

Chapter 38 Digestive and Excretory Systems

Section Review 38-1

Reviewing Key Concepts

Matching *On the line provided, match the letter of the nutrient with the description of its function in the human body.*

- a. water
- b. carbohydrates
- c. fats
- d. proteins
- e. vitamins
- f. minerals

- _____ 1. provide the body with building materials for growth and repair
- _____ 2. needed to build cell membranes, produce certain hormones, and store energy
- _____ 3. major source of food energy
- _____ 4. most important of all nutrients, makes up the bulk of most bodily fluids
- _____ 5. inorganic nutrients
- _____ 6. organic molecules needed by the body to help regulate body processes

Short Answer *On the lines provided, answer the following questions.*

7. Why do all the cells in your body need water?

8. What problems may result from dehydration of the body?

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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.

5. What is the role of teeth in digestion? _____



Chapter 38, Digestive and Excretory Systems (continued)

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. _____

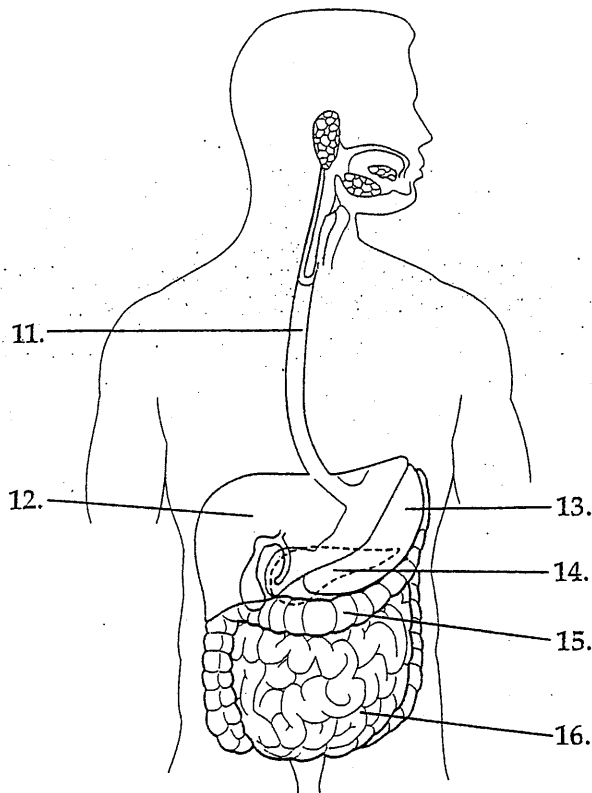
The Large Intestine (page 984)

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.

Labeling Diagrams On the lines provided, label the parts of the digestive system that correspond with the numbers in the diagram.



11. _____
12. _____
13. _____
14. _____
15. _____
16. _____

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Chapter 38

Digestive and Excretory Systems

Vocabulary Review

Interpreting Tables Use the table to answer the questions.

Digestive Enzymes			
Enzyme	Site of Action	Site of Production	Nutrient Digested
Amylase	Mouth	Salivary glands	Carbohydrate
Pepsin	Stomach	Lining of stomach	Protein
Lipase	Small intestine	Pancreas	Fat
Amylase	Small intestine	Pancreas	Carbohydrate
Trypsin	Small intestine	Pancreas	Protein
Lactase	Small intestine	Lining of small intestine	Carbohydrate
Maltase	Small intestine	Lining of small intestine	Carbohydrate
Sucrase	Small intestine	Lining of small intestine	Carbohydrate
Peptidase	Small intestine	Lining of small intestine	Protein

- Where are the majority of digestive enzymes active? _____
- Which organ or gland produces the greatest number of different digestive enzymes? _____
- Which digestive enzyme has more than one site of action and production? _____
- Which digestive enzymes are active at a site different from the site where they are produced? _____
- Which nutrient is digested by more enzymes than any other nutrient? _____

Completion Fill in the blanks with terms from Chapter 38.

- Organic molecules that help regulate body processes are called _____.
- The tube that connects the throat with the stomach is the _____.
- The organ that produces bile is the _____.
- The mixture of partly digested food that leaves the stomach is called _____.
- The lining of the small intestine is covered with fingerlike projections called _____.