St John's
C of E Primary School

Science at St John's

Intent

Our curriculum intent for Science reflects the purpose and aims of the national curriculum by helping our pupils to develop scientific knowledge and conceptual understanding through the specific disciplines of biology, chemistry and physics. It inspires them to develop their understanding of the nature, processes and methods of science through different types of science enquiries that help them to answer scientific questions about the world around them. It develops their scientific knowledge required to understand the uses and implications of science, today and for the future. The curriculum breadth is adapted to the context of our school and develops pupils' understanding of fundamental British values/spiritual, moral, social and cultural development, by teaching how science has changed our lives and is vital to the world's future prosperity.

The curriculum is sequenced in long and medium term plans to help pupils build cumulative knowledge towards agreed milestones or expected standards. The most important subject content is organised through threshold concepts which organise new knowledge systematically and ensure a logical progression. The curriculum design helps pupils to read widely by including scientific journals for the children to research. They will also explore and learn through using a variety of different texts both online and in book form. We will broaden their vocabulary by introducing them to scientific vocabulary every lesson.

Implementation

As part of the planning process, teachers refer to the following documents:

- The National Curriculum
- Knowledge Organisers
- Chris Quigley Essentials – Threshold Concepts and Milestones (End points)

Teachers plan a cycle of lessons which makes links to previous learning; outlines the knowledge and vocabulary to be taught; plans for progression and depth; includes frequent low stakes quiz opportunities to develop deep long-term learning; helps SEND pupils to catch up and keep up and includes challenge for all pupils to apply their learning.

Impact

Our Science curriculum is high-quality, well taught and planned to demonstrate progression. We use the Chris Quigley milestones to measure the impact of our curriculum through:

- Low stakes quizzes
- Proof of Progress (POP) tasks
- Pupils' discussions about their learning