

THE HOLY FAMILY CATHOLIC PRIMARY SCHOOL

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Science Policy



Date:

Review Date:



OFSTED July 2019

'Pupils feel safe in school and believe that the adults take good care of them.'

'The quality of teaching, learning and assessment in the school is strong.'



Catholic Schools Inspection February 2023

'The visitor is left in no doubt that this is a loving Catholic school that prides itself on a genuine, warm welcome.'

'Staff provide the highest level of pastoral care; there is a deep commitment to the most vulnerable.'

'Prayer is central to life in Holy Family.'

At The Holy Family School we are committed to Safeguarding Children

'As a family we live, love, learn and celebrate with Jesus.'

Science Policy

Intent

This policy outlines the teaching, organisation and management of science taught at Holy Family Catholic Primary School. At Holy Family Primary School, science should be fully inclusive to every child. Our aims are to fulfil the requirements of the National Curriculum for Science; providing a broad, balanced and differentiated curriculum; ensuring the progressive development of knowledge, skills and vocabulary and for the children to develop a love of science. We aim to inspire in pupils a curiosity and fascination about the natural and man-made world and a respect for the environment that will remain with them for the rest of their lives. This includes the lessons they complete in the classroom but also the other experiences they are offered, such as educational visits, residential and enrichment days.

For our pupils to achieve well in science, they need to acquire the necessary scientific knowledge and also be able to enjoy the experience of engaging and purposeful scientific enquiry in order to help them to answer scientific questions about the world around them. The new National Curriculum 2014 states why we teach science in schools: *'A high-quality science education provides the foundations for understanding the world through the specific disciplines of biology, chemistry and physics...Through building up a body of key foundational knowledge and concepts, pupils should be encouraged to recognise the power of rational explanation and develop a sense of excitement and curiosity about natural phenomena.'*

The aims of teaching science in our school are to:

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 - Equip children to use themselves as starting points for learning about science, and to build on their enthusiasm and natural sense of wonder about the world
 - Develop through practical work the skills of observation, prediction, investigation, interpretation, communication, questioning and hypothesising, and increased use of precise measurement skills and ICT
 - Encourage and enable pupils to offer their own suggestions, and to be creative in their approach to science, devising their own investigations and taking lines of enquiry in a way that interests them
 - Gain enjoyment from their scientific work
 - Teach scientific enquiry through contexts taken from the National Curriculum for science
 - Stress the need for personal and group safety by the correct usage and storage of resources
 - To critically question the world around them

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- Equip children with the language to be able to discuss their learning and confidently explain their scientific understanding in small groups

Implementation

Throughout the programmes of study, the children will acquire and develop the key knowledge that has been identified within each unit and across each year group.

Below are the expectations for the two key stages:

Key stage 1

Key stage 1, Most of the learning about science should be done through the use of first-hand practical experiences:

Pupils should be able to **experience and observe phenomena**, looking closely at the natural and humanly- constructed world around them. They should be encouraged to be **curious and ask questions** about what they notice. Pupils working scientifically by using their observations to compare and contrast observations or through videos and photographs.

Key stage 2

The aim of this key stage is to enable pupils to broaden their scientific view of the world around them by exploring, talking about, testing and developing ideas about everyday phenomena. They should ask their own questions about what they observe and make some decisions about which types of scientific enquiry are likely to be the best ways of answering them. Such as: observing changes over time, noticing patterns, grouping and classifying things, carrying out simple comparative tests and finding things out using secondary sources of information. They should draw simple conclusions and use scientific language.

Impact

Start from what the children know

Children arrive at the classroom door with a wide range of scientific knowledge gathered from their personal experiences, discussions with families and, more increasingly, TV programmes. For example, Year 1 teachers sometimes find that children have already experienced the terms carnivore, herbivore and omnivore from learning about dinosaurs. It is therefore important to start any topic by finding out what the children know and what they would like to know, and this should then feed into planning for the topic.

There are several possible approaches, but to do this effectively it is important to bring the existing knowledge to the forefront of the children's minds, stimulate their imaginations and

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get them talking. This could involve a wide range of thought-provoking activities, including watching a short video clip, giving a question that promotes discussion, carrying out a short enquiry, or drawing or making a model of what they think something looks like.

Assessment

Teachers use assessment for learning techniques to assess children during every science session. A record is made in the marking folder of children who are achieving below expectation or who need further challenge. Also, to identify the pupils who are below ARE and those who are above ARE, Those children who are identified below ARE are supported appropriately through planning and support from the class teaching assistant. SEND children are supported by the guidance of the SEND coordinator.

Leadership and Management

The role of the Science Coordinator:

- Be responsible for the development of Science in school.
- Monitor the Science curriculum and update school policy when and where necessary.
- Monitor the effectiveness of Science in school by means of book, scrutinies ensuring the quality of the learning environment and overseeing assessment.
- Support teachers in their planning and strategies for classroom management.
- Disseminate new information.
- Support teachers in delivering the curriculum and arrange staff development and INSET training where appropriate.
- Be responsible for purchasing and providing appropriate Science resources.
- Consider and minimise risks for all activities in line with current Health and safety regulations.

Monitoring and Evaluation

Subject leaders monitor the delivery of science teaching and the quality of learning across the school. This is done through observations and drop in sessions. The subject leader also scrutinises children's books, the learning environment and medium planning.