Science

Animals Including Humans


Digestive System
Functions
twinkl

Aim

- I can explain the functions of the digestive system.
- I can use scientific evidence to answer questions.

Success Criteria

- I can add functions to the parts of the digestive system.
- I can match the parts of the digestive system with their functions.
- I can explain the functions of the digestive system.
- I can use scientific evidence I have been given to answer questions.
- I can distinguish between scientific and non-scientific evidence when answering questions.

Digestive System - Parts

Whole Class

Label the parts of the digestive system

mouth

pancreas

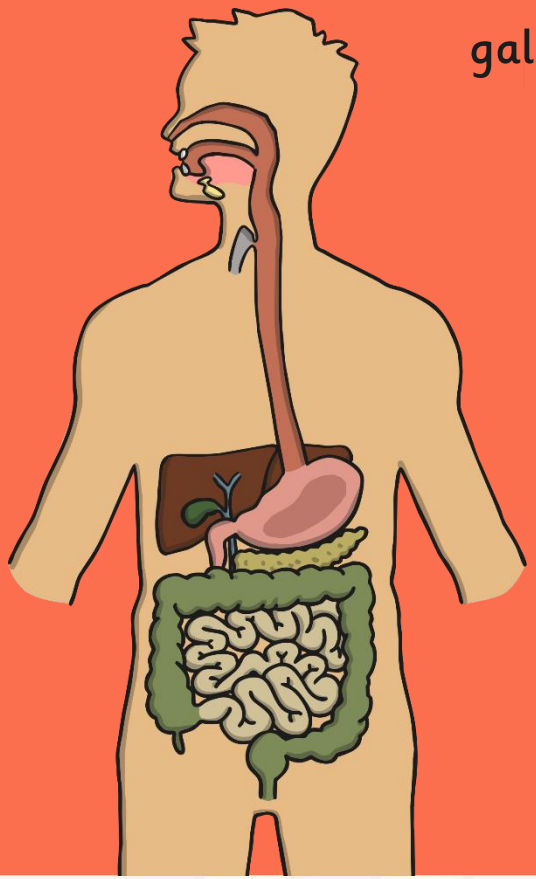
oesophagus

liver

duodenum

anus

salivary glands



gallbladder

teeth

large intestine

stomach

rectum

small intestine

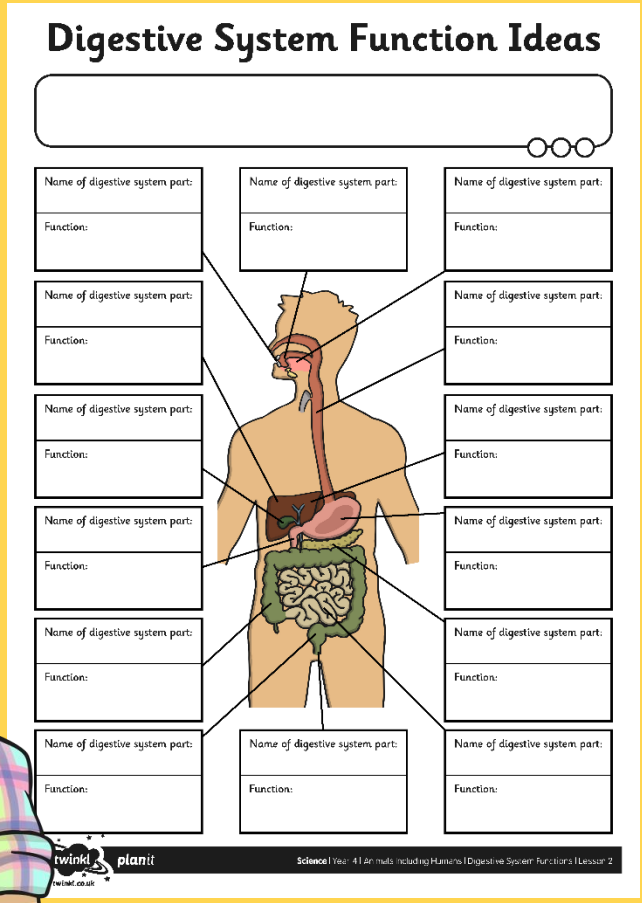
tongue

Digestive System - Functions

How do the different parts of the digestive system work?

How do they help humans to digest food?

Discuss with your group and write down ideas next to the part on your sheet.



Glands

You will come across the word **glands** in this lesson so we should find out what they are!

Glands are organs that release fluids to be used in the body.

Tear glands produce tears.

Sweat glands produce sweat.

Enzymes

Similarly, you will come across the term enzymes.

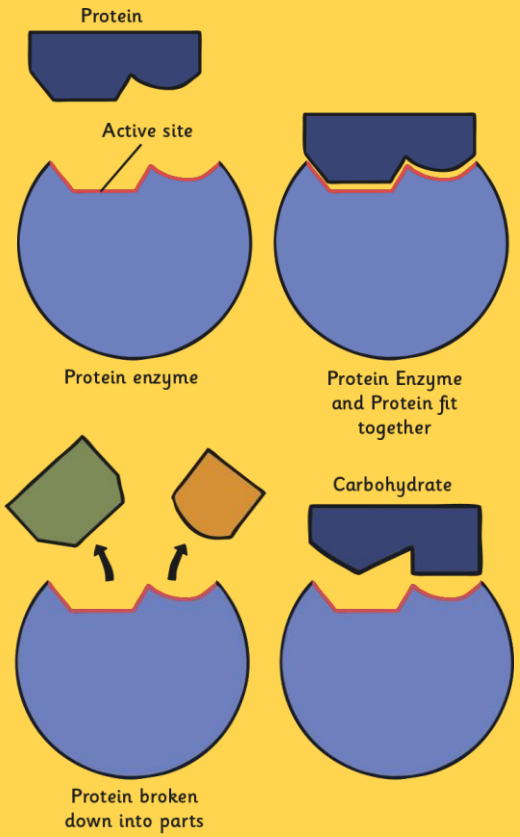
Enzymes are special molecules in the body (molecules make up cells, which make up tissue, glands, organs, etc).

They act to create a chemical reaction.

In the digestive system the reaction they produce breaks down food.

There are lots of **different types of enzymes** as a type of enzyme can only do one thing – so **enzymes** that break down protein can not also break down carbohydrates. You need different enzyme for that!

They are often thought of as a lock – only the right key will fit!



Salivary Glands

Function:

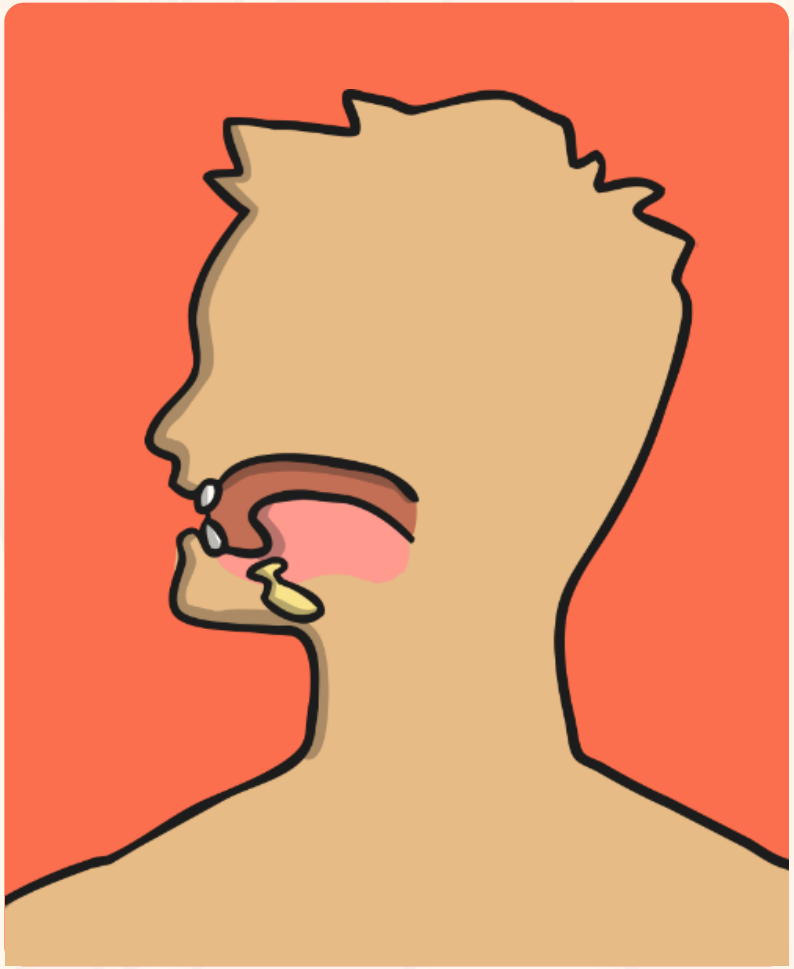
First part of the digestion process starts without you even eating!

The smell of food triggers the salivary glands to produce saliva (some call it your mouth watering).

The amount of saliva increases as you taste the food.

Saliva is mostly made of water and it helps you to chew, taste and swallow food.

Contains enzymes which start to break down the food we eat.



Mouth

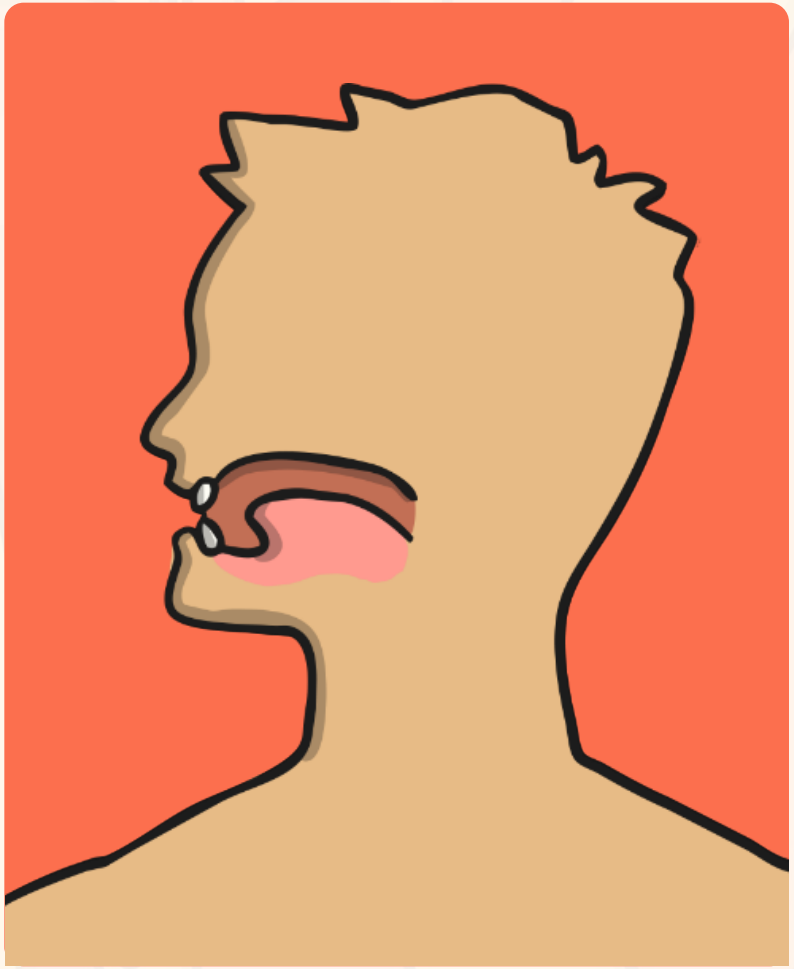
Function:

Entry point for food.

Where saliva mixes with food.

Location of tongue and teeth.

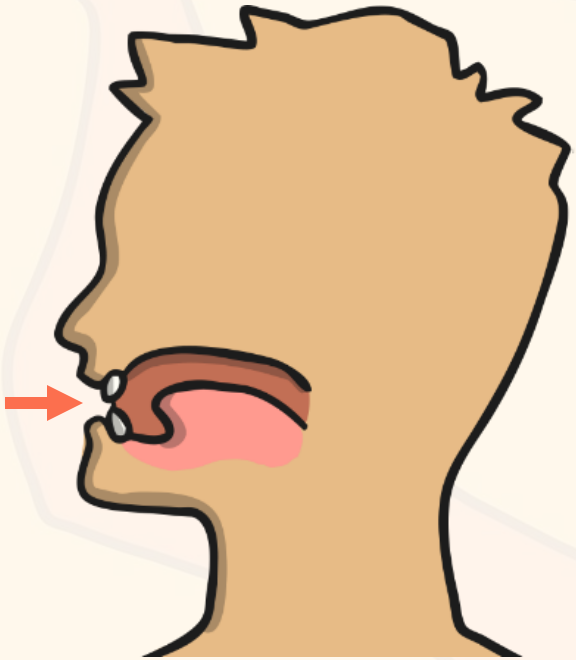
Top part of the mouth (soft palate) helps move food along to the oesophagus.



Teeth

Function:

Tear, cut and grind food into smaller pieces.



Tongue

Function:

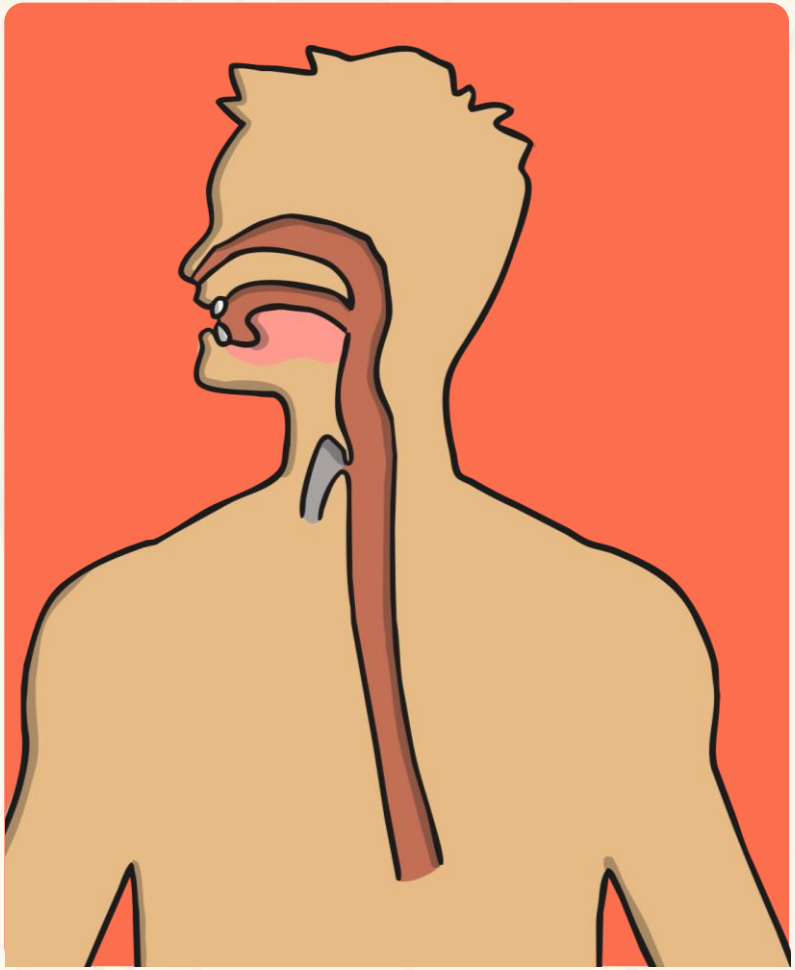
Helps mix the food and saliva.

Oesophagus

Function:

A muscular tube which forms the path from the mouth to the stomach.

Muscles contract and relax to move food down the oesophagus to the stomach.

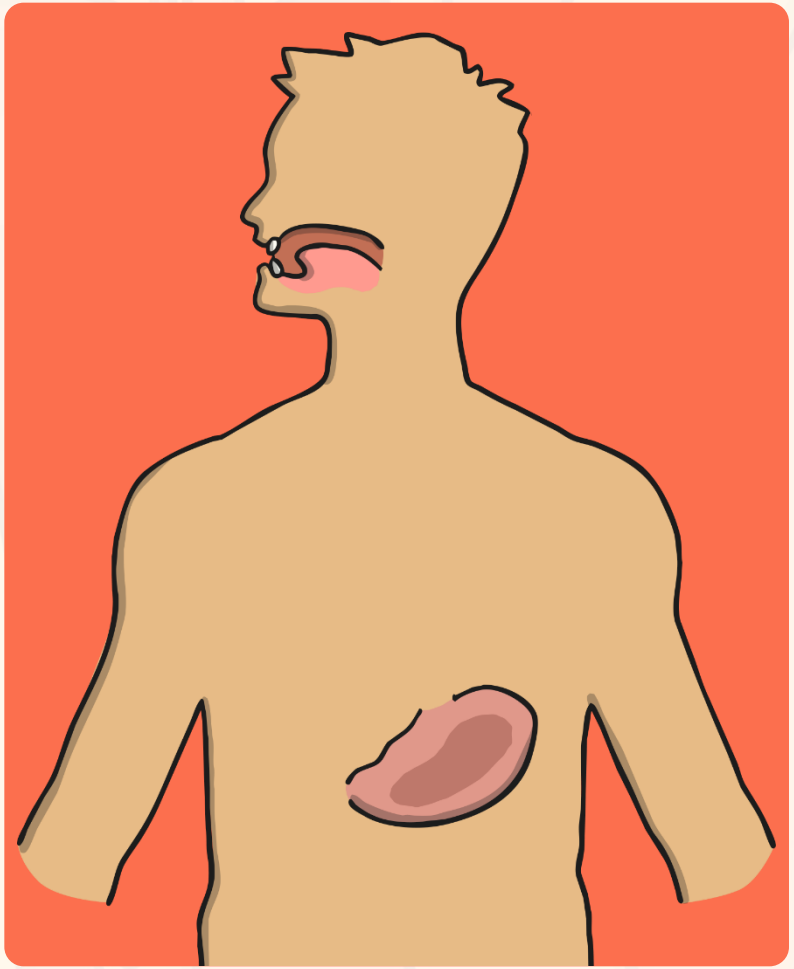


Stomach

Function:

Glands line the stomach produce acid and **enzymes** which breaks the food down further.

Muscles in the stomach mix the food.

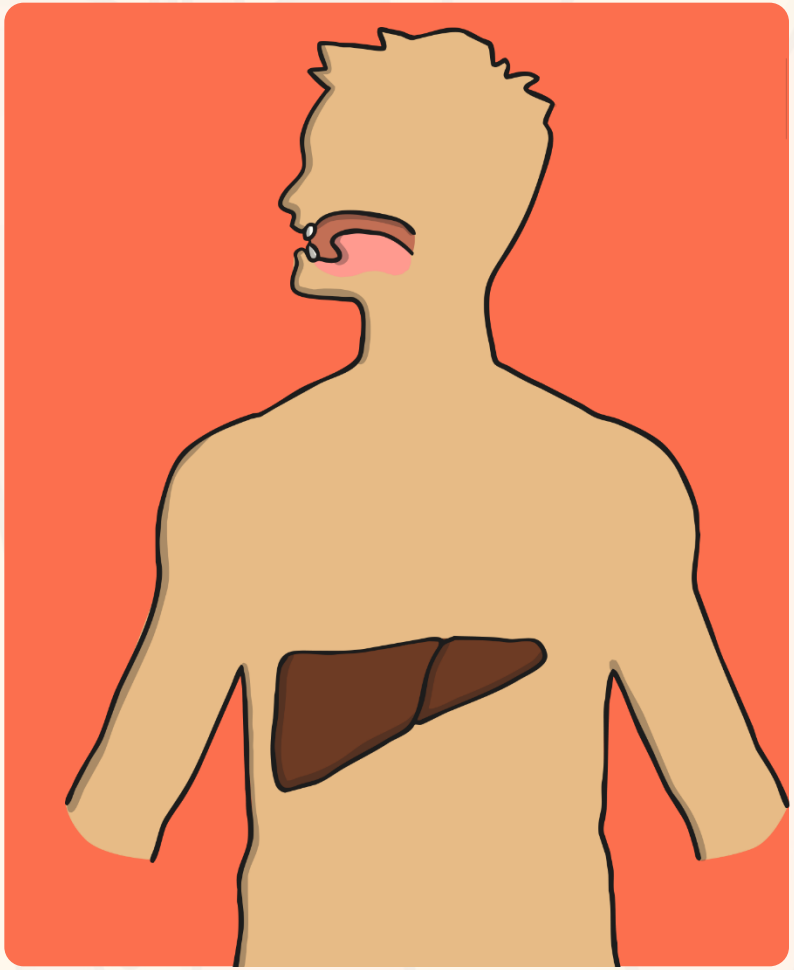


Liver

Function:

Produces bile which helps to absorb fats.

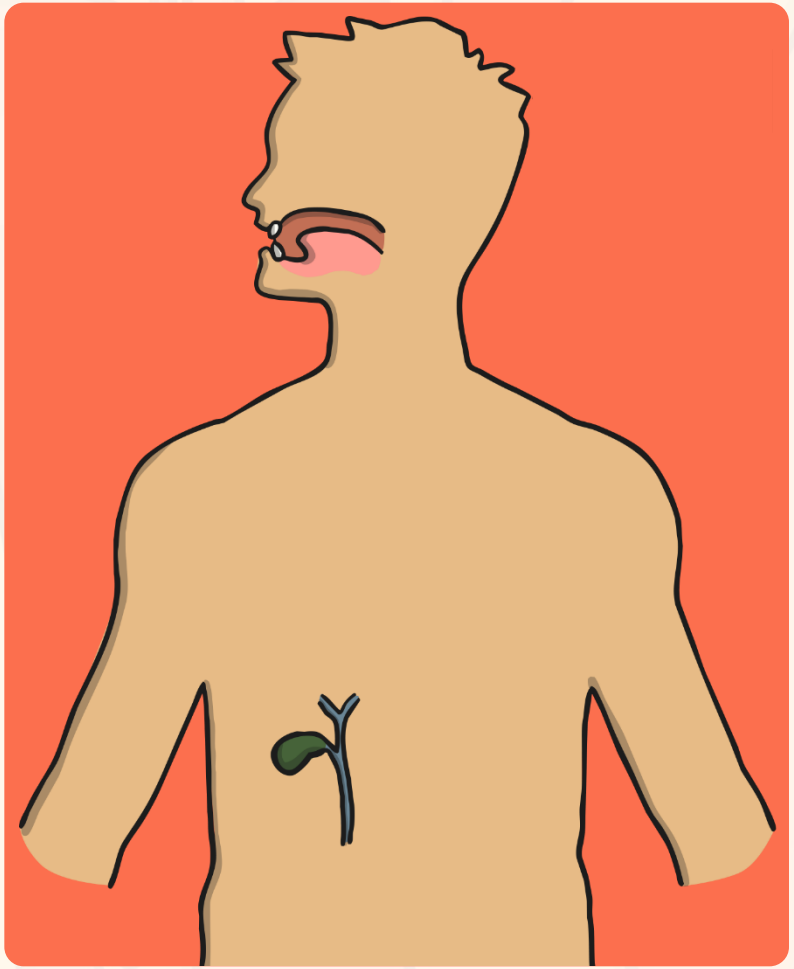
Bile is sent to the gallbladder to be stored.



Gallbladder

Function:

Releases bile into the duodenum when needed.

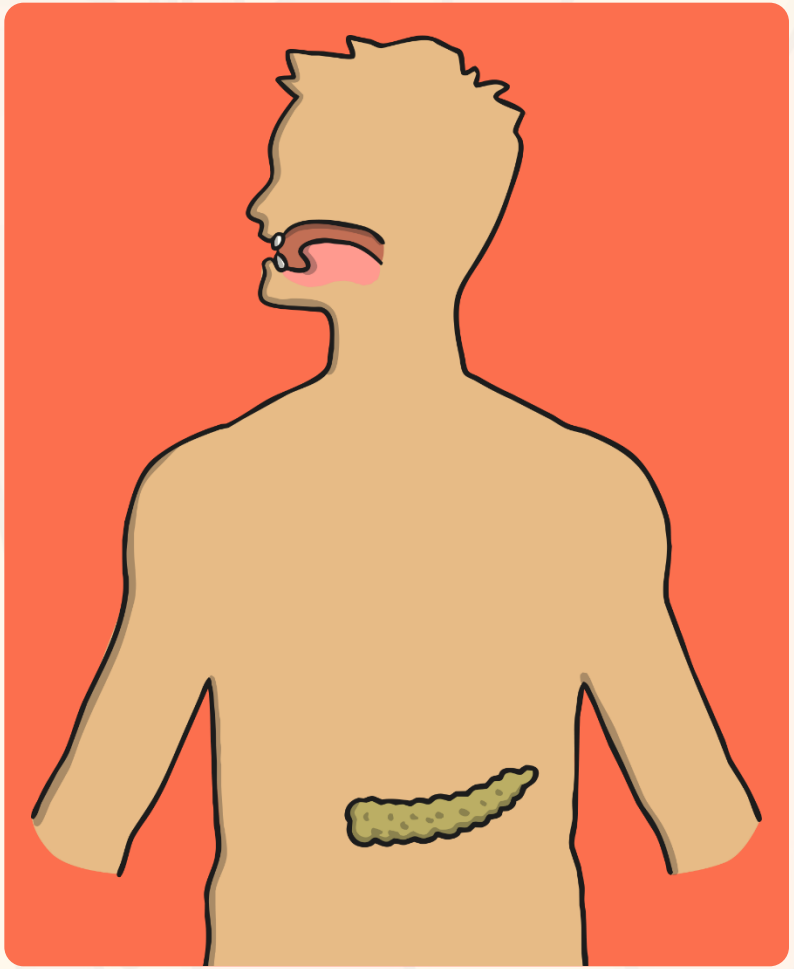


Pancreas

Function:

Produces enzymes to break down fats, proteins and carbohydrates.

Releases them into the duodenum.

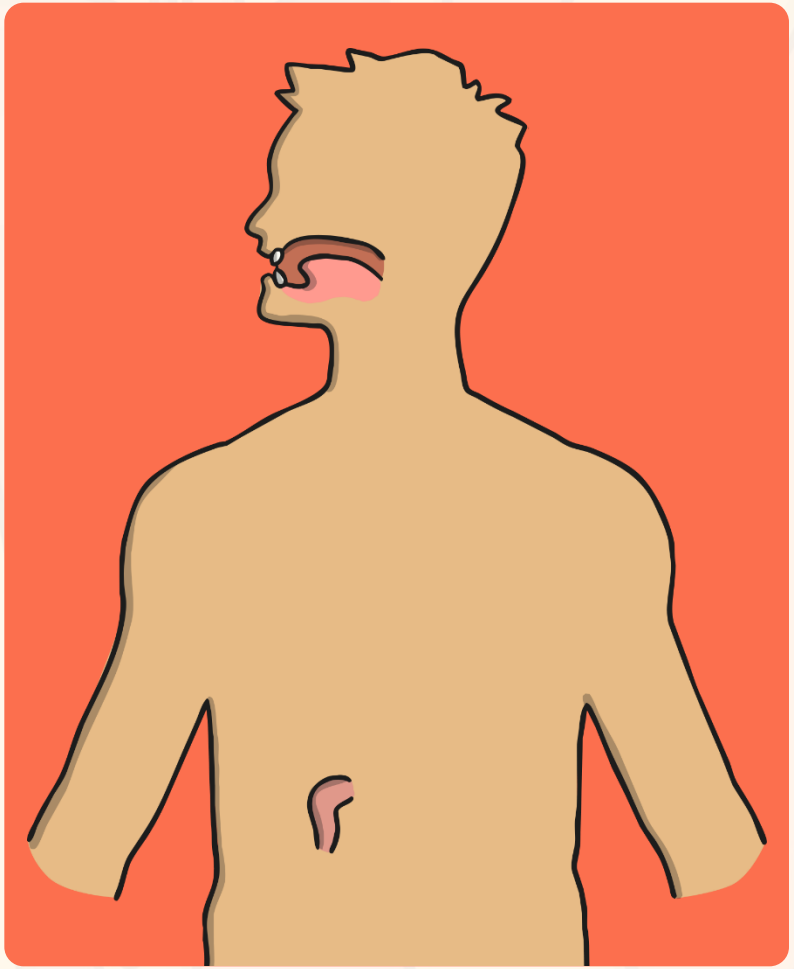


Duodenum

Function:

First part of the small intestine

Food is broken down by bile from the gallbladder and enzymes from the pancreas.

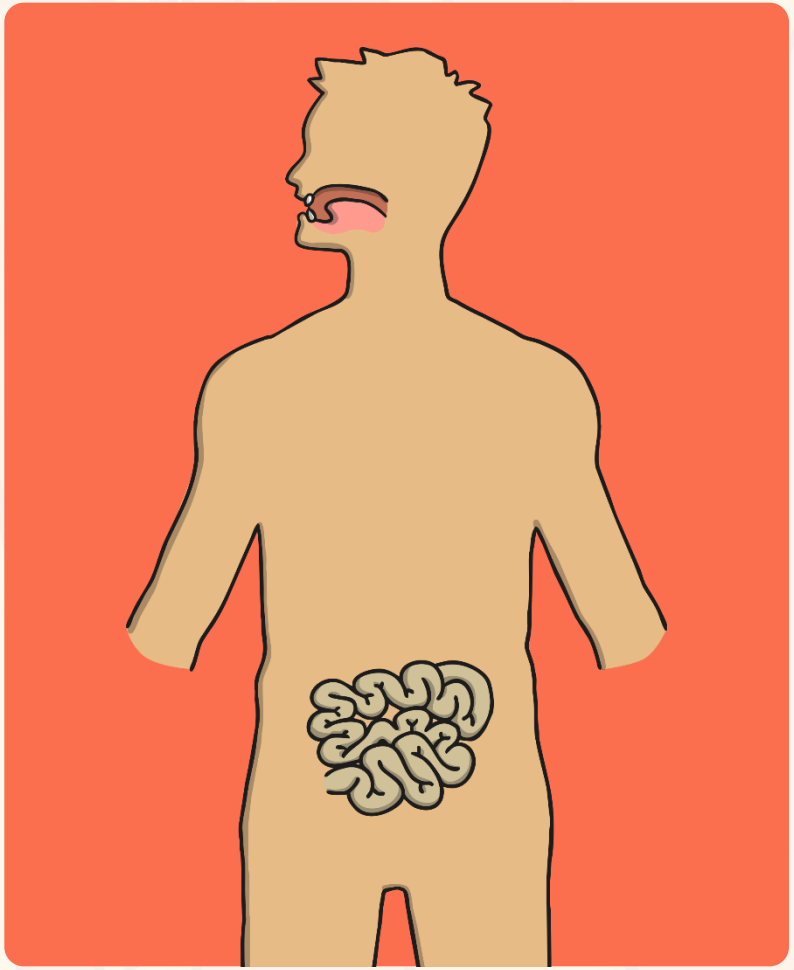


Small Intestine

Function:

The other parts of the small intestine – (jejunum and ileum) absorb nutrients from the food.

Pass any leftover broken down food to the large intestine.



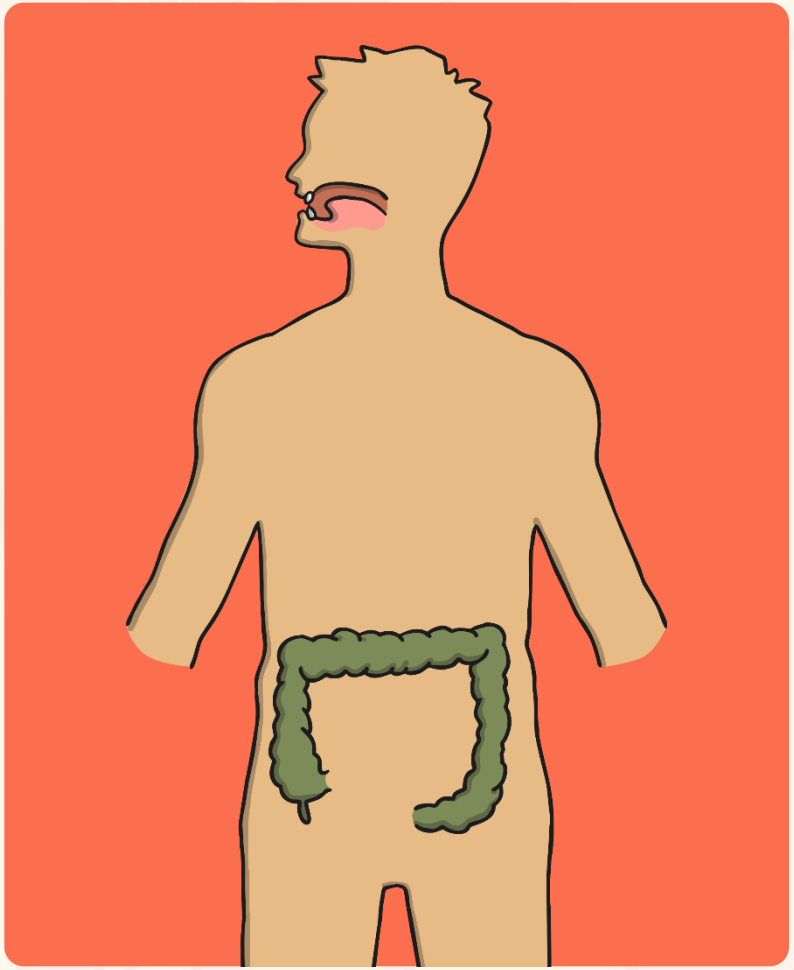
Large Intestine

Function:

Connects the small intestine to the rectum.

Absorbs water from waste food.

Forms stool from waste food.

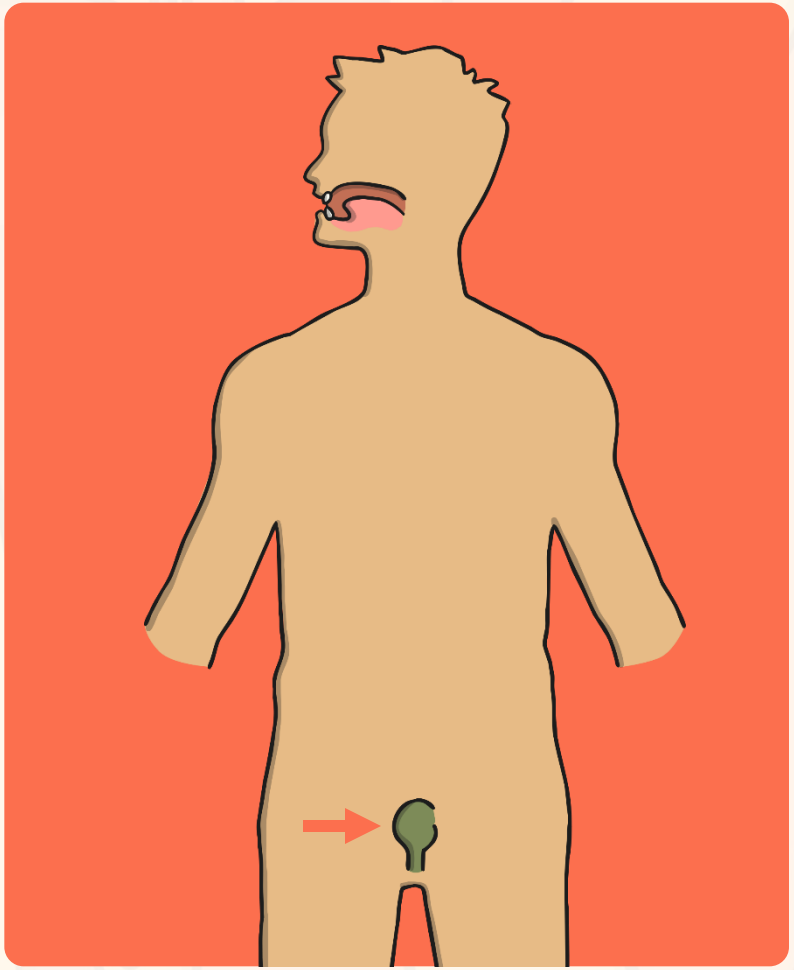


Rectum

Function:

Stores stool passed to it from the large intestine.

Makes brain aware of need to go to the toilet.

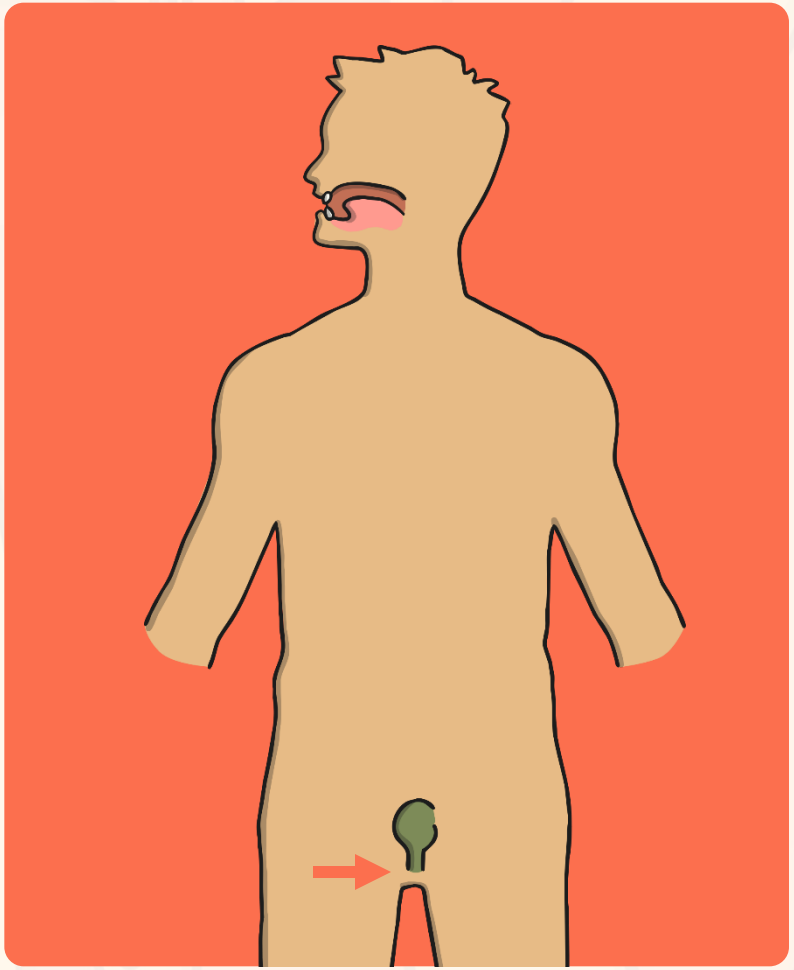


Anus

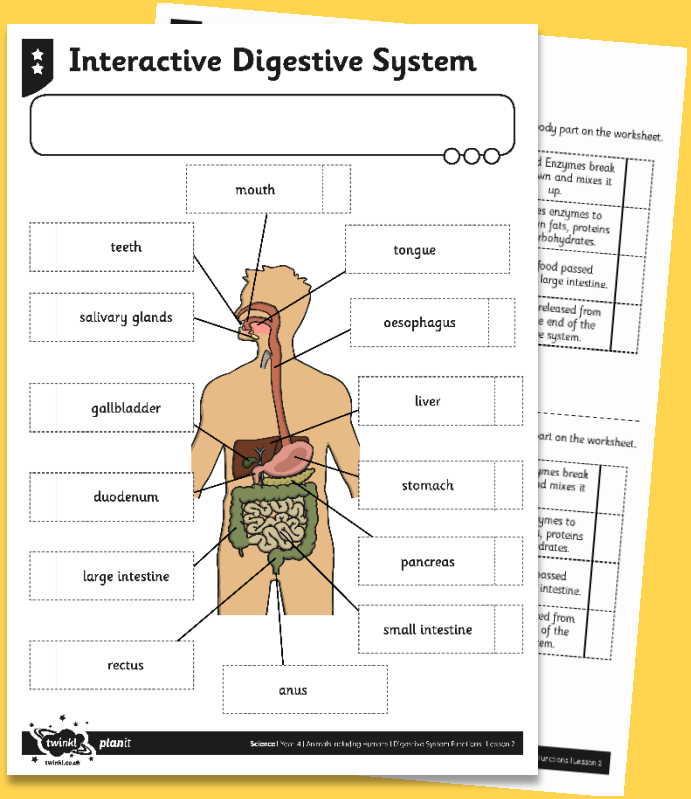
Function:

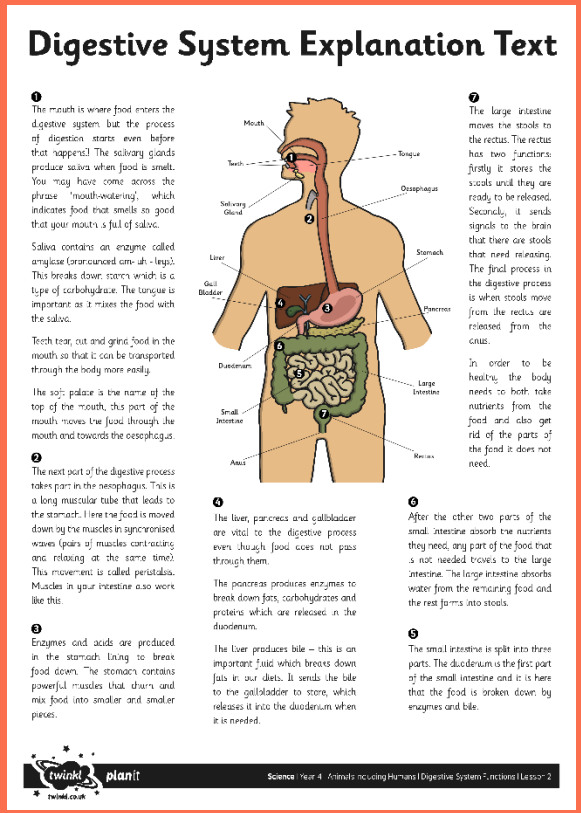
Releases the stool.

End of the digestive process.



The Functions Of The Digestive System

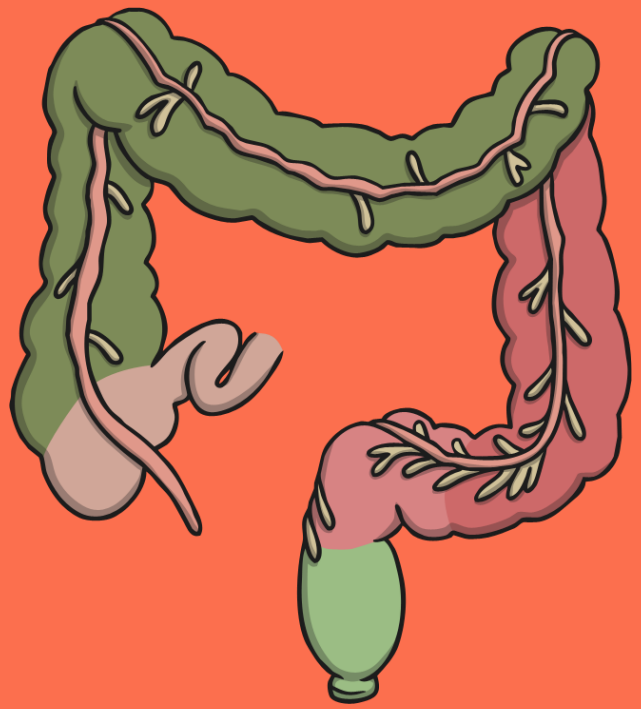




Digestive System Quiz

Whole Class

Click on the answer boxes.



Digestive System Quiz

Whole Class

? What part of the digestive system tears, cuts and grinds food?

stomach

teeth

salivary glands

pancreas

Digestive System Quiz

Whole Class

?

Which part of the body produces saliva?

Well done!

mouth

gallbladder

salivary glands

liver

Digestive System Quiz

?

What is the function of the tongue?

Well done!

mixes food with saliva

cuts food

produces saliva

breaks down food

Digestive System Quiz

Whole Class

?

Which part of the digestive system forms stools?

rectum

oesophagus

small intestine

large intestine

Digestive System Quiz

?

Which is the only part of the digestive system which needs to send a signal to the brain?

Well done!

- rectum
- gallbladder
- pancreas
- anus

Digestive System Quiz

Whole Class

?

Which of these is the function of the stomach?

produces saliva

produces bile

produces acid

produces stools

Digestive System Quiz

Whole Class

?

Where is bile stored?

stomach

liver

pancreas

gallbladder

Digestive System Quiz

? How many parts of the small intestine are used to digest food?

Well done!

two

one

three

none

Digestive System Quiz

Whole Class

?

Which part moves the food to the stomach?

Well done!

small intestine

oesophagus

large intestine

mouth

Digestive System Quiz

?

What do glands do?

Well done!

break down food

keep the pancreas healthy

produce fluids

send signals to the brain

Digestive System Quiz

Whole Class

?

How many different parts of the digestive system does food enter?

eight

ten

thirteen

three

Digestive System Quiz

?

What are enzymes?

Well done!

cells that break down food

molecules that break down food

glands that break down food

organs that break down food

Digestive System Quiz

Whole Class

?

What is the name of the top part of the mouth?

hard palate

soft pilates

soft palate

hard pilates

Digestive System Quiz

?

What two substances break down food in the duodenum?

Well done!

acid and enzymes

bile and saliva

acid and bile

enzymes and bile

Digestive System Quiz

?

The name of the wave movement of the muscles in the oesophagus is called…

Well done!

- periscope
- perisic
- peristalsis
- periodic

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