

## **Our Science Curriculum**

### **Our Vision**

At St John's, our vision is to provide a science curriculum that allows all children to critically question, explore and discover the world they live in. To achieve this, we aim to provide lessons rooted in scientific enquiry with relevant practical hands-on experiences that encourage a deeper understanding and curiosity. This will lead to them being life-long scientists, engaged and excited by the world around them.

### **Curriculum Intent**

Our intent is to equip our children with life-long experiences and skills through the science National Curriculum, and by providing opportunities which allows:

- All our children to be curious, inquisitive, independent thinkers, confident to ask 'Big Questions' in an ever-changing world.
- All children to enjoy science and embrace the scientific opportunities and enquiries they are presented with in class and through visits and events.
- Teachers to provide scientific knowledge through exciting, practical experiences to stimulate and challenge every child while securing and extending their scientific vocabulary and five scientific enquiry skills.
- Working scientifically skills to be built-on and developed throughout children's time at our school so that they can apply their knowledge of science, continue to ask questions and be curious about their surroundings.
- All children to use their conceptual knowledge to explain what is occurring, predict how things will behave, and analyse causes. It will provide opportunities for them to apply their mathematical knowledge to their understanding of science, including collecting, presenting and analysing data.

### **Curriculum Implementation**

At St John's teachers create a positive attitude to science within their classrooms and reinforce an expectation that all pupils are capable of achieving high standards.

Our whole school approach to the teaching and learning of science involves the following:

- Applying a Science Capital approach to connect science with children's identities, experiences and what matters to them and their lives including accessing outdoor learning and workshops with experts.
- Ensuring every lesson reviews and builds upon children's prior knowledge, reinforcing key vocabulary and scientific concepts enabling them to question and become enquiry-based learners.
- Asking questions which excite pupils to problem solve and allow children to apply their knowledge and find out answers for themselves.

- Using progressive planning to assess pupil's scientific skills and conceptual knowledge.

### **Curriculum Impact**

The successful approach to the teaching of science at St John's will result in a fun and engaging science education. It ensures children understand that they are all scientists, who can challenge and question the world around them.

We want children to be immersed in science, to reinforce the skills that they have previously learned and build on them by challenging their thinking further. Through enrichment opportunities such as workshops, trips and extracurricular activities, children develop the understanding that science has changed our lives and that it is vital to the world's future prosperity.

This gives our children access to positive role models within the field of science from the immediate and wider local community. We also deliver science fairs for the parents and carers to attend.

Children at St John's will:

- Demonstrate an excitement and love of science
- Retain knowledge of science through a real-life context.
- Be able to question ideas and reflect on knowledge.
- Be able to articulate their understanding of scientific concepts and be able to reason scientifically using rich language linked to science.
- Demonstrate a high love of mathematical skills through their work, organising, recording and interpreting results.
- Work collaboratively and practically to investigate and experiment.
- Achieve age related expectations in science at the end of their cohort year.