



The Digestive System

Year 4

Knowing More, Remembering More

Remembering previous learning

What is a carnivore? A carnivore is an animal with sharp teeth and claws that eats other animals (meat).

What is an herbivore? An herbivore is an animal with flat teeth that eats plants.

What is an omnivore? An omnivore is an animal that eats animals and plants.

What are germs? Germs are living things that are too small to be seen by the human eye that make you unwell.

How often should you brush your teeth? Twice a day, with a toothbrush, toothpaste and water.

Why is it important to brush your teeth? If you don't, plaque can build up on your teeth and can damage your teeth and gums.

In this unit children will...

- Compare the teeth of carnivores and herbivores and suggesting reasons for differences (non-statutory).
- Identify the different types of teeth in humans and their simple functions.
- Describe the simple functions of the basic parts of the digestive system in humans.

Working Scientifically:

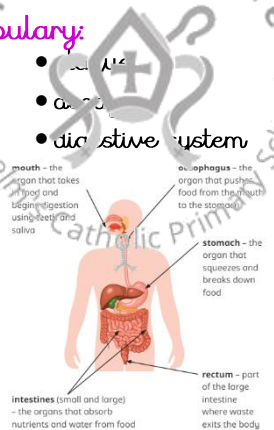
- 4.1 Ask relevant questions and use different types of scientific enquiry to answer them.
- 4.3 Make predictions based on simple scientific knowledge.
- 4.4 Identify what they will change, observe or measure and keep the same.
- 4.5 Set up simple practical enquiries, comparative and fair tests.
- 4.6 Make systematic and careful observations
- 4.10 Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.
- 4.13 Use results to draw simple conclusions.

Key Learning Steps:

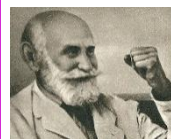
- Teeth - carnivores, herbivores and omnivores
- Human teeth
- Layers of the teeth
- Plan - tooth decay experiment
- The digestive system
- The digestive system - model
- Findings - tooth decay experiment

Key Vocabulary:

- teeth
- root
- germs
- enamel
- mouth
- oesophagus
- stomach
- rectum
- intestines
- saliva



Key Scientists:



Classic
Ivan Pavlov (1849 - 1936)
Russian scientist who studied mammal digestive systems.



Contemporary
Emma Allen-Vercoe
Developed 'Robogut', a bioreactor that helps to study the Colon (large intestine).

Knowing More, Remembering More

Knowing more in Y4

How many types of teeth do humans have? They have four types - incisors, canines, premolars and molars.

What are incisors? Incisors are flat teeth at the front of the mouth that bite into food.

What are canines? Canines are sharp, pointed teeth that rip and tear food.

What are premolars? Premolars are found between the canines and molars; they guide food to the back of the mouth.

What are molars? Molars are the large teeth at the back of the mouth used to grind and chew food.

What is enamel? Enamel protects the sensitive parts of the tooth underneath.

What is plaque? Plaque is a sticky coating made by germs. If it is not removed from the teeth, it can cause the enamel to rot away, exposing the sensitive.

How should we take care of our teeth? Brush them twice a day, reduce our sugar intake, visit the dentist regularly.

What is digestion? Digestion is the breaking down of larger pieces of food into smaller pieces so that the body can use it for energy. It begins when food is bitten by the teeth.

What is saliva? Saliva turns smaller pieces of food into a more liquid substance, so it travels smoothly down the oesophagus to the stomach.

What happens in the stomach? Food is churned and acid is added to break it down further before it passes to the small intestine.

What happens in the small intestine? Nutrients from the body are absorbed in the small intestine before passing to the large intestine.

What happens in the large intestine? Water from the remaining food is absorbed and then waste is passed to the rectum.

Label the digestive system (see diagram above)