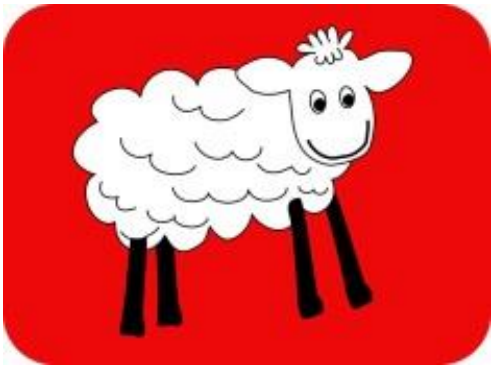


Sheepy Magna Church of England Primary School

Science Policy

Headteacher: Alison Field

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Chair of Governors: David Wright

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Last Reviewed – February 2024

Next Review Date – February 2026

Rationale

It is important that children are given the opportunity to explore and understand the world in which they live. Science at Sheepy Magna CE School is about giving children the tools to develop their ideas and ways of working that enable them to understand the world through investigation with independence, resilience and enjoyment.

At Sheepy, we believe that a broad and balanced science education is the entitlement of all children, regardless of ethnic, origin, gender, class, aptitude or disability.

Aims

- Preparing our children for life in an increasingly scientific and technological world.
- Developing children's Science Capital by broadening what counts as valued science experience in the classroom and by personalising the content and giving local context where possible.
- Fostering concern about, and active care for, our environment.
- Helping our children acquire a growing understanding of scientific ideas.
- Helping develop and extend our children's scientific concept of their world.
- Developing our children's understanding of the international and collaborative nature of science.

Attitudes

- Encouraging the development of resilient and positive attitudes to science.
- Building on our children's natural curiosity and developing a scientific approach to problems.
- Encouraging open-mindedness, self-assessment, perseverance and responsibility.
- Building our children's self-confidence to enable them to work independently.
- Developing our children's social skills to work independently and cooperatively with others.
- Providing our children with an enjoyable experience of science, so that they will develop a deep and lasting interest and may be motivated to study science further.

Skills

- Giving our children an understanding of scientific processes.
- Helping our children to acquire practical scientific skills.
- Developing the skills of investigation - including observing, measuring, predicting, hypothesising, experimenting, communicating, interpreting, explaining and evaluating.
- Developing the use of scientific language, recording and techniques.
- Developing the use of computing in investigating and recording.
- Enabling our children to become effective communicators of scientific ideas, facts and data.
- Enabling our children to work scientifically.
- Allow children to use scientific skills across the curriculum.

Our teaching aims

- Teaching science (using Engaging Science) in ways that are imaginative, purposeful, well managed and enjoyable.
- Giving clear and accurate teacher explanations and offering skilful questioning.
- Making clear links between science and other subjects.
- Ensuring children are given enough time to study the four main areas of the science curriculum. These are: Scientific enquiry, Life and living processes, materials and their properties and physical processes.
- Offering ample opportunity for practical investigation and enquiry.
- Teaching science outdoors as well as in the classroom.

How science is structured

Children at Sheepy Magna CE Primary School learn through a thematic curriculum, with the teaching and learning of science being based on investigation, observation and application. Pupils also are taught Science as a discrete subject in order to ensure coverage and deeper understanding.

Children in the foundation stage are taught the science elements as indicated in the development matters curriculum through: Knowledge and Understanding of the World.

Links to other areas of the curriculum that enhance their understanding of science are identified and incorporated into planning.

The curriculum overviews are available on the website. Science books and medium term plans are monitored by the science coordinator on a termly basis, and support given where required.

In addition to the knowledge and understanding aspects of the National Curriculum, emphasis needs to be put on scientific investigation and enquiry, including the correct use and care of scientific apparatus. When planning the learning experiences, the pupils' previous experiences and present understanding should be taken into account.

Science is taught in a cross curricular way and our children experience science outside of the classroom as much as possible.

Teachers are encouraged to actively teach science skills, and reinforce learning with selected enquiry stimulations. We encourage children to ask and answer their own questions as often as they like.

Children should complete at least one investigation per half term. These investigation should be based on their current topic but have a focus on developing the children's scientific skills.

EYFS teachers are encouraged to carry out regular short oral scientific enquires with their children.

Assessment and recording

We use assessment to inform and develop our teaching.

 Within the classroom, topics commonly begin with an assessment of what children already know. The learning objective for the lesson is always shared with the children. However, this may not always be at the beginning of the lesson. For example, if the investigation or enquiry leads the children to discovering the learning objective for themselves.

 Children are involved in the process of self-improvement, recognising their achievements and acknowledging where they could improve on a short term basis when assessing their understanding against the learning target of a lesson. Learning objectives will be highlighted in green to indicate if a child has met it. Any questions used to further challenge children will be presented as a 'purple pen question'.

 EYFS knowledge and understanding of the world may be evidenced using photographs of the children working scientifically. Any oral evidence can be recorded by teachers during their observations.

 Science medium term and long term plans are monitored at least annually to ensure that all areas of the curriculum are adequately covered. The science coordinator will also conduct a book scrutiny to ensure all objectives are covered and offer support where necessary.

 Reports to parents are written once a year, describing each child's attitude to science, his/her progress and understanding of the content of science.

Pupils are assessed by teachers at the end of each Key Stage and determine whether pupils are working at the required standard or not. Teachers assess each pupil in a similar way each year and records are passed on to the next teacher to inform planning.

Health and safety

Children should be taught the correct and safe use of equipment and the carrying out of simple safety procedures as an intrinsic part of their science lessons. A risk assessment should be carried out in line with school policy in regards to any school trips or experiments out of school grounds. Safety equipment is available in the science cupboard. It is the teacher's responsibility to ensure any investigations carried are done so in a safe way for the protection of their class.

Review

This policy will be reviewed every two years by the science curriculum leader.