



Rawmarsh Ryecroft

Infant School

Science Policy

Reviewed: September 2025

Next Review Due: September 2027

This policy reflects the school's values and philosophy in relation to the teaching and learning of science. It sets out the framework within which teaching and non-teaching staff operate and gives guidance on planning, teaching and assessment.

The policy should be read in conjunction with the National Curriculum, EYFS Foundation Stage Framework and Calculation Policy, which sets out in detail what pupils in different year groups will be taught. This document is intended for all teaching and non-teaching staff with classroom responsibilities, Governors, parents, OFSTED, LA Advisors and interested others.

Science makes an increasing contribution to all aspects of life. Children are naturally fascinated by everything in the world around them and science makes a valuable contribution to their understanding.

Intent

Curriculum definition

A high-quality science education provides the foundations for understanding the world through the specific disciplines of biology, chemistry and physics. Science has changed our lives and is vital to the world's future prosperity, and all pupils should be taught essential aspects of the knowledge, methods, processes and uses of science. Through building up a body of key foundation 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. They should be encouraged to understand how science can be used to explain what is occurring, predict how things will behave, and analyse causes.

The principal focus of science teaching in EYFS and KS1 is to enable pupils to experience and observe phenomena, looking more closely at the natural and humanly constructed world around them. They should be encouraged to be curious and ask questions about what they notice. They should be helped to develop their understanding of scientific ideas by using different types of scientific enquiry to answer their own questions, including observing changes over a period of time, noticing patterns, grouping and classifying things, carrying out simple comparative tests, and finding things out using secondary sources of information. They should begin to use simple scientific language to talk about what they have found out and communicate their ideas to a range of audiences in a variety of ways. Most of the learning about science should be done through the use of first-hand practical experiences, but there should also be some use of appropriate secondary sources, such as books, photographs and videos. Pupils should read and spell scientific vocabulary at a level consistent with their increasing word reading and phonic knowledge at key stage 1

Our science curriculum where possible is linked through the theme being taught that half term.

Teachers share clear and precise objectives with the children and regularly recap previous learning through our sticky knowledge checks. Sticky knowledge checks look at the objectives being taught, how these might link with previous learning, new vocabulary being covered and any background knowledge they may need to access the lessons teaching.

Teachers use a range of teaching styles incorporating: -

- direct teaching
- group/paired work
- individual work
- investigation tasks
- making predictions and observations
- carrying out scientific tests

Aims for the teaching of science

At Rawmarsh Ryecroft Infant School we aim: -

- To raise standards in science by using the National Curriculum as a tool for teaching and learning.
- To teach the children to work scientifically
- To teach the children scientific disciplinary knowledge
- To teach scientific substantive knowledge.
- To develop our children's curiosity
- To expand pupils' scientific vocabulary
- To develop skills which enable children to use and apply their scientific understanding and skills across all the different strands of the science curriculum through investigations and questioning which relate to everyday experiences.
- To provide a stimulating and challenging scientific environment with well-planned work to interest and motivate children.
- To encourage and develop children's confidence in and enjoyment of science for life.
- To provide problem solving opportunities whereby children are able to apply and extend their scientific knowledge.

Implementation

Teaching and Learning

Science is a core subject which, where possible, is not taught in isolation but will draw from, compliment and contribute to all other areas of the curriculum. The teaching of science encompasses a range of methods including whole class, making predictions and

observations, experimental learning, discovery learning, problem solving and open-ended investigations.

Curriculum Planning

All learning is planned using objectives from the National Curriculum and the Early Years Foundation Stage (EYFS) Statutory Framework with lessons building upon prior learning from the previous year.

Science schemes have been written by the science coordinator in line with the relevant documentation. Schemes of work follow the science curriculum progressions map and are successive year on year. This is then utilised by class teachers ensuring sequential learning over the half term.

Sticky knowledge checks, vocabulary and resources are carefully planned for each lesson and learning scaffolded to meet the needs of the individual learners including those with SEND.

Grouping of Pupils

Children of all abilities benefit from the study of science. Both boys and girls are encouraged to take an active part in scientific investigations. Children may be grouped in a variety of ways during science lessons depending on what the children are learning and how the teacher wants the children to engage.

Language in the Science curriculum

Science reflects the importance of spoken language in pupils' development across the whole curriculum. The quality and variety of language that pupils hear and speak are key factors in developing their scientific vocabulary and articulating scientific concepts clearly and precisely. They must be assisted in making their thinking clear, both to themselves and others, and teachers should ensure that pupils build secure foundations by using discussion to probe and remedy their misconceptions. Pupils will be given the opportunity to regularly revisit previous vocabulary and talk about its meaning and be supported in linking existing knowledge and vocabulary to new knowledge.

Impact

Monitoring and Assessment/ Moderation

The Science Subject Leader will monitor and evaluate the teaching and learning of science through looking closely at pupil's work, carrying out deep dives and lesson observations and ensuring teachers are monitoring pupils' achievements using our assessment documents.

Assessment in Science is based upon scientific disciplinary knowledge and substantive knowledge. In the Foundation Stage children's knowledge and understanding is assessed in line with the "Early learning goals". The statements in bold highlight the key end points for all children.

At Ryecroft Infant School we carry out assessments in a variety of ways. Teaching staff observe and listen to pupil responses and assess their level of understanding when Science is taught. Teaching staff plan for regular assessment tasks throughout the course of the school year to ensure pupils are keeping on track. Assessment tasks are stuck into pupils' books for evidence and again these link to the bolded statements and end of year expectations. Parents are notified of their child's performance in science through the end of year report.

At Rawmarsh Ryecroft Infant school the assessment of science consists of: -

- Foundation Stage on going observations
- Teachers ongoing formative assessments
- Pupils work
- Assessment Tasks
- Key stage 1 curriculum books
- Photographic evidence of investigations
- Curriculum Assessment Documents
- Class discussions
- Sticky knowledge checks

The teacher and science subject leader will use the assessment documentation of the children to plan appropriate scientific learning and to inform future schemes of work.

Inclusion

Ryecroft Infant school is an inclusive school and ensures policy and procedures are in place to promote this. The design and delivery of teaching, learning and assessment methods allow all students to engage meaningfully with the curriculum and achieve their full potential.

EYFS

The Science curriculum for Foundation stage is as set out in the EYFS document; these outcomes are based on the Early Learning Goals 'Understanding the World, The natural world'. Schemes have been planned with these statements in mind and allow children the opportunity to observe, discuss, predict and take part in simple activities and investigations. When Science is the scheme for the week, the theme area within the classroom environment reflects this and allows children to practice their knowledge, skills and vocabulary more independently. Adults often support children in this area and use it as an opportunity to observe and extend children's play.

Health and Safety

Pupils will be taught to use scientific equipment safely when using it during practical activities. Teachers will ensure the school policy for Health and Safety is integrated into science teaching and relevant risk assessments are undertaken if necessary. Children will be made aware of safety issues and will be taught to recognise any possible hazards and risks.

E- Safeguarding

Technology is an important and essential part of the learning experience. We are committed to ensuring that our children leave with the skills and knowledge that will help them to thrive in this digital age. Children use a range of technology, and it is vital that we teach children how to use this valuable resource safely. All staff have regular and up to date training, they can recognise and are aware of online safety issues. Children are aware of how to report issues or concerns to staff. Staff check all materials and resources before use and adhere to all safeguarding policies when using online content to support teaching and learning.