

THE HOLY FAMILY CATHOLIC PRIMARY SCHOOL

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Science Policy



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'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
INSPECTORATE**
THE NATIONAL FRAMEWORK FOR THE INSPECTION OF CATHOLIC SCHOOLS, COLLEGES AND ACADEMIES

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.

The science curriculum at Holy Family aims for pupils to develop a complex knowledge of biology, chemistry and physics but also adopt a broad range of skills in working scientifically and beyond. Our chosen scheme of work is inclusive and meaningful so all pupils may experience the joy of science and make associations between their science learning and their lives outside the classroom. Studying science allows pupils to appreciate how new knowledge and skills can be fundamental to solving arising global challenges.

The curriculum aims to encourage critical thinking and empower pupils to question the hows and whys of the world around them.

Science Curriculum

At The Holy Family Catholic Primary School we follow the Kapow Primary's Science Scheme of work. The carefully designed curriculum aims to develop a sense of excitement and curiosity about natural phenomena and an understanding of how the scientific community contributes to the past, present and future.

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The curriculum aims to encourage critical thinking and empower pupils to question the hows and whys of the world around them. The scheme encourages:

- A strong focus on developing knowledge alongside scientific skills across biology, chemistry and physics.
- Curiosity and excitement about familiar and unknown observations.
- Challenging misconceptions and demystifying truths.
- Continuous progression by building on practical and investigative skills across all units.

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- Critical thinking, with the ability to ask perceptive questions and explain and analyse evidence.
- Development of scientific literacy using wide-ranging, specialist vocabulary.

Kapow Primary's Science scheme of work supports pupils in meeting the Early Learning Goals for Understanding the world (The Natural world) and the end of key stage attainment targets set out in the National curriculum.

To meet the aims of the National curriculum for science our science scheme of work prioritises the following key strands:

- **Scientific knowledge and understanding of:**
 - biology: living organisms and vital processes;
 - chemistry: matter and its properties;
 - physics: how the world we live in 'works'.
- **Working scientifically:** processes and methods of science to answer questions about the world around us.
- **Science in action:** uses and implications of science in the past, present and for the future

Our school science scheme is a spiral curriculum, with essential knowledge and skills revisited with increasing complexity, allowing pupils to revise and build on their previous learning. A range of engaging recall activities promotes frequent pupil reflection on prior learning, ensuring new learning is approached with confidence. **The Science in action** strand is interwoven throughout the scheme to make the concepts and skills relevant to pupils and inspiring for future application. Cross-curricular links are included throughout each unit, allowing pupils to make connections and apply their science skills to other areas of learning. Each unit is based on one of the key science disciplines: biology, chemistry and physics.

The National curriculum content has been grouped into six key areas of science to show progression throughout the school:

- Plants. Animals, including humans.
- Living things and habitats.
- Materials.
- Energy.
- Forces.
- Earth and space.

Pupils explore knowledge and conceptual understanding through engaging activities and an introduction to relevant, specialist vocabulary. Working scientifically skills are integrated with

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conceptual understanding The scheme utilises practical activities that aid in the progression of individual skills and provide opportunities for full investigations.

Assessment

Pupils are assessed for prior knowledge at the beginning of each unit of work. This will be done using a range of retrieval practice strategies. Staff continually assess knowledge and understanding during every science session. A record is made in the marking folder of pupils' achievement and those that may need further support or challenge. At the end of each unit of work pupil's learning will be assessed using the assessment resources from Kapow such as quizzes. Each term teachers use their ongoing assessment to make an overall judgement of whether each pupil is working below or at age related expectations or at greater depth. This data will be recorded on Arbor termly.

Subject Leadership

At Holy Family, the role of a subject leader is to *'provide professional leadership and management for a subject to secure high-quality teaching, effective use of resources and improved standards of learning and achievement for all pupils'*.

The subject leader will:

- Play a leading role in preparing and reviewing policy for the teaching of their subject.
- Plan and organise the curriculum for their subject throughout our school, establishing how
- good standards, continuity and progression can be achieved and sustained.
- Monitor and evaluate the implementation of policy and planning.
- Regularly and systematically provide guidance to colleagues on content, methodology and
- resources.
- Oversee the assessment and recording of pupils' progress.

Monitoring and Evaluation

The science leader is responsible for monitoring the teaching and learning. The science leader will undertake regular monitoring activities, and have a good understanding of what is being taught in science, the outcomes, and progress of pupils. The science leader will also identify any areas to be developed and will work on these areas through staff training, coaching and mentoring colleagues.

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