

The Digestive System

Warm-Up

1. What happens to food after it goes into your mouth?
Describe the path it takes until it exits your body.
2. Can you name any of the organs or body parts that are part of the digestive system?

Key Terms

Match each part of the digestion system to its function.

- | | |
|---------------------------|---|
| _____ 1. mouth | a) provides exit point for feces to leave the body |
| _____ 2. anus | b) breaks food into smaller parts and mixes it with saliva |
| _____ 3. salivary glands | c) mixes food and liquid with gastric acids and enzymes |
| _____ 4. esophagus | d) makes juices that break down food and controls blood sugar levels |
| _____ 5. stomach | e) moves food from the mouth to the stomach |
| _____ 6. small intestine | f) stores feces |
| _____ 7. pancreas | g) makes bile—a substance that helps break down fats |
| _____ 8. gallbladder | h) absorbs nutrients from food |
| _____ 9. liver | i) has no clear function |
| _____ 10. large intestine | j) make saliva—a liquid that helps with digestion |
| _____ 11. rectum | k) absorbs water and salt from material not digested as food, and turns waste products into feces |
| _____ 12. appendix | l) stores bile |

Reading

Read the article about the digestive system.

1. Digestion is the process of breaking food down in order to obtain nutrients from it. Nutrients are things that the body needs to stay healthy and function properly. Nutrients include vitamins, minerals, water, proteins, and carbohydrates. Digestion takes place in the alimentary canal, which begins at the **mouth** and ends at the **anus**.
2. Digestion starts in the mouth. When food enters our mouths, we chew it to break it into smaller parts. While we chew food, our **salivary glands** release saliva. Saliva is a fluid that contains enzymes—substances that help break down the food. Saliva also softens the food, making it easier to swallow.
3. When food is swallowed, it travels down the **esophagus** and into the **stomach**. The stomach is a muscular bag that produces gastric acids as well as more enzymes. The stomach breaks down food even more, helping it pass through the **small intestine**.
4. Other organs such as the **pancreas** and the **gallbladder** release substances that help with digestion. The pancreas releases juices to an area called the duodenum, which connects the stomach to the small intestine. These juices help to break down starches and sugars. The pancreas also helps to control sugar levels in the blood. A small organ called the gallbladder releases a substance called bile into the duodenum. Bile helps to break down fats (also called “lipids”). Bile is made in the **liver**, but it is stored in the gallbladder.
5. Next, the food travels through the small intestine, where it continues to break down, becoming more like liquid. Any nutrients from the food that the body can use are absorbed into the blood. Anything that the body doesn’t need moves into the **large intestine**.
6. The body absorbs water into the blood from the waste products in the large intestine. Waste products (known as “feces”) move to the end of the large intestine and are stored in the **rectum**. When the body is ready to release this waste, it comes out through the anus.

What Does the Appendix Do?

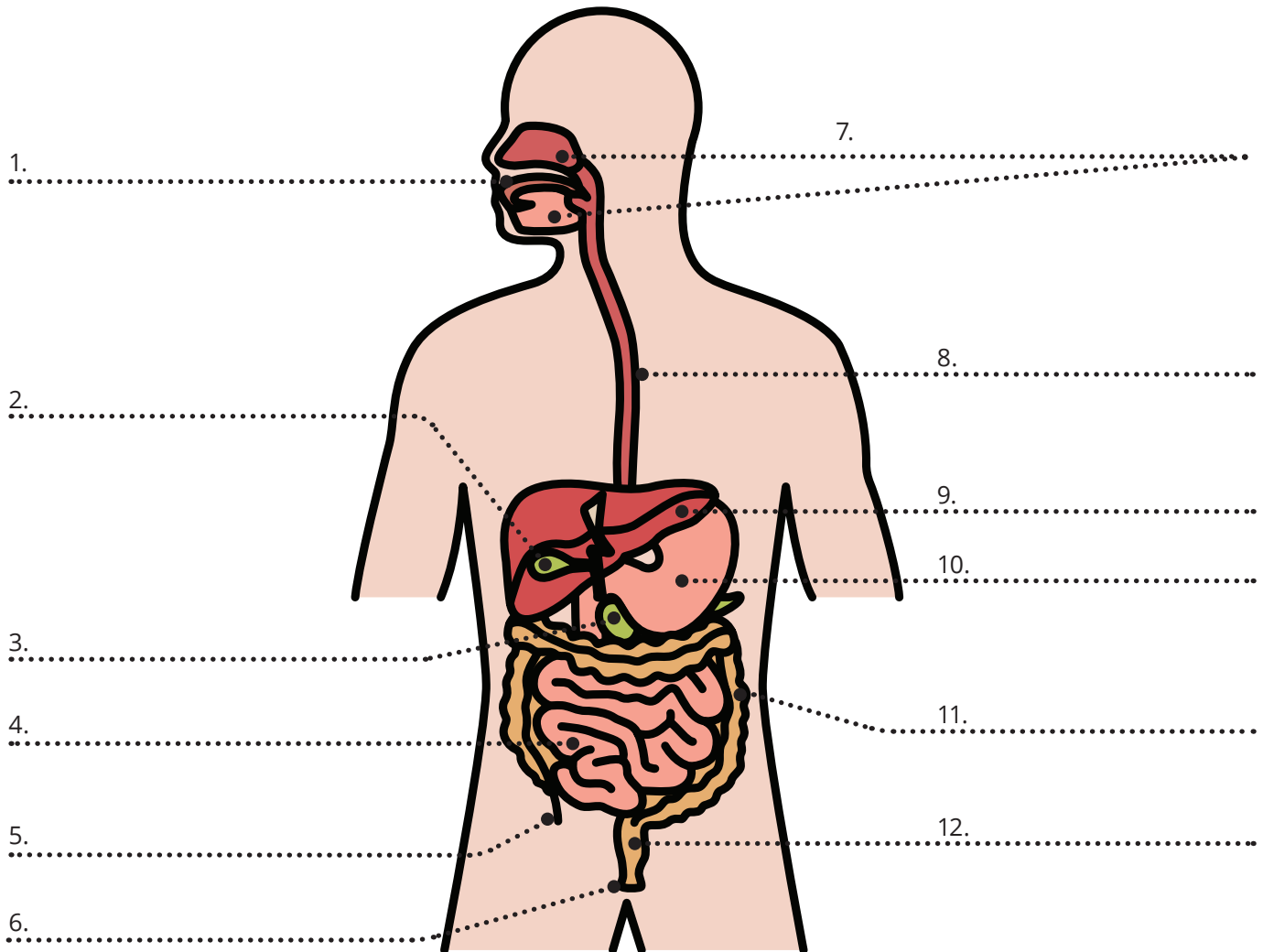
The **appendix** is a small organ attached to the large intestine. Scientists are not sure what this organ does—it doesn’t seem to have a function in normal digestion. Sometimes the appendix becomes sore, swollen, and infected. It needs to be removed. Do you know anyone who has had their appendix removed?

Label the Diagram

Write the terms from the Word List in the diagram below.

Word List:

- | | |
|-------------------|---------------|
| • salivary glands | • anus |
| • large intestine | • gallbladder |
| • small intestine | • stomach |
| • liver | • mouth |
| • pancreas | • esophagus |
| • rectum | • appendix |



Practice

Discuss the questions with a partner.

1. What is digestion? Where does digestion take place?
2. Describe the first thing that happens in the mouth.
3. What does saliva do?
4. How does food get from the mouth to the stomach?
5. What is in the stomach?
6. What do pancreatic juices and bile do?
7. What happens to nutrients from food when they are in the small intestine?
8. Where do waste products go after they move through the small intestine?
9. What happens to food in the large intestine?
10. Where are waste products stored, and where do they exit the body?

Complete the Chart

Find the following words in the reading. Write a definition for each word.

#	Word	Definition
1	enzymes	
2	nutrients	
3	duodenum	
4	bile	
5	lipids	
8	feces	

Challenge

With a partner, take turns using the diagram on page 3 to describe the path of food through the alimentary canal (from mouth to anus). Explain the function of each organ or body part.