

## Science at St. Jude's

At St. Jude's Catholic Primary School, our vision is to deliver a science curriculum to our children which enables them to explore and make discoveries about the world around them. We provide practical experiences that encourage curiosity and welcome questioning.

## Intent

Our intent for our Science curriculum is for the children to have:

- an experience of a high quality science education.
- the ability to think independently by building on their substantive and disciplinary knowledge, making links between prior learning and new learning, and by working scientifically.
- confidence and competence in the full range of practical skills, taking the initiative in, for example, planning and carrying out scientific investigations.
- excellent scientific knowledge and understanding which is demonstrated in written and verbal explanations, solving challenging problems and reporting scientific findings.
- the ability to enquire, research, ask questions and use challenging vocabulary correctly.
- opportunities to undertake practical work in a variety of contexts, including fieldwork.
- an understanding of the application of science in past and present technologies that prepares them for life in an increasingly scientific and technological world today and in the future.
- a passion for science that increases their science capital and inspires them to consider a future career in science.

## **Implementation**

Our curriculum has been sequenced to enable pupils to acquire new knowledge that is built on knowledge they have gained from previous learning. It is a spiral curriculum with the three aspects of Science sequenced into separate terms to allow for easier recall and retrieval of knowledge by pupils. Across all year groups scientific substantive and disciplinary knowledge is learned by working scientifically. In each year group, science knowledge is continually revisited, especially at the start of new topics and lessons, especially through the use of 'Learning Journals' in order that children become more confident in retrieval of scientific knowledge. In a similar way, skills of working scientifically are continually revisited and practised. We share the knowledge, vocabulary and concepts that we want our children to learn through the Science curriculum with the pupils themselves and their parents using 'Knowledge Organisers'. The science curriculum is progressive throughout the whole school to enable children to build on, and make links with, existing knowledge and dive deeper into their science learning. Learning is assessed through the use of a 'Killer Question' that provides pupils with an opportunity to demonstrate what they have learned across the whole topic. Each question is shared with the pupils at the start of a topic and referred to through the sequence of lessons so that they are continually building the scientific knowledge to be able to answer the question at the end of the topic.

## **Impact**

Our aim is that these stimulating, challenging and enquiry-based experiences help children secure and extend their substantive and disciplinary scientific knowledge and vocabulary whilst fostering an investigative, collaborative approach towards all aspects of science. Opportunities are provided so that children can acquire knowledge, skills and attitudes to better prepare them for modern life. 'Killer Questions' are used to assess the knowledge that has been acquired during a topic and 'Learning Journals' are used to ensure that this learning is recapped in a variety of ways and so retained by pupils ensuring that they therefore make progress.

