







### Holy Trinity CofE Primary School Science Curriculum Overview

#### **Rationale**

At Holy Trinity we are aspirational for all children and aim for each child to live life to the full. We believe that **Science** should ignite curiosity and foster a deep enthusiasm for understanding the world around us. Our **Science curriculum** empowers all children, including those with **SEND** and **disadvantaged pupils**, to think, act, and learn as scientists, ensuring that learning is **purposeful**, **engaging**, and rooted in **exploration and discovery**.

Science is taught through weekly discrete lessons within a progressive curriculum that builds on prior knowledge and skills each year. To ensure a strong foundation, retrieval activities and elicitation tasks are used at the start of each unit, helping children connect and deepen their learning over time. The curriculum develops both scientific knowledge and skills, alongside the explicit teaching of scientific vocabulary, equipping children to investigate, analyse, and interpret the world around them with increasing confidence and competence.

Children experience a hands-on, enquiry-based approach, celebrating the joy of questioning, exploring, and discovering. By incorporating timely and accurate assessment, we ensure teaching is responsive to each child's needs, fostering a lifelong love of Science.

To enrich our curriculum, we connect children with **local scientists** and participate in events such as the **Cheltenham Science Festival**, broadening their horizons and enhancing their **cultural capital**. These experiences inspire children to see the **real-world applications of Science** and understand its role in addressing **global challenges**.

Aligned with our school's ethos of **care and responsibility**, we promote a culture of respect for the **environment** and the wider **community**. Through the use of our rich **school grounds**, children develop an appreciation for the **natural world** while meeting the requirements of the **EYFS Framework** and **National Curriculum Programmes of Study**.

Our **Science curriculum** prepares children for future success, equipping them with the **skills**, **knowledge**, and **attitudes** to thrive in secondary education, potential careers, and as responsible citizens of the world

#### **Structure**

Science is taught weekly for approximately one hour a week.

Throughout Key Stage 1, children learn to identify, name, describe and compare different animals and plants as well as learning about the different habitats of living things. They also learn about everyday materials and their uses as well as observing and describing the four seasons. In Key Stage 2, the children's learning around plants and animals is broadened and deepened to include details about basic functions and systems. Children's learning around habitats is extended to classification, life cycles and the environment and learning about materials focuses on their properties and how they can change. In addition, they are taught units on rocks and soils, electricity, light, sound, forces and the Earth in space as well as the evolution and inheritance of plants and animals over time.

For each unit of work, the knowledge we teach the children has been carefully mapped to provide a clear and progressive sequence of learning. Alongside the topic-specific knowledge, we have a clear idea of how we want children to know and learn about working scientifically at each stage of their schooling at Holy Trinity. We have mapped out our expectations against six aspects around working scientifically:

- 1. Asking questions and recognising that they can be answered in different ways
- 2. Setting up enquiries to answer scientific questions









## Holy Trinity CofE Primary School Science Curriculum Overview

- 3. Making observations and taking measurements
- 4. Recording and presenting evidence
- 5. Interpreting data and reporting findings
- 6. Evaluating and raising further questions and predictions

Towards the end of each unit, TAPs Science assessments are used to evaluate children's understanding and application of Working Scientifically skills and approaches. This provides insight into their progress, identifies areas for development, and informs future planning to tailor learning to their specific needs.

We have created a progression framework for both the subject and topic specific knowledge we want the children to as well as the skills required to be able to work scientifically under the seven heading above. This can be seen in the Science Progression Framework document.

#### **Curriculum Coverage**

#### Science in EYFS

Science in EYFS is predominantly taught as part of the 'Understanding the World' area of learning, where children learn by observing, investigating and asking questions about the natural environment around them. Children engage in a range of hands-on activities to develop foundational scientific skills like observation, prediction and basic cause and effect relationships. Below is an overview of the various concepts taught in EYFS at Hoy Trinity.

Autumn		Spring		Summer	
Nocturnal Animals - Making sense of different environments and habitats  Know where animals live and what they need  1. Learn about living things that are animals 2. Know where animals live and what they need	Seasonal Changes: Recognise the changing in the seasons – weather / trees / temperature / clothes / hibernation	<ul> <li>Develop a basic understanding of Space</li> <li>Listen to children describing and commenting on things they have seen whilst outside, including plants and animals.</li> <li>After close observation, draw pictures of the natural world, including animals and plants</li> <li>Day and Night: Know that day and night are parts of the day that are determined by light and dark.</li> </ul>	Dental Care: Children will develop an understanding of good oral hygiene and know the importance of good dental care. Know how to brush our own teeth and understand the importance of a healthy diet	Animals: Insects. Learn about insects and invertebrate and where they live. Drawing pictures of the natural world, including animals  Plants: Learn about living things which are plants, where plants come from and how to look after them. Learning about the lifecycle of a plant. Drawing pictures of the natural world, including plants	Materials and their Properties: Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter. Now that things can change shape such as melting and changes in water









# Holy Trinity CofE Primary School Science Curriculum Overview

## <u>Science in Year 1 – Year 6</u>

Yearl	Materials – Exploring Everyday Materials			Animals inc. Humans Seasonal Changes		Plants	
Year 2	Animals inc. Humans – Growth	Animal inc. Humans – Life Cycles	Living Things and their Habitats	Living Things and their Habitats	Uses of Everyday Materials	Plants	
Year 3	Forces and Magnets	Animals inc. Humans	Light	Rocks and Soils	Plants	Working Scientifically Focus	
Year 4	States of Matter	Electricity	Sound		Animals inc. Humans	Living Things and their Habitats	
Year 5	Properties of Materials	Changes of Materials	Earth and Space	Living Things and their Habitats (Life cycles)	Forces	Animals inc. Humans	
Year 6	Evolution and Inheritance	Living Things and their Habitats	Electricity	Light	Animals inc. Humans	Consolidation	