



Science at Shears Green Junior School

At Shears Green, we aim to provide our children with a strong understanding of the world around them, whilst acquiring specific skills and knowledge to help them to think scientifically, to gain an understanding of scientific processes and an understanding of the uses and implications of Science, today and for the future.

Our curriculum is designed to engage all pupils and prepare them for future learning, encouraging curiosity and questioning attitudes. In science, we take pride in our pupils developing independence, confidence, and resilience. We focus on building up extended specialist vocabulary, enabling pupils to articulate scientific concepts. We ensure pupils build an awareness of potential risks when investigating. Throughout our science lessons, we ask pupils to be brave in their thinking, predicting, investigating, and thus we nurture future scientists.

How do we do this?

- Through teaching scientific ways of thinking.
- Adopting the '[Thinking, Doing, Talking Science approach](#)' to our lessons.
- Promoting student discussion with the inclusion of an '[Explorify](#)' or '[Bright Idea](#)' activity at the start of every lesson (e.g. An odd one out, zoom in and zoom out or giving the children a big question) and through discussion during group activities. During the starter, the children are encouraged to jot down their initial ideas on post-it notes and these are recorded in our 'Science in Action' book.
- Actively involving students in their own learning.
- Helping students to develop a conceptual framework as well as develop problem-solving skills.
- Helping students to experience science in varied, interesting and enjoyable ways.
- Provide [keywords](#) in children's books and display [vocabulary](#) on working walls to ensure misunderstandings do not occur and that the correct scientific language is used within their written work and discussions.
- Through the use of '[Science in Action](#)' floor books to promote the development of children's ideas, thinking and reasoning skills, and to model the collaborative nature of science and support effective teacher assessment. It also tells a story about the science learning going on at Shears Green Junior School.
- Science Ambassadors (2 per class)
- Key vocabulary jars in classrooms so that vocabulary is constantly recapped and revisited to help improve long-term memory.

Impact

Our Science Curriculum is of a high quality, well thought out and is planned to demonstrate progression. If children are keeping up with the curriculum, they are deemed to be making

good or better progress. In addition, we measure the impact of our curriculum through the following methods:

- Tracking of knowledge in [pre and post-learning quizzes](#).
- Pupil/Teacher discussions about their learning.
- A reflection on standards achieved against the planned outcomes with key objective sheets linked to the National Curriculum objectives are shown on '[Title Pages](#)' for each science unit, as well as the prior learning for each unit and key vocabulary.
- Teacher assessment of 'working scientifically' is also found on the school's [Curriculum grid](#).
- [Pupil Voice \(Science Ambassadors\)](#) across the school, where the children get to share their views about the science being taught in school and how they feel it could be improved.
- [Science Action books](#) allow us to track changes in children's ideas and to understand how children are developing an understanding of science.