

Vision

Pupils are given opportunities to develop their knowledge and understanding of the World with activities that engage and inspire them to be inquisitive both inside and outside of the classroom. Children are given the opportunity to develop their ability to work scientifically, take an active role in their own learning and articulate their understanding clearly using scientific language.



Science



Content & Sequencing

Big Ideas

- Pupils understand why they are carrying out investigations and how it relates to the real World.
- Pupils taking an active role in their learning.
- Pupils increase their Science capital through a variety of activities and practices.
- Pupils are able to articulate their questions, answers, hypothesis and learning using appropriate scientific language.
- Teachers can assess pupils confidently, including during practical opportunities.

KS1 : The principal focus of Science teaching in KS1 is to enable pupils to experience and observe phenomena, looking more closely at the natural and human-constructed World around them. They should be encouraged to be curious and ask questions about what they observe and notice. Pupils should be helped to develop their understanding of scientific ideas using different types of scientific enquiry to answer their questions: observing changes over time, pattern seeking, grouping and classifying, conducting 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 be able to communicate their ideas in a variety of ways. Most of the learning should be done through first-hand practical experiences; there should also be some use of appropriate secondary sources, such as books, photographs, and videos.

LKS2 : The principal focus of Science in LKS2 is to enable pupils to broaden their scientific view of the World around them. They should do this through exploration, talking about, testing and developing ideas about phenomena and the relationship between living things and familiar environments, and by beginning to develop their ideas about functions, relationship and interactions. They should ask their own questions about what they observe and make some decisions about which type of scientific enquiry are likely to be the best way of answering them. They should draw simple conclusions and use some scientific language to articulate their understanding and learning, before being given the opportunity to write about or/and present what they have discovered.

Cross Curricular Links

Maths: Statistics, measurement and language.

Computing: Use of digital technologies

Art: Observational drawings

English: Reading, writing, spoken language and use of technical language.

Retrieval Practice

Recap of prior learning is carried out at the beginning of every lesson, e.g. quizzes, questioning, discussions.

Key concepts revisited, e.g. electricity, light, sounds, plants etc.

Books/iPads are used to capture learning during lessons. The children can then refer to these if necessary.

Science working walls are regularly added to, including key vocabulary.

End of unit assessments are completed by the children in order for them to demonstrate what they have learnt.

TAPs assessment provides children with the opportunity to demonstrate what they have learned.

Progress

Units sequenced so that children build upon prior learning.

Key vocabulary introduced through every unit to progressively build upon the children's knowledge of scientific concepts.

End of unit assessments aid teachers in knowing how much progress has been made and if there are any gaps.

TAPs assessments help teachers check knowledge and understanding.

All year group teachers have access to the history plans for all year groups to ensure progression of vocabulary and skills throughout the key stages/school.

All teachers have access to progression documents for each unit of work, which include: key vocabulary, previous learning, future learning and working scientifically ideas.

Support

Working walls are regularly added to.

Relevant resources provided for children to access and store through their personal iPads.

Staff CPD provided by Curriculum and History leads. Monitoring and Evaluation by SLT.

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Staff CPD provided by Curriculum Lead