Year	4	**Topic**	Animals, including humans

- 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.

Prior learning	**Future learning**
- Identify and name a variety of common animals that are carnivores, herbivores and omnivores. (Y1 - Animals, including humans) - Find out about and describe the basic needs of animals, including humans, for survival (water, food and air). (Y2 - Animals, including humans) - Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene. (Y2 - Animals, including humans) - Identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat. (Y3 - Animals, including humans)	- Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood. (Y6 - Animals, including humans) - Recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function. (Y6 - Animals, including humans) - Describe the ways in which nutrients and water are transported within animals, including humans. (Y6 - Animals, including humans)

WHAT PUPILS NEED TO KNOW OR DO TO BE SECURE	
Show understanding of a concept using scientific vocabulary correctly	
Key learning	**Possible evidence**
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. 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. Humans have four types of teeth: incisors for cutting; canines for tearing; and molars and premolars for grinding (chewing).	- Can sequence the main parts of the digestive system - Can draw the main parts of the digestive system onto a human outline - Can describe what happens in each part of the digestive system - Can point to the three different types of teeth in their mouth and talk about their shape and what they are used for - Can name producers, predators and prey within a habitat

Living things can be classified as producers, predators and prey according to their place in the food chain.	• Can construct food chains
Key vocabulary	
Digestive system, digestion, mouth, teeth, saliva, oesophagus, stomach, small intestine, nutrients, large intestine, rectum, anus, teeth, incisor, canine, molar, premolars, herbivore, carnivore, omnivore, producer, predator, prey, food chain	

Common misconceptions
Some children may think: • arrows in a food chains mean 'eats'   • the death of one of the parts of a food chain or web has no, or limited, consequences on the rest of the chain   • there is always plenty of food for wild animals   • your stomach is where your belly button is   • food is digested only in the stomach   • when you have a meal, your food goes down one tube and your drink down another   • the food you eat becomes "poo" and the drink becomes "wee".

Apply knowledge in familiar related contexts, including a range of enquiries	
Activities	**Possible evidence**
• Research the function of the parts of the digestive system. • Create a model of the digestive system using household objects. • Explore eating different types of food to identify which teeth are being used for cutting, tearing and grinding (chewing). • Classify animals as herbivores, carnivores or omnivores according to the type of teeth they have in their skulls. • Use food chains to identify producers, predators and prey within a habitat. • Use secondary sources to identify animals in a habitat and find out what they eat.	• Can use diagrams or a model to describe the journey of food through the body explaining what happens in each part • Can record the teeth in their mouth (make a dental record) • Can explain the role of the different types of teeth • Can explain how the teeth in animal skulls show they are carnivores, herbivores or omnivores • Can create food chains based on research
Working Scientifically	

Year 4 Animals including humans
Classifying: Children interpret their data to generate simple comparative statements based on their evidence. They begin to identify naturally occurring patterns and causal relationships.

- Compare and contrast different types of teeth (linking to simple functions).
- Classify jaw bones/teeth to aid with making food chains e.g. recognise what eats plants and what eats animals by looking at their teeth.

Observing over time

- Not relevant

Pattern seeking

- Not relevant

Comparative/Fair testing

- Not relevant

Researching: Given a range of resources, the children decide for themselves how to gather evidence to answer the question. They recognise when secondary sources can be used to answer questions that cannot be answered through practical work. They identify the type of enquiry that they have chosen to answer their question.

- Research the different parts of the digestive system. (Children present what they've learned in different ways: create a model, write a song, write a story, create a PPT, etc.)
- Research what different animals eat within a specific environment, e.g. coral, polar, African grasslands, in order to construct food chains.