# Year 4 – Animals, including humans (Biology)

**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

**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

## Lesson 1: Teeth

Observation over time

**Enquiry Question – Are all my teeth the same?**

Provide chn with pictures of different humans teeth (child, adult, X-ray) and a mirror. Encourage the chn to look at their teeth closely. Introduce correct vocabulary for each tooth, discuss their shape and role in digestion. Chn to have plasticine to make a model of their own teeth. Discuss with the chn the importance of looking after their teeth. What do they already know? Chn to have different foods to eat. They are to identify which teeth they are using and why? Biscuit – incisor for biting, crusty baguette (canines for tearing), jelly sweets (molars for grinding).

**Working Scientifically Skills:**

| | |
|---|---|
| gathering data | 1 |
| recording data | 4 |
| presenting data | 1 |

**Key Knowledge:** Different types of teeth do different jobs. We need to look after our teeth by brushing them regularly otherwise they will decay.

## Lesson 2: Food Chains

**Enquiry Question – What is a food chain?**

List some of the things that we eat. Model to the children how we can trace back. E.g. they may have eaten a beef burger, the beef was part of a cow that fed on grass. Repeat and they should see that every food-chain has plants at its base. Explain these are food chains and highlight herbivore/carnivores, predators/prey in the food chain with the chn. Explain that they are going to look for real life examples in the school grounds. Take the chn outside to see the school animals. Discuss with the children the diets of the different animals and see if they can create their own food chains. Look for other examples e.g caterpillars on a leaf, butterflies on flowers, flies in a web. Chn to be given pictures of different animals and plants, they should link up with other children to create their own food chain. Identify producers, predators and prey. Chn to create their own food chains ensure that the arrow shows the transfer of energy in the correct direction.

**Working Scientifically Skills**:

| | |
|---|---|
| asking questions | 1 |
| making predictions | 1 |
| gathering data | 1 |
| recording data | 4 |

**Key Knowledge:** Nutrients produced by plants move to primary consumers then to secondary consumers through food chains. Living things are classified as producers, predators and prey according to their place in the food chain.

## Lesson 3: Food Chains

Research

**Enquiry Question – What is a food chain?**

Chn to have the opportunity to research different food chains. They should write and draw the name of each plant or animal in the food chain on a separate upturned paper/polystyrene cup. Chn to start with the 'plant cup' and to stack the remaining cups on top of this in order of 'what is eaten by what.' Chn can make chomping noises to demonstrate how the animal is eating the previous one. Challenge chn to add additional key vocabulary on each cup to show herbivore, carnivore, producer, predator, prey.

**Working Scientifically Skills**:

| | |
|---|---|
| asking questions | 2 |
| recording data | 4 |
| presenting data | 1 |

**Key Knowledge:** Nutrients produced by plants move to primary consumers then to secondary consumers through food chains. Living things are classified as producers, predators and prey according to their place in the food chain.

## Lesson 4: The Digestive System

Identify & Classify

**Enquiry Question – What happens to my food when I eat it?**

## Lesson 5: The Digestive System

**Enquiry Question – How does digestion work?**

**Prior learning:**

Y3:

- 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
- Identify that humans and some other animals have skeletons and muscles for support, protection and movement

**Future Learning:**

Y5:

- Describe the changes as humans develop to old age
- The life cycle of different living things, e.g. mammal, amphibian, insect bird.
- The differences between different life cycles.
- The process of reproduction in plants
- The process of reproduction in animals

**Working Scientifically Skills:**

- Asking questions
- Planning an enquiry
- Making predictions
- Gathering data
- Recording data
- Presenting data
- Drawing conclusions
- Evaluating an enquiry

| | | | |
|---|---|---|---|
| Ask the chn if they know what digestion is. Discuss and ensure they understand the process. Chn to have the outline of a body and pictures of the digestive system. Ask the chn to put the pictures in the correct place on the body. In groups children to research different organs of the digestive system and present to the rest of the class. As a class discuss the different organs, what they now know about them and where they are in the body.<br>Chn to draw and label a digestive system with the names and functions of the different organs.<br>https://thehumanbodygame.co.uk/#home<br>**Working Scientifically Skills:**<br>asking questions 1<br>recording data 4<br>drawing conclusions 1<br>**Key Knowledge:** Food is broken down by the teeth and further in the stomach and intestines where nutrients go into the blood. | Show the chn a video of the digestive system and how it works. Explain that they are going to create their own digestive system using: bananas, crackers, water, orange juice, tights and cups. Model how to do this then allow the chn to experiment themselves.<br>Children to have a sheet and to order the statements about digestion (Save Teachers Sundays).<br>**Working Scientifically Skills**:<br>planning an enquiry 2<br>recording data 4<br>presenting data 1<br>drawing conclusions 1<br>**Key Knowledge**: Food is broken down by the teeth and further in the stomach and intestines where nutrients go into the blood. | | |

Clapgate Primary School
Inspiring Young Minds

# Year 4 Medium Term Science Planner
# Animals, including humans (Biology) – Formative Assessment

Knowledge Spark Humanity Grit Team

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| Enquiry Question 1: | Enquiry Question 2: | Enquiry Question 3: | Enquiry Question 4: |
|---|---|---|---|
| **Are all my teeth the same?** | **What is a food chain?** | **What is a food chain?** | **What happens to my food when I eat it?** |
| **Working Scientifically Skills:**<br>gathering data 1<br>recording data 4<br>presenting data 1 | **Working Scientifically Skills**:<br>asking questions 1<br>making predictions 1<br>gathering data 1<br>recording data 4 | **Working Scientifically Skills**:<br>asking questions 2<br>recording data 4<br>presenting data 1 | **Working Scientifically Skills:**<br>asking questions 1<br>recording data 4<br>drawing conclusions 1 |
| **Key Knowledge:** Different types of teeth do different jobs. We need to look after our teeth by brushing them regularly otherwise they will decay. | **Key Knowledge:** Nutrients produced by plants move to primary consumers then to secondary consumers through food chains. Living things are classified as producers, predators and prey according to their place in the food chain. | **Key Knowledge:** Nutrients produced by plants move to primary consumers then to secondary consumers through food chains. Living things are classified as producers, predators and prey according to their place in the food chain. | **Key Knowledge:** Food is broken down by the teeth and further in the stomach and intestines where nutrients go into the blood. |
| Below: | Below: | Below: | Below: |
| Absent: | Absent: | Absent: | Absent: |

Enquiry Question 5:
**How does digestion work?**

**Working Scientifically Skills**:

| | |
|---|---|
| planning an enquiry | 2 |
| recording data | 4 |
| presenting data | 1 |
| drawing conclusions | 1 |

**Key Knowledge**: Food is broken down by the teeth and further in the stomach and intestines where nutrients go into the blood.

Below:

Absent:

**Notes:**
TAPS Assessment
Animal Teeth
Y4eg-Animal-teeth.pdf
Digestion
Y4eg_Animals_Digestion_diagrams.pdf
Y4eg-Human-digestion.pdf