

*Inspiring and enabling our school community to live life to the full*



## YEAR 3 SCIENCE

### Movement and Nutrition for the Human Body

Our Science curriculum aims to enthuse children and help them to be curious and develop a sense of excitement about the world. Through a range of teaching, learning and extra-curricular opportunities, children will develop scientific knowledge and conceptual understanding to recognise the uses and implications of Science, today and for the future. We encourage children to ask their own questions; predict how things will behave and analyse causes, using Science to explain what is happening.

### Characteristics of an Effective Learner

Courage  
Commitment  
Collaboration  
Creativity  
Curiosity

#### **Prior Learning:**

- Children explore animals' diets and classify them into carnivores, herbivores and omnivores in year 1
- Children know how animals in all habitats depend on plants and each other for food by creating simple food chains in year 2
- In year 3, children explore different types of food, sorting them into different categories and planning meals. They begin to understand that different people may have different energy/nutritional requirements e.g. athletes or explorers.

#### **Key Vocabulary taught in this unit:**

Balanced, contract, diagram, internal, key, protect, support, system, data, evidence, investigate, sequence, calcium, carbohydrate, cartilage, energy, exoskeleton, fat, fibre, fluid, heart, invertebrate, joint, mineral, nutrient, organ, protein, ribs, skull, spinal cord, spine, sugar, tendon, vitamin, X-ray, classify, conclude/conclusion, enquiry, identify, measure, observe, brain, amphibian, bird, diet, fish, invertebrate, mammal, reptile, vertebrate.

#### **Key Questions:**

- Q1: What nutrition do we get from our food?  
Q2: Which nutrients are in school midday meals?  
Q3: What is in a human skeleton?  
Q4: How do muscles help humans to move?  
Q5: How are vertebrate and invertebrate bodies supported?  
Q6: How are human skeletons different to other vertebrates?

#### **Intent: What do we want the children to know and be able to do by the time they complete this unit?**

- 1: The different types of food we eat contain different nutrients. These are useful for our bodies in different ways.
- 2: Different types of food in the meals we eat contain different nutrients. A healthy diet contains a balance of different nutrients.
- 3: All our bones have different names. Some of these bones protect our soft internal organs.
- 4: Muscles work in pairs to move the bones in our skeleton. Other bones provide support so that our body can remain upright. Our joints allow us to twist and bend so that our bodies can move.
- 5: Vertebrate bodies are supported by an internal bony skeleton including a spine (made of many vertebrae). Invertebrates have no bony skeleton. Some invertebrates have an exoskeleton to provide protection and support. Some invertebrates have a hydrostatic skeleton to support their bodies.

6: The human bony skeleton has the same basic structure as all vertebrates: a spine, a skull with an opening jaw, hips and shoulder joints and four limbs. Humans' two 'front limbs' are arms whereas other vertebrates have fins, wings or legs. Humans walk upright on two legs whereas other animals use all four limbs to move around.

**Working Scientifically:**

- Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions.
- Recording findings using simple scientific language, drawings, labelled diagrams, [keys, bar charts, and tables].
- Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.
- Identifying differences, similarities [or changes] related to simple scientific ideas and processes.
- Using straightforward scientific evidence to answer questions [or to support their findings].

**Impact / Outcome: What will the final product / result be?**

Children will learn that scientists use models and representations of structures in order to better understand how they work. They learn how school cooks use scientific knowledge to plan healthy menus.

They will develop an understanding of the following types of enquiry: Grouping and classifying things, finding things out using secondary sources of information.

**P4C Inquiry (where appropriate):**