



Year 3 & 4 - Science

BIOLOGY UNIT

Animals including humans (Teeth & Digestion)

Autumn term 2026

Prior knowledge

- Identify and name a variety of common animals that are carnivores, herbivores and omnivores. (KS1 - Animals, including humans).
- Find out about and describe the basic needs of animals, including humans, for survival (water, food and air). (KS1 - Animals, including humans).
- Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene. (KS1 - Animals, including humans).

Future knowledge

- Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood. (UKS2 - Animals, including humans).
- Recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function. (UKS2 - Animals, including humans).
- Describe the ways in which nutrients and water are transported within animals, including humans. (UKS2 - Animals, including humans).
- Describe the changes as humans develop to old age. (UKS2 - Animals, including humans).

Key Vocabulary

Science specific: Scientific, accurate, conclusion, difference, similarity, criteria, comparative test, fair test, evidence, diagram, enquiry, analyse, prediction, recognise, practical.

Topic specific: Digestive system, digestion, stomach, small intestine, large intestine, oesophagus, rectum, anus, teeth, molar, pre-molar, incisor, canine, saliva, mouth, nutrients, herbivore, carnivore, predator, producer, prey, food chain.

Learning Sequence

What types of teeth do humans have and what is their function?

Substantive Knowledge:

- Identify the different types of teeth in humans and their simple function.
- Humans have four types of teeth: incisors for cutting; canines for tearing;

Disciplinary Knowledge:



Gather, record, classify and present data in a variety of ways to help answer questions, supported by the teacher.

and molars and premolars for grinding (chewing).	
What effect do different liquids have on teeth?	
Substantive Knowledge: - Identify the different types of teeth in humans and their simple function. - Different liquids affect teeth differently.	Disciplinary Knowledge: Use prior knowledge to suggest what might happen in an enquiry, with support. Decide on the method and equipment to use to carry out an enquiry, with support from the teacher. Make systematic and careful observations and, where appropriate, take accurate measurements with a range of equipment, supported by the teacher. Use observations, ideas and straightforward scientific evidence to support and explain findings. Use results to evaluate the success of an enquiry, suggest improvements and raise further questions.
What makes an effective toothpaste?	
Substantive Knowledge: Identify the best ingredients to use in toothpaste manufacture	Disciplinary Knowledge: Ask relevant questions and use different types of scientific enquiries to answer them, with teacher support. Use prior knowledge to suggest what might happen in an enquiry, with support.
Where did toothpaste originate?	
Substantive Knowledge: Washington and Sheffield invented tubed toothpaste	Disciplinary Knowledge: Ask relevant questions and use different types of scientific enquiries to answer them, with teacher support.

Why do different animals have different teeth?	
Substantive Knowledge: - Construct and interpret a variety of food chains, identifying producers, predators and prey - Living things can be classified as producers, predators and prey according to their place in the food chain.	Disciplinary Knowledge:  Gather, record, classify and present data in a variety of ways to help answer questions, supported by the teacher.
What are food chains and food webs?	
Substantive Knowledge: - Construct and interpret a variety of food chains, identifying producers, predators and prey - Living things can be classified as producers, predators and prey according to their place in the food chain.	Disciplinary Knowledge:  Gather, record, classify and present data in a variety of ways to help answer questions, supported by the teacher.
How does the human digestive system work?	
Substantive Knowledge: - Describe the simple functions of the basic parts of the digestive system in humans - Food enters the body through the mouth. - Digestion starts when the teeth start to break the food down. - Saliva is added and the tongue rolls the food into a ball. - The food is swallowed and passes down the oesophagus to the stomach. - Here the food is broken down further by being churned around and other chemicals are added. - The food passes into the small intestine. Here nutrients are removed from the food and leave the digestive system to be used elsewhere in the body.	Disciplinary Knowledge:  Gather, record, classify and present data in a variety of ways to help answer questions, supported by the teacher.

• The rest of the food then passes into the large intestine. Here the water is removed for use elsewhere in the body. • What is left is then stored in the rectum until it leaves the body through the anus when you go to the toilet.	
End point: • Can point to the different types of teeth in their mouth and talk about their shape and what they are used for. • Can sequence the main parts of the digestive system. • Can describe what happens in each part of the digestive system. • Can draw the main parts of the digestive system onto a human outline. • Can name producers, predators and prey within a habitat. • Can construct a food chain.	