



Curriculum Statement for Science

Science Intent

At Highbury, the intention of the Science curriculum is to enable children to gain knowledge of scientific concepts and discoveries, as well as an understanding of how scientific findings have shaped our world and how vital the subject is to our future prosperity. We foster children's curiosity about the biggest questions in our universe by providing quality first teaching, experimentation and first hand experiences. There are equal opportunities for children from all backgrounds to develop enquiry-based learning skills throughout Key Stage 1 and 2. Where possible, we will link Science to class topics to enrich and embed children's learning across the curriculum. In doing this, we prepare children for life in an increasingly scientific and technological world today and in the future.

Implementation of Science

At Highbury, the Science curriculum is mapped out across the whole school using the National Curriculum guidance; this is detailed in the whole School Curriculum Overview. We plan the Science curriculum with a clear progression of substantive and disciplinary knowledge, with key vocabulary taught explicitly. This progression takes into account prior learning and consolidates the key skills.

The children learn the following Working Scientifically skills:

- Inquiring skills
- Practical and investigational skills
- Observational skills
- Recording and analysis skills
- Identification and classification skills

Teachers carefully select the appropriate pedagogy to teach and embed learning, ensuring that key misconceptions are addressed in a timely manner. Frequent recall quizzes ensure that children's knowledge is fully secure before moving on, and children are given sufficient time to learn, remember and connect their knowledge when moving between topics. Teachers take into account prior maths learning when analysing and recording data, and explicitly teach skills such as measurement of data.

The Science curriculum also promotes reading, writing and communication skills, as children have the opportunity to write for a range of purposes using scientific knowledge, understanding and vocabulary.

Staff expertise is continually developed through sharing advice and resources in CPL meetings, and the consultation of teacher mastery documents on Developing Experts.

As a school, we seize opportunities to promote children's enthusiasm for Science, such as involving the whole school in Science week, exploring natural phenomena during weekly Forest school sessions, and providing a Science club with a focus on practical experiments.

Impact of the Science curriculum

Not only will children leave with key scientific skills and knowledge, but also they will be motivated and enthusiastic to take these skills further as they develop into young scientists. They will confidently use their literacy and computing skills to record accurately and communicate their discoveries or findings.

The wealth of practical learning opportunities we provide will lead to greater knowledge retention, helping them to prosper in their secondary education. The children will leave Highbury with a more developed enquiring mind and a richer scientific vocabulary, allowing them to draw their own conclusions about the world around them. Their varied and exciting curriculum experiences will allow them to understand the significant part they are able to play in the future of Science.