

## **Science Curriculum Statement 2023-2024**

### **Intent**

Our intent in science is to ignite curiosity in children and excite them so that they confidently ask questions that fuel explorations and investigations about the world that we live in. We aim to inspire and excite our children through our knowledge rich science curriculum that is carefully considered so that skills and knowledge are built on year on year.

At St Mary's we:

- Ensure that all scientific knowledge is prioritised so that our pupils gain a deeper understanding.
- Ensure that all children are equipped with the working scientifically skills needed to make good progress.
- Develop children's natural curiosity and encourage their inquisitive nature through our science lessons.
- Make purposeful links between the curriculum, our local area, diversity, and inspirational people including great scientists.
- Ensure all children receive quality first teaching in science, where their needs are met through small step instructions.

### **Implementation**

Teachers create a positive attitude to science learning within their classrooms and reinforce an expectation that all children can achieve high standards in science.

At St Mary's:

- Science will be taught weekly using the Developing Experts lessons. Where possible it will be cross-curricular. This is a strategy to enable the achievement of a greater depth of knowledge. For example, through English by writing a letter to a local politician regarding the closure of a park or the biography of a famous scientist's life.
- Planning is reduced using the Developing Experts resource, helping to manage teacher workload but also maintaining a high standard of science teaching and learning. It also ensures excellent coverage of the national curriculum and progression of skills.
- Children are encouraged to ask their own questions and are given opportunities to use their scientific skills and research to discover the answers.
- Teachers use precise questioning in class to test conceptual knowledge and skills and assess children regularly to identify those children with gaps in learning, so that all children keep up.
- Children carry out pre and post task assessments to demonstrate knowledge they have learnt and highlight where additional support is needed.
- Working scientifically skills are embedded into each lesson to ensure these skills are developed throughout the children's learning journey.
- We offer our children a wide range of extra-curricular activities, visits, trips, and visitors to complement and broaden the curriculum. These are purposeful and link with the knowledge taught in class.
- We hold regular events, such as Science Week or theme days, such as 'Health Week,' allowing all pupils to come off-timetable, to provide broader provision and the acquisition and application of knowledge and skills. These events often involve families and the wider community.

- We ensure that British values are an integral part of our science curriculum; children's understanding of democracy is deepened as they develop their team working skills, the rule of law is embedded as the children learn rules for some investigations, and we are tolerant of all beliefs when learning and discussing different viewpoints (e.g. evolution).

### **Impact**

The storytelling approach of our Developing Experts science curriculum engages all our students and enables them to discover a world of learning.

At St Mary's:

- The links made between education and the workplace is reflected in the relationship with industry partners who sponsor, create, and support every lesson. The impact of this is immense as it allows our children to make connections with real life jobs and ignite a passion for science.
- Our knowledge rich curriculum improves the critical thinking and problem solving skills of our pupils.
- Our science curriculum builds broad knowledge, teaching all the knowledge that writers assume readers have. The impact of this is that our pupils grow into literate adults that read with ease. They understand the scientific vocabulary.
- Most importantly, our children will learn to love science and all the opportunities it can offer them. We want them to leave St Mary's with a passion for the subject so that they become the scientists of the future. This will have a positive impact for everyone.