

## Science End of Year Evaluation 2025.26

### Evaluation of Impact

The science curriculum has been developed with the school's context and the needs of its pupils in mind. The school recognises the importance of ensuring that all pupils have access to a broad and ambitious body of knowledge that contributes to their cultural capital. As a result, there is a consistent emphasis across subjects on securing important knowledge, building connections between learning and ensuring that pupils retain what they have been taught.

In science, this is reflected in a carefully sequenced curriculum that builds on prior learning and develops both substantive and disciplinary knowledge over time. The impact of this is evaluated through ongoing assessment, monitoring and re-assessment, enabling leaders to identify what pupils know, what they have retained and where further action is required.

### Curriculum and Teaching

The curriculum provides clear opportunities for pupils to build on previously taught scientific knowledge. Daily reviews are a consistent feature of science lessons and include key vocabulary, learning from the previous lesson and relevant knowledge from the previous year. This supports pupils to make connections between current and prior learning and strengthens the retention of important scientific knowledge.

The quality of teaching is supported through regular targeted questioning and cold calling, enabling teachers to capture the knowledge of identified pupils and check understanding beyond those who routinely volunteer answers. This allows misconceptions and gaps to be identified during teaching and addressed appropriately.

Activities are adapted where necessary to ensure that pupils with SEND can access the curriculum and demonstrate their understanding, while maintaining appropriate ambition for their scientific learning.

Ongoing learning walks and content checks undertaken by the Teaching and Learning Lead provide leaders with an informed understanding of how consistently the intended curriculum is being implemented. This monitoring has demonstrated that daily reviews are being used to revisit identified knowledge and support pupils to retain important content.

### Assessment and Use of Information

Assessment has been used to provide leaders and teachers with precise information about pupils' knowledge rather than simply as an end point.

The end of year Mastermind-style assessment assesses key substantive and disciplinary knowledge from across the science curriculum. Subject leaders undertake question level

analysis to identify knowledge that has been securely retained and knowledge that requires further consolidation.

This analysis is used directly to inform teaching. Where knowledge is identified as less secure, subject leaders provide class teachers with specific content to revisit through 'last year' daily reviews during the autumn and spring terms where appropriate.

This ensures that assessment information leads to timely action. Rather than waiting for pupils to encounter gaps again at the end of the year, teachers are provided with precise information about the knowledge that needs to be revisited and pupils are given further opportunities to retrieve and secure it.

### Impact of Re-Assessment

The impact of this responsive approach was evaluated through a spring re-quiz, undertaken by the subject leader and Teaching and Learning Lead. The re-quiz revisited key knowledge identified through assessment and question level analysis as requiring further consolidation.

The results demonstrate an increase in average points scored across all year groups represented in the re-quiz:

#### Science Re-Assessment Report – Spring

##### Year Group Average Points Scored +/-

|        |      |
|--------|------|
| Year 1 | +9%  |
| Year 2 | +20% |
| Year 3 | +21% |
| Year 4 | +21% |
| Year 5 | +14% |

The fact that all year groups represented demonstrated an increase in average points scored provides evidence that pupils were able to retain more of the identified scientific knowledge when it was revisited.

The increases of 20–21% in Years 2, 3 and 4 demonstrate positive movement in knowledge retention following targeted retrieval and teaching. The increases in Year 5 (14%) and Year 1 (9%) also demonstrate improved retention, while the variation between year groups provides leaders with useful information about where further consolidation may be required.

The assessment outcomes are considered alongside the ongoing monitoring of daily review content. Together, these provide evidence of a rigorous and responsive approach to assessment, in which leaders use information about pupils' knowledge to inform teaching and then evaluate whether subsequent action has resulted in improved retention.

### Inclusion and Pupil Groups

Leaders consider the impact of science provision across different groups of pupils, including those with SEND and disadvantaged pupils. Assessment information is analysed to identify pupils who have retained less knowledge and may require further support or targeted retrieval.

Pupil voice is then used with identified pupils to explore specific knowledge gaps and their experience of learning science. This provides additional information alongside assessment outcomes and helps leaders to understand pupils' perceptions of the subject, their confidence and any barriers affecting their learning.

Individual case studies are developed for identified pupils where appropriate and shared with governors. This enables governors to understand the experiences and outcomes of individual pupils, consider the impact of actions taken and hold leaders to account for the effectiveness of provision and the progress made by pupils.

Where evidence indicates that particular pupils or groups have not secured important knowledge, this informs further teaching, retrieval and, where necessary, adaptations to the curriculum or teaching approach.

This ensures that pupils are not simply identified through assessment data but that leaders seek to understand and respond to the reasons behind gaps in knowledge, with appropriate oversight from governors.

### Leadership and Curriculum Development

The assessment and monitoring cycle provides leaders with a clear understanding of the strengths and areas for development within science. The subject leader and Teaching and Learning Lead use assessment information, question level analysis, learning walks, content checks and pupil voice to evaluate the effectiveness of provision and identify where further action is required.

The positive movement in average points scored demonstrates that identified knowledge gaps can be addressed through deliberate retrieval and further teaching. At the same time, differences between year groups and individual pupil outcomes provide leaders with useful information for future curriculum planning.

Where persistent gaps are identified, leaders can consider whether changes are needed to curriculum sequencing, the emphasis given to particular knowledge, teaching approaches, resources or opportunities for retrieval.

## Overall Evaluation

Overall, the evidence demonstrates positive impact on pupils' retention of scientific knowledge. The spring re-quiz shows that all year groups represented increased their average points scored, indicating that pupils were able to retrieve more of the identified knowledge following further opportunities for teaching and retrieval.

This evidence is strengthened by ongoing monitoring of daily review content, question level analysis, targeted questioning and the analysis of outcomes for pupils with SEND and disadvantaged pupils. Leaders therefore have a detailed understanding of both the impact achieved and the areas where further improvement is required.

The evaluation demonstrates that the science curriculum is not only being delivered consistently but is being reviewed and adapted in response to evidence of what pupils know and remember. This enables the school to maintain high expectations for all pupils and to ensure that important scientific knowledge is progressively built, connected and retained.

Through this approach, science contributes to the school's wider commitment to providing pupils with a broad and ambitious education and developing the knowledge and understanding that contributes to their wider cultural capital.