Science Curriculum Overview

Intent

Our vision for the primary science curriculum is to spark curiosity and foster a love for exploration among children. We aim to nurture inquisitive minds who can ask questions, investigate, and draw conclusions from their observations. By encouraging hands-on experiences, we enable children to connect scientific concepts to their everyday lives and the world around them.

We strive to develop critical thinkers who understand the scientific method, allowing them to formulate hypotheses, conduct experiments, and analyse results. Our curriculum provides opportunities to explore a variety of scientific disciplines, including biology, chemistry, and physics, fostering a solid foundation for future learning.

Our curriculum is designed to align with the aims of the National Curriculum while also reflecting the aspirations and interests of our diverse learners.

Key objectives of our science programme include:

• **Curiosity and Wonde**r: Instil a sense of awe in the natural world through engaging activities that provoke questions and encourage exploration.

• **Practical Investigation:** Empower children with the skills to conduct hands-on experiments, ensuring they learn through direct experience while developing important scientific skills.

• **Encouraging Collaboration:** Foster teamwork by encouraging pupils to work in groups, sharing ideas and findings while developing effective communication skills.

• **Connecting Science to Real Life:** Help children understand the relevance of science by relating learning to real-world issues, such as environmental sustainability and health, to promote active citizenship.

• **Diversity in Science:** Celebrate contributions from diverse scientists and inventors, demonstrating how varied perspectives enrich our understanding of science and inspire pupils from all backgrounds.

Implementation and Curriculum Overview

Downholland Haskayne CE Primary School has mixed age classes. There is an EYFS (including 3+ Nursery)/KS1 class- Acorn and a KS2 Class – Oak. The curriculum has been designed with a 2 year rolling program for Acorn class and a 4 year rolling program for Oak class.

EYFS activities will align with the Early Learning Goals while complementing the KS1 Science curriculum. For instance, the objective: *Explore the properties of materials by manipulating them. (Development Matters Sept: 2023)* can be developed through a unit on materials. Children could investigate different kinds of fabrics by making a simple parachute, allowing them to explore concepts of air resistance and buoyancy while developing their scientific enquiry skills.

Acorn Class – KS1

Cycles	Autumn	Spring	Summer
Cycle A	Weather and Seasonal Changes Everyday Materials	Seasonal Changes – Hibernation Uses of Everyday Materials	Seasonal Changes – Weather Living Things and Their Habitats
Cycle B	Animals including Humans – Basic Structure and senses Animal Structures	Health – Growing and Staying Healthy Plants – Common Names and Basic Structure	Plants – Growing Plants Animal Survival and Growth

Oak Class – KS2

Cycles	Autumn	Spring	Summer
Cycle A	Skeleton and Movement Electricity	Health and Nutrition Teeth and Digestion	Sound Living Things and Habitats - Classification
Cycle B	Rocks Light	Properties and changes in Materials	Earth and Space Forces and Magnets
Cycle C	The Circulatory System Electricity	Keeping Healthy Evolution	Light Classificaton
Cycle D	Forces and Magnets States of Matter	Plants Living things and their habitats inc. Reproduction	Evolution and Inheritance Changes as Humans Develop to Old Age