



**Topic Title:** Tails and Toes

**Year Group:** 3

**Academic Year:** 2022-2023

**Science Intent:** What do animals, including humans, need to survive and stay healthy?

Children will learn about the importance of nutrition and how animals and humans have nutritional needs, which need to be met. The children will investigate how foods can be categorised and grouped accordingly, and will explore how a balanced diet is required to keep humans healthy. The children will look at the skeleton to understand its function, as well as investigating how the skeleton provides protection for muscles which enable movement.

<p><b>Prior Scientific Learning/Linked Topics:</b></p> <p><i>Pupils will build on their learning from years 1 and 2 about the basic body parts and what animals and humans need to survive.</i></p> <p>Y1 Moo Baa Cluck</p> <p>Y2 Fabulous Food</p>	<p><b>Literacy Links (including texts/media used):</b></p> <p>Texts used:</p> <ul style="list-style-type: none"><li>• The Story of the Little Mole Who Knew It Was None of His Business</li><li>• The Hodgeheg</li><li>• Fantastic Mr Fox</li></ul>	<p><b>Maths Links:</b></p> <ul style="list-style-type: none"><li>• Data Handling</li><li>• Measurement</li></ul>
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No Limits  
To Learning!

Scientific Knowledge	Working Scientifically
<ul style="list-style-type: none"> <li>• 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</li> <li>• Identify that humans and some animals have skeletons and muscles for support, protection and movement.</li> </ul>	<p>Children will:</p> <ul style="list-style-type: none"> <li>• Ask relevant questions and use different types of scientific enquiries to answer them, using scientific equipment with increasing accuracy.</li> <li>• Gather, record, classify and present data in various ways to help in answering scientific questions.</li> <li>• Record data using scientific diagrams and labels, classification keys, tables and bar charts.</li> <li>• Use straightforward scientific evidence and vocabulary to answer questions and support findings.</li> <li>• Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.</li> <li>• Identify patterns, including similarities and differences related to simple scientific ideas and enquiries.</li> </ul>
<p><b>Content:</b></p> <p>Stunning Start</p> <p>Lesson 1: Children will draw their favourite dinner on a plate and compare with their partner. Whose plate looks 'healthier'? Children will be introduced to the food groups and discuss what makes a balanced diet. Using sorting cards, children will put different foods into the correct food group. Children will return to their drawing of their favourite food and using a different coloured pencil, they will add to their plate to make it balanced.</p> <p>Lesson 2: Children will learn about the different nutrients found in food and what they do for our body. Children will match the nutrients/food group to an image of food that it is found in and a short sentence explaining why it is important.</p>	



**Lesson 3:**

Children will explore the nutritional values of different foods by gathering information from food packing labels.

**Lesson 5:**

Children will compare humans diet with a hedgehog (relating to our Topic text The Hodgehog). Discuss how hedgehog's get their food, which leads onto a discussion about how animals cannot make their own food. Using fact files, children find out what food a variety of animals eat and using this information they classify the animals into the correct animal groups.

(Marvellous middle).

**Lesson 5:**

Children will be introduced to the terms 'vertebrate' and 'invertebrate'. Using X-Ray images of animals, they will sort animal skeletons into groups, discussing patterns and similarities and differences.

**Lesson 6:**

Children to discuss the question 'what would life be like if we had no skeleton'? In groups, draw around a child on large pieces of sugar paper. How many bones can each group label? Children will learn the bone names and begin to understand their role.

**Lesson 7:**

Children will use scientific enquiry to answer the question 'can people with longer femurs jump further'?

**Lesson 8:**

Using spaghetti and marshmallows, children will make a model of a skeleton to represent the bones and muscles. After learning about muscles and how they work, children will make a model of a moving muscle.

**Lesson 9:**

Using recyclable materials, children will wrap an egg to try and protect it when dropped from a height to represent the brain being protected by the skull.

**Lesson 10:**

Children will reflect on their 'egg drop' investigation and record their observations in a leaflet about protecting our bodies. Children will include information and knowledge they have gained throughout the term about a balanced diet and keeping our bodies healthy.



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Key Vocabulary:

Nutrition, balanced diet, food groups, protein, carbohydrate, fats, sugars, fibre, vitamins, minerals, dairy, fruits, vegetables, herbivore, carnivore, omnivore, skeleton, vertebrate, invertebrate, endoskeleton, exoskeleton, hydro skeleton, the skull, cranium, clavicle and scapula, arm, humerus, radius, ulna, hand, chest, ribs, spine, leg, femur, tibia, fibula, ankle, foot, muscles, biceps, triceps, voluntary, involuntary, contract, relax.

Stunning Start/Marvellous Middle/Fabulous Finish:

Stunning Start – Food plate carousel

OAA/Trips/Visits/Visitors:

All to be revealed.