

Digestive System Explanation Text

1

The mouth is where food enters the digestive system but the process of digestion starts even before that happens!! The salivary glands produce saliva when food is smelt. You may have come across the phrase 'mouth-watering', which indicates food that smells so good that your mouth is full of saliva.

Saliva contains an enzyme called amylase (pronounced am- uh - leys). This breaks down starch which is a type of carbohydrate. The tongue is important as it mixes the food with the saliva.

Teeth tear, cut and grind food in the mouth so that it can be transported through the body more easily.

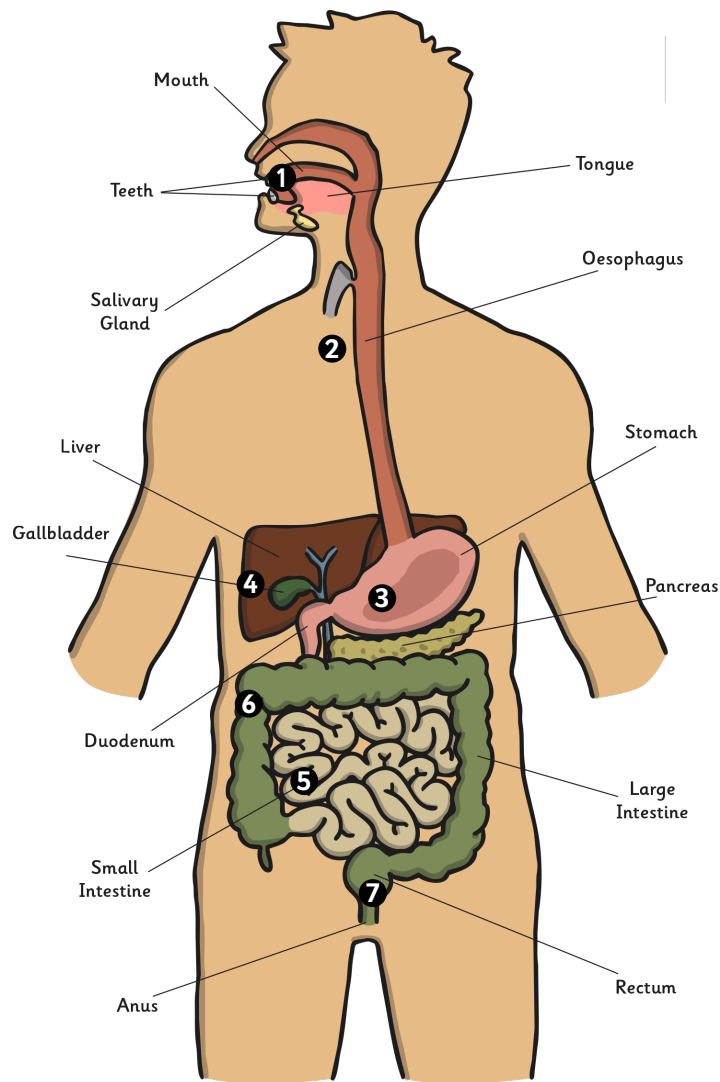
The soft palate is the name of the top of the mouth, this part of the mouth moves the food through the mouth and towards the oesophagus.

2

The next part of the digestive process takes part in the oesophagus. This is a long muscular tube that leads to the stomach. Here the food is moved down by the muscles in synchronised waves (pairs of muscles contracting and relaxing at the same time). This movement is called peristalsis. Muscles in your intestine also work like this.

3

Enzymes and acids are produced in the stomach lining to break food down. The stomach contains powerful muscles that churn and mix food into smaller and smaller pieces.



4

The liver, pancreas and gallbladder are vital to the digestive process even though food does not pass through them.

The pancreas produces enzymes to break down fats, carbohydrates and proteins which are released in the duodenum.

The liver produces bile – this is an important fluid which breaks down fats in our diets. It sends the bile to the gallbladder to store, which releases it into the duodenum when it is needed.

6

After the other two parts of the small intestine absorb the nutrients they need, any part of the food that is not needed travels to the large intestine. The large intestine absorbs water from the remaining food and the rest forms into stools.

5

The small intestine is split into three parts. The duodenum is the first part of the small intestine and it is here that the food is broken down by enzymes and bile.

7

The large intestine moves the stools to the rectum. The rectum has two functions: firstly it stores the stools until they are ready to be released. Secondly, it sends signals to the brain that there are stools that need releasing. The final process in the digestive process is when stools move from the rectum are released from the anus.

In order to be healthy the body needs to both take nutrients from the food and also get rid of the parts of the food it does not

Digestive System Explanation Text Questions



Read each question carefully and answer questions in **sentences**. Re-read the Digestive System Explanation Text if you are unsure of an answer.

1. How many different parts of the digestive system are involved in breaking down food in the mouth?

2. Where is 'bile' produced?

3. Is the whole of the small intestine used in the digestive process?

4. Explain how the stomach helps to digest food.

5. In which part of the digestive system does peristalsis occur?

6. Which part of the digestive system sends signals to your brain? Why does it send them?

7. Why would it be a problem if you did not have a pancreas?

8. Which part of the digestive system is the most important? Why? Explain your answer with at least two reasons.

Digestive System Explanation Text Questions

Teacher Answer Sheet

1. How many different parts of the digestive system are involved in breaking down food in the mouth? **4 – salivary glands, mouth, teeth and tongue.**
2. Where is 'bile' produced? **The liver.**
3. Is the whole of the small intestine used in the digestive process? **No, only the first part called the duodenum.**
4. Explain how the stomach helps to digest food. **The stomach lining produces enzymes and acids which break down food. The stomach muscles churn and breaks food into smaller pieces.**
5. In which part of the digestive system does peristalsis occur? **The oesophagus and the intestines.**
6. Which part of the digestive system sends signals to your brain? Why does it send them? **The rectum sends signals to your brain. It sends them to inform your brain that it contains stools that need to be released.**
7. Why would it be a problem if you did not have a pancreas? **The pancreas produces enzymes that break down fats, proteins and carbohydrates, which are the three main nutrients we eat.**
8. Which part of the digestive system is the most important? Why? Explain your answer with at least two reasons. **There is no 'right' answer here.**

The child needs to:

- 1. Pick one part**
- 2. Include the important function of the part**
- 3. Explain why it can be considered the most important part**