

## The Big picture (Overview)

Our curriculum is designed with the overarching goal of fostering curiosity, critical thinking, and a foundational understanding of the natural world. We aim to inspire a sense of wonder and exploration, encouraging students to develop scientific skills through hands-on experiences and inquiry-based learning. Emphasis is placed on developing key scientific skills such as observation, investigation, and communication, as well as promoting the understanding of scientific concepts within the context of everyday phenomena.

## What it's like to be a scientist in our school (pupil voice)

- I like learning about the seasons and looking at how they change (Y1)
- Science is fun because you get to carry out investigations to see if you are correct (Y4)
- I enjoy science because it is practical and you get to know why and how things work (Y6)
- I like plants, they need water to stay alive (R)

## Teaching and Learning (Key learning and skills)

focuses on developing key skills and fostering foundational learning. These include:

1. Observation
2. Investigation
3. Communication
4. Critical Thinking
5. Practical Skills
6. Understanding Concepts
7. Application of Knowledge
8. Collaboration
9. Environmental Awareness

By focusing on these skills and learning outcomes, our science curriculum aims to prepare students for future scientific studies and applications while nurturing a lifelong appreciation for the scientific method and its impact on the world.

## What we want our curriculum to help our children know and do (Intent)

In crafting our primary science curriculum, our overarching intent is to ignite curiosity, promote critical thinking, and foster a deep appreciation for the natural world among our pupils. Our curriculum places a strong emphasis on hands-on exploration and inquiry-based learning, aligning with the principles of the HEP Science scheme.

This approach is particularly tailored to the developmental needs of EYFS, where children are encouraged to actively engage in age-appropriate practical experiments. The curriculum spans diverse scientific domains, such as life processes, materials and their properties, physical processes, and Earth and space, ensuring a well-rounded and developmentally appropriate scientific education. Our curriculum not only imparts foundational knowledge but also instils a sense of wonder and environmental consciousness for all children at St Finbar's Primary School.

## How we organise our curriculum (Implement)

Our approach to implementing the science curriculum is designed to seamlessly integrate developmental stages from Early Years Foundation Stage (EYFS) to Year 6, ensuring a cohesive and progressive learning journey.

In the early years, we foster curiosity and exploration through age-appropriate, hands-on activities that align with the principles of the EYFS framework. Moving into Key Stage 1, we seamlessly transition to the National Curriculum, building upon the foundational knowledge developed in EYFS. The curriculum continues to evolve through Key Stage 2, where we integrate the HEP Science scheme, specifically tailored for this stage.

Practical experiments and engaging activities are strategically incorporated to deepen understanding and develop essential scientific skills. Throughout the trajectory, our approach emphasizes continuity of learning, ensuring that each stage builds on the knowledge and skills acquired in previous years.

## How we know children are knowing and doing more (Impact)

Our science curriculum is designed not only to deliver knowledge but also to have a tangible impact on students' understanding and skills. Formative assessment is used as the main tool for assessing the impact of science as it allows for misconceptions and gaps to be addressed immediately rather than building on insecure scientific foundations.

Regular half-termly assessments and ongoing formative assessments are integral components of our evaluation strategy. In addition to assessments, the monitoring of the science curriculum is undertaken through comprehensive book looks and observations.

Ultimately, our science curriculum is designed to leave a lasting positive impact, preparing children for a future where they approach the world with a curious and analytical mindset.