

SCIENCE POLICY

ST. HELEN'S CATHOLIC PRIMARY SCHOOL SEPTEMBER 2022

ST. HELEN'S MISSION STATEMENT

RESPECT YOURSELF,

RESPECT EVERYONE IN OUR SCHOOL COMMUNITY,

RESPECT EVERYONE IN OUR LOCAL COMMUNITY,

RESPECT EVERYONE IN OUR GLOBAL COMMUNITY

BUT MOST OF ALL, RESPECT GOD OUR FATHER IN HEAVEN.

The Governing Body of St. Helen's Catholic Primary School adopted this SCIENCE POLICY in SEPEMBER 2022.

The school's mission statement underpins all we do – respect. Science lessons are approached with respect to all religions, diversity, cultural differences within our school community. Certain themes covered in the science national curriculum question the school's catholic beliefs and these issues will be dealt with in a sensitive manner respecting all beliefs-for example – evolution and relationship education.

Aims and objectives

Science at St. Helen's aims to teach our children the skills, knowledge and understanding they need to question and understand concepts and phenomena that occur in the world around them and equips them with the motivation to seek explanations for these.

Children learn the skills required for scientific enquiry and they will begin to appreciate the way science will affect their future on a personal, national and global level.

The aims of science are to enable children to:

- Ask and answer scientific questions
- Plan and carry out fair scientific investigations, using equipment including computers
- Know and understand the life processes of living things

• Know and understand the physical processes of materials, electricity, light, sound and natural forces

- Know about materials and their properties
- Evaluate evidence and present their conclusions clearly and accurately

Teaching and learning style

The school uses a variety of teaching and learning styles in science lessons. Our principal aim is to develop the children's knowledge, skills and understanding. We do this through a mixture of whole-class teaching and individual / group activities. Teachers encourage the children to ask as well as answer scientific questions. Key Stage One use continuous provision to offer opportunities for Science, they teach learn it sessions and children are encouraged to deepen their knowledge and understanding through the activities/challenges offered.

The children have the opportunity to use a variety of secondary sources of information, where it will enhance learning as well as gaining first hand experiences, for example, the use of books, photographs, graphs, diagrams, models and ICT.

We recognise the fact that we have children of differing scientific ability in all our classes and so we provide suitable learning opportunities for all children by matching the challenge of the task to the ability of the child.

Foundation Stage

We teach science in the Foundation stage by encouraging children to develop enquiring minds, asking questions and finding answers. It comes under Understanding the World in the EYFS. Children must be supported in developing the knowledge, skills and understanding that help them to make sense of the world. Through their learning environment, opportunities are made for them to use a range of tools safely; encounter creatures, people, plants and objects in their natural environments and in real-life situations; undertake practical 'experiments'; and work with a range of materials.

Science curriculum planning

Teachers follow the National Curriculum and the Science Learning Challenge Curriculum. A big question is discussed at the beginning of any topic and key vocabulary displayed which is added to as the topic continues. Teachers often link Science themes to a topic-based approach in their classrooms. Teachers are required to make available their long and medium term plans using Sonar, demonstrating their learning objectives and some activities which they will use in daily lessons. Wherever possible, science is linked to other subjects to promote a crosscurricular approach.

In Key Stage 1, work is often produced in 'big' books, children contribute to these pages with photos, pictures, quotes to demonstrate their understanding of the theme covered. In Key Stage 2, each child has a science book and work is recorded individually and at an appropriate level. Differentiation in questioning, work, information processed can be seen in the books.

Assessment and recording

We assess children's work formatively in science through observations and marking. These assessments inform the class teacher's planning for future lessons. Target tracker is used in both key stages to record progress.

Resources

We have a range of resources to support the teaching of Science across the school and all our resources are kept in the science cupboard by the Year 3 classroom. All resources are sorted into topics related to the national curriculum and labelled. Outdoor learning resources are provided in the nature area shed and the green gardening shed.

Monitoring and review

It is the responsibility of the Science Subject Leader, the Headteacher and Governors to monitor the standards of children's work and the quality of teaching in science. The Science Subject Co-ordinator is also responsible for supporting colleagues in the teaching of science, for being informed about current developments in the subject and for providing a strategic lead and direction for the subject in the school.