



Science Policy

Staff Responsible:

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Teaching and Learning in Science

Teaching and Learning Documentation

In order to communicate effectively each of our subject areas, key documentation is established by the Subject Leader and shared with all relevant teaching staff. This documentation includes: -

1. Subject Vision
2. Subject Policy
3. Unit of Study Overview (LTP)
4. Curriculum Planning

Together, this documentation collates the coverage and implementation of each of the Wider Curriculum Subject Areas.

Subject Leadership Documentation

In addition, Subject Leaders are required to monitor the effectiveness of their subject throughout each academic year. In order to do this with effect, the following documentation may contain:

1. Subject Audit - An audit of the subject is completed annually RAG rating the effectiveness of the subject, whilst informing key priorities moving forward.
2. Subject Action Plan - Supports the RAG rating from the Subject Audit.
3. Learning Enquiry - As part of our monitoring cycle, our Learning Enquiry approach ensures the monitoring of each subject area through scheduled book looks, learning walks, planning/ resource checks, pupil voice and staff voice.
4. From the steps above, all findings are collated, feedback is shared and next steps are actioned.

Delivery of Science

Science is taught weekly from Year 1 to Year 6, ensuring that all of the National Curriculum Programmes of Study are covered in depth. KS1 Science is taught for an hour and KS2 Science lessons last 2 hours. We follow our own bespoke curriculum; however, we use aspects of the Developing Experts Scheme to supplement teaching and resources. Early Years Science is taught in correlation with the Early Year curriculum. All teaching that relates to Science is stated on the Science Overview.

There is a school-wide focus on ensuring a variety of enquiry types used across science units.

Lesson Content

In support of foundational understanding of Science, key components of lessons have been established in conjunction with teaching proformas to support class teachers with consistent delivery lesson-by-lesson.

These key components include: -

- **Teachers have the freedom to create a lesson, or use the Developing Experts Scheme** to support them in delivering a lesson.
- **Mind maps** - All units will begin with a mind map to gauge what the children already know. This will be added to throughout the unit to support the retrieval of information, and to help children remember what has been taught. When new information is added, it should be dated.
- **Mission log** - This states the learning intention, what the children should remember (sticky knowledge), the scientific skills and key vocabulary used in the lesson; all of which can be found on the Science Overview.
- **Key vocabulary and prior learning** - To begin lessons, key vocabulary should be shared, discussed and defined with support of teachers encouraging clear and purposeful discussion throughout.
- **Scientific write-up** - All lessons should include some form of scientific write up (some aspects of scientific write-up may not be appropriate for some lessons/units, and therefore may not be present in every lesson). **KS1 write-ups** should include: a question, how evidence is gathered (method), how evidence will be recorded (results) and an answer to the question. **KS2 write-ups** should include: a question, a section stating the different variables within the experiment, how evidence is gathered (method), how evidence will be recorded (results) and a conclusion.

- **Exit tasks** - Lessons will end with an exit tasks to help identify what has learnt and any misconceptions. 2/5 exit tasks will be recorded in books.
- **Most units taught contain five lessons.** This ensures there is time at the end of a unit to revise and consolidate learning, as well as giving opportunities to welcome in visitors and/or organise experiences to enhance the teaching of Science.

Performance and Learning Evidence

Evidence collation is key to support the learning process and the monitoring of Teaching and Learning by Subject Leaders and Senior Leaders. In order to evidence Science effectively, the following strategies have been implemented: -

- EYFS - Floor Books
- KS1 - Science Books
- KS2 - Science Books

Assessment

As per our Marking and Feedback policy, adults are encouraged to live mark throughout the entire learning sequence, ensuring proactivity and responsivity to the needs of all children. This feedback can be verbal or written feedback.

At the end of the academic year, Class Teachers make a final judgement on whether the children are meeting age-related expectation or working below. Conversations about attainment take place during transition meetings and are communicated to parents in the end of year report.