

## **Science Intent, Implementation and Impact at St Joseph's**

### **Intent**

Science teaching at St Joseph's Catholic Primary School aims to give all children a strong understanding of the world around them whilst acquiring specific skills and knowledge to help them to think scientifically, to gain an understanding of scientific processes and also an understanding of the uses and implications of Science, today and for the future.

At St Joseph's Catholic Primary School, scientific enquiry skills are embedded in each topic the children study and these topics are revisited and developed throughout their time at school. Topics, such as Plants, are taught in Key Stage One and studied again in further detail throughout Key Stage Two. This model allows children to build upon their prior knowledge and increases their enthusiasm for the topics whilst embedding this procedural knowledge into the long-term memory.

All children are encouraged to develop and use a range of skills including observations, planning and investigations, as well as being encouraged to question the world around them and become independent learners in exploring possible answers for their scientific based questions. Specialist vocabulary for topics is taught and built up, and effective questioning to communicate ideas is encouraged. Concepts taught should be reinforced by focusing on the key features of scientific enquiry, so that pupils learn to use a variety of approaches to answer relevant scientific questions.

### **Implementation:**

- We maintain a high level of subject knowledge of science in our school by regular training and professional development.
- Teachers use assessment for learning to tailor lessons around our children and help us plan for next steps.
- In our school we strongly encourage all pupils to use specific topic related vocabulary.
- Through effective teaching of science, we develop children's knowledge and key skills during each topic.
- With effective subject management we are a well-equipped and resourced school.
- Regular monitoring shows that our children understand and apply key scientific principles within their work.
- Children are provided with regular opportunities to develop strategies for questioning and thinking.
- In our school we have a rigorous monitoring process which is kept up to date and works towards our school improvement plan.

### **Impact**

- Children enjoy and are enthusiastic about science in our school.
- There is a clear progression of children's work and teachers' expectations in our school.
- Children's work shows a range of topics and evidence of the curriculum coverage for all science topics.
- Children are becoming increasingly independent in science, selecting their own tools and materials, completing pupil lead investigations and choosing their own strategies for recording.
- Feedback from teachers has impact on our pupils, often with going deeper questions to push learning on.
- Standards in science at the end of the key stages are good and issues arising are addressed effectively in school.
- Our SLT and governors are kept up to date with developments in the way science is run in our school with subject reports, action plans and review meetings.