Our Science curriculum aims to enthuse children and hep 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.

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

YEAR 4 SCIENCE

Human Impact on the environment

Characteristics of an Effective Learner

Courage
Commitment
Collaboration
Creativity
Curiosity

Prior Learning:

- Children explore a variety of animals living on the Earth and classify into fish, amphibian, reptile, bird or mammal based on similar features in Year 1
- In Year 2, children visit several different habitats (and microhabitats) around the school and identify the living things found there. They sort a collection of objects according to whether they are living things (plants and animals), things that once lived or things that have never been alive. They know how animals in all habitats depend on plants and each other for food by creating simple food chains. They consider how living things are suited to live in different habitats.
- In Year 3, children compare and group together different kinds of rocks on the basis of their appearance and simple physical properties. They describe in simple terms how fossils are formed when things that have lived are trapped within rock.

Key Vocabulary taught in this unit:
Compare, litter, evaluate, variable, biodegradable, compost, decompose, environment, filter, fungi, micro-organism, organism, pollution, food chain, decomposer, decay, classify, rank, comparative test, investigate, enquiry, habitat, organic, recycle, soil.

Key Questions:
What is the impact of litter in our school?
How do materials change over time?
How do micro plastics get into the food chain?
How can we prevent micro plastics from getting into our seas and oceans?
How can we clean up birds affected by an oil spill?

Intent: What do we want the children to know, be able to do by the time they complete this unit?
To recognise that environments can change and that this can sometimes pose dangers to living things.

Enquiry skills
To set up simple practical enquiries, comparative and fair tests.
To record findings using simple scientific language, drawings, labelled diagrams, [keys, bar charts,] and tables.

To use results to draw simple conclusions, [make predictions for new values, suggest improvements and raise further questions].
To identify differences, similarities [or changes] related to simple scientific ideas and processes.

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

Children will learn about the methods scientists use to build scientific knowledge about the environment.

They will learn that scientists ask, plan and answer their own scientific questions to explore possibilities and help explain how human activity has made an impact on the world. Furthermore, scientists apply what they know to inform decisions and solve problems related to local and global challenges.

They will develop an understanding of the following types of enquiry: observing over time, comparative testing, research using secondary sources.

P4C Inquiry (where appropriate)
Children discuss the positive and negative impacts that humans have on animals and the environment.
Should zoos be banned?