

### The Small Intestine (pages 981–982)

13. Where does most chemical digestion take place? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

14. Circle the letter of each sentence that is true about the pancreas.

- a. It produces amylase.
- b. It produces sodium bicarbonate.
- c. Its enzymes help break down lipids and nucleic acids.
- d. It produces lactase.

15. What role does the liver play in digestion? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

16. Bile is stored in a small pouchlike organ called the \_\_\_\_\_.

### Absorption in the Small Intestine (pages 982–983)

17. Name the two parts of the small intestine where nutrients are absorbed.

- a. \_\_\_\_\_
- b. \_\_\_\_\_

Name \_\_\_\_\_ Class \_\_\_\_\_ Date \_\_\_\_\_

18. Projections that cover the folds of the small intestine are called \_\_\_\_\_.
19. Is the following sentence true or false? Molecules of undigested fat and some fatty acids are absorbed by lymph vessels called lacteals. \_\_\_\_\_
20. Is the following sentence true or false? The appendix plays an important role in human digestion. \_\_\_\_\_

### **The Large Intestine** (page 984)

21. What is the primary job of the large intestine? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

### **Digestive System Disorders** (page 984)

22. A hole in the stomach wall is known as a(an) \_\_\_\_\_.
23. When something happens that interferes with the removal of water by the large intestine, a condition known as \_\_\_\_\_ results.

#### **Reading Skill Practice**

When you read about a complex process, representing the process with a flowchart can help you better understand and remember it. Make a flowchart to show how food travels through the digestive system and is broken down into simpler molecules that the body can use. For more information on flowcharts, see Appendix A of your textbook. Do your work on a separate sheet of paper.