National Curriculum Objectives

- 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.

Working Scientifically Skills

- Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions.
- Use straightforward scientific evidence to answer questions or to support their findings.

Enquiry type

- ❖ Fair Testing: Testing different types of liquid on teeth
- Research: Use secondary information to research what different animals eat and what teeth they have
- Identifying, grouping and classifying: Sorting animals into categories based on their teeth type.

Enquiry Skills

- Setting up tests: Fair test: Does the type of liquid have an effect on the colour of the teeth?
- ❖ Making predictions: I think that the xxx will change the colour of the teeth because...
- Asking Questions: What happens to food after we swallow?

Topic Summary: LKS2 Teeth

Substantive knowledge

- Big idea: In the human body, systems carry out such key functions as respiration, digestion, elimination of waste and temperature control.
- Know that 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.
- Know that Humans have four types of teeth: incisors for cutting; canines for tearing; and molars and premolars for grinding (chewing).
- Know that Living things can be classified as producers, predators and prey according to their place in the food chain.

Disciplinary knowledge

- Identify the different types of teeth in humans and their functions. Make links to other animals and what they eat.
- Research the function of the parts of the digestive system.

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

Phonics / polysyllabic words

oesophagus (ph)
incisor (c/or)
herbivore / carnivore (ore)

Reading support

- Word mats
- Scaffolded recording / choice of recording
- Pre teaching of vocab
- Word / picture association

Extension deeper thinking

Explain why humans have different types of teeth. Link to early man's diet.

Key People

- Charlotte Armah: (nutritional biochemist - looking at the effect of diet on human health)
- William Beaumont: First person to observe and describe the process of digestion in a living human.

Topic Summary: LKS2 Teeth

Possible misconceptions

- 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".

- 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.

Assessment Evidence

- 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.
- Can construct food chains.

TAPS assessment focus:

Function of teeth – to find out about what damages teeth and how to look after them.

Use results to draw simple conclusions, suggest improvements and raise further questions.

- Can children use results to draw conclusions?
- Can children suggest explanations for their findings?

Prior learning

- Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense (Year 1)
- Identify and name a variety of common animals that are carnivores, herbivores and omnivores. (Y1

 Animals, including humans)

British Values

- Democracy Take the views and opinions of others into account. Take turns and instructions from others.
- ❖ The rule of law Understand the importance of safety rules when working scientifically make choices when planning an investigation as others

Christian Values

- Spirituality: Living in awe and wonder, asking questions, being inspired by the world and being aware of something 'bigger' outside of ourselves.
- Everyone Achieving: In Science lessons, we explore and celebrate research and developments that take place in many different cultures, both past and present. We explore how

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Topic Summary: LKS2 Teeth

- 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)

Future learning

- 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)

- may have different points of view as to where to start.
- ❖ <u>Tolerance</u> Scientific discoveries have come from other cultures and religious beliefs often compete with scientific understanding.
- Mutual respect Work as a team, discuss findings and offer support and advice to others.
- scientific discoveries have shaped the beliefs, cultures and politics of the modern world.
- Everyone Believing: We ask our own questions to support our own understanding of the world and understand that sharing ideas, data, and results (for further testing and development by others) is a key principle of the scientific method.
- Everyone Caring: Learning about the importance of food chains and how the loss or threat to a species can impact other species.