

KS1.CA.T2.1	Area of study: Animals including humans Unit aims / outcome: <ul style="list-style-type: none"> Describe the simple functions of the basic parts of the digestive system in humans. Identify the different types of teeth in humans and their simple functions. Construct and interpret a variety of food chains, identifying producers, predators and prey. 		
Geographical concepts to organise knowledge: Biology Working Scientifically			
Key strands of learning:			
Hierarchical Strands: (see progression) The digestive system Teeth Food chains		Cumulative Strands:	
Learning in Reception:	Tier 2 <u>New</u> Digestion Bloodstream absorb <u>Review -</u> Mouth Tongue Stomach Teeth		Tier 3 <u>New</u> Oesophagus Small and large intestine Rectum Incisors Canines Molars Wisdom teeth Fluoride
NC objective:	Vocabulary and crucial knowledge:		
-describe the simple functions of the basic parts of the digestive system in humans -identify the different types of teeth in humans and their simple functions - construct and interpret a variety of food	<u>Context of study:</u> This unit is the sixth science units where pupils study animals, including humans, as part of the discipline of biology. Pupils have a secure knowledge of life cycles and what animals, including humans, need to survive (KS1.CB.T2.2). Pupils know the importance of a healthy lifestyle, including a balanced diet and the effects of sugar, the food groups and their role in human development (KS1.CB.T2.2). Pupils can identify and name a variety of animals, including the names of animals native to the sea, rivers and canals and the features that help them to live there(KS1.CB.T2.1). Pupils can use classification keys to help group, identify and name a variety of living things in their local and wider environment (KS1CAT1). Pupils know that humans and some other animals have skeletons and muscles for support, protection and movement (KS2.CA.T2.1). In this unit, pupils learn about the simple functions of the basic parts of the digestive system in humans. New learning includes identifying the different		

chains, identifying producers, predators and prey

types of teeth in humans and their simple functions. Pupils construct and interpret a variety of food chains, identifying producers, predators and prey.

Crucial Knowledge:

The digestive system

Know that digestion is the breaking down of food mechanically in the mouth before chemically in the stomach.

Know that the mouth, tongue, teeth, oesophagus, stomach, small and large intestine and anus make up the human digestive system.

Know where each part is within the human body.

Know the function of each part –

1. Mouth: food enters the digestive system and is mixed with saliva to make it softer, the tongue and teeth break down the food.

2. Oesophagus: moves food from the mouth to the stomach.

3. Stomach: uses chemicals to break down the food into small parts before passing on to the small intestine.

4. Small intestine: digested food here is passed into the bloodstream where it can be taken to the body parts that require it.

5. Large intestine: any food leftover is unwanted, and is passed along the large intestine to the rectum.

6. Anus- where the waste is removed from the body.

Know that, without digestion, we could not absorb nutrients from food into our bodies and use them.

Know that, in humans, the small intestine is about 6 metres long and the large intestine is about 1.5 metres long.

Teeth

Know that there are different teeth for different purposes.

Incisors: the front teeth help bite off chunks of food to be broken down.

Canines: pointed teeth designed to rip and tear meat and fish. (Premolars and)

Pre-molars: crush the food down in to smaller parts

Molars: flatter, thicker teeth at the back of the mouth designed to chew and grind food.

Know that you get two sets of teeth during your lifetime - the first set is often called the milk or baby teeth.

Know that a child has 20 teeth and an adult has 32.

Know that adults have wisdom teeth which grow at the end of each row of teeth. These are often removed in adults because they can affect the growth of the teeth nearby and can be painful.

Know that it is important to look after teeth by brushing at least twice a day for two minutes at a time. It is important to use toothpaste which contains flouride as this protects teeth from tooth decay. (Watch video clip to understand the most effective way to brush teeth -

<https://www.youtube.com/watch?v=xm9c5HAUBpY>)

Know that you can also use mouthwash and dental floss to help look after your teeth.

Food Chains

Know that a food chain is a series of living things which are linked to each other because each thing feeds on the one next to it in the series.

Know that plants are producers, and create their own food through a process called photosynthesis (which they will find out about in secondary school).

Know that all animals are consumers, they eat food (either plants or other animals) rather than produce their own (as plants are able to)

Know that prey are animals that are consumed by other animals and predators are animals that consume other animals. Understand that some animals can be both predator and prey (e.g. a baboon eats grasshoppers but is eaten by a leopard)

Know the following food chains: Plant Roots (producer) -> Zebra (prey) -> Lion (predator) Green shoots (producer) -> antelope (prey) -> crocodile (predator) Grass (producer) -> grasshopper (prey) -> Baboon (predator + prey) -> Leopard (predator). Grass (producer) -> cow (prey) -> human (predator).

Working Scientifically:

Research:

Children would be researching which teeth to use when eating different foods and researching which parts of the body play what role/function within the digestive system. Compare the teeth of humans with carnivores and herbivores. Know that carnivores eat only meat. Their teeth have more canines as they will rip and tear food more. e.g. Lion's teeth. Know that herbivores eat only plant life. Their teeth have more molars as they grind and break down vegetation more. e.g. Zebra's teeth. Know that humans are omnivores and have a more balanced diet of plants and animals. (this links to prior topics).

- Ask questions: discussion as to why and how your mouth/teeth would work to eat that particular food. Thinking about the process and why you have to digest food in that order through the different body parts.
- Predict: Which teeth would you use for that particular food? What do you think that part of the body does in the process of digestion.

Identifying, classifying and grouping

Children will identify different animals and plants and why they go in that particular order in the food chain. Children will think about classifying animals and plants in to producers/consumers/predators and prey.

- Record: simple food chains and label their classification.
- Communication result/evaluate: explain why the animals and plants go in that particular order and think about explaining why those animals have been chosen- would you find them all in the same habitat?

Pattern seeking

Get the children to think about what patterns they can see. Children will understand that plants always have to start the food chain and usually bigger animals such as predators come at the end. Children will understand

that food chains can be linked to habitats and where you would find different animals.

- Recording: food chains in their books with labels of classifications
- Evaluate: children will explain why certain animals go in different orders and what the arrows mean within the food chain.

Key scientists of study: