



Statement of Intent for Science

Experience Success ↔ **Build Aspiration**

“Until you spread your wings, you’ll have no idea how far you can fly”

Respect • Resilience • Responsibility • Compassion • Curiosity • Trust

At Bowerhill Primary School our **INTENT** is to enable ALL children to **EXPERIENCE SUCCESS** through **BUILDING ASPIRATION** within them. Equally as important, to **BUILD ASPIRATION** through the **SUCCESS** they **EXPERIENCE**... we want all children to experience just how far they can fly! We will do this through all the opportunities we provide them with, including our curriculum.

Intent

Science allows children to expand their minds and engage in their learning through curiosity, exploration and questioning. At Bowerhill it is our intention that children broaden their understanding of science in a wider, deeper and more meaningful context through activities that initiate investigation and research. Through science, it is our hope that Bowerhill pupils will become curious and enthusiastic about their learning and the world around them, seeing how science has impacted the world and its possibilities for the future. This learning will be progressed from Reception to KS2 following the National Curriculum Guidelines and, in Early Years, activities will encompass the Framework’s ‘Understanding the World’ objectives. Children will build upon their scientific knowledge each year and they will revisit and deepen some topics, such as plants, throughout their time at Bowerhill.

Implementation

Bowerhill Primary School has adopted Science Bug, by Pearson. This scheme of work encompasses all the National Curriculum objectives; however, many of our staff felt that this scheme wasn’t very engaging for our children and the lessons were not always effective for the teaching of science. Therefore, we are in the process of creating our own scheme of work for Science. The implementation of this scheme will have a similar structure to the previous lesson structure:

- Hook/Big Question
- Whole class teaching (new or reiterating knowledge & vocabulary)
- Class activities & task (consolidating or deepening knowledge)
- Plenary

In our new scheme of work, there will be structured, purposeful practical sessions for each topic, during which children will either be building their practical skills or using their theoretical knowledge to test a theory. It is our hope that, once the new scheme is in place, both children

and teachers will find science lessons more engaging and purposeful, building on their previous knowledge successfully and broadening their understanding of science. Although Science Bugs provided workbooks for children and a progression of work, this scheme was not the most accessible; therefore, our Bowerhill scheme of work will be ensuring that a variety of resources can be used, which enable all pupils to engage successfully in their science learning, through differentiated and varied resources, suitable for all classes. This scheme will continue to adhere and follow the National Curriculum Guidelines, allowing for progression throughout the school and it will also allow clear progression into KS1 from early years, who follow the EYFS 'Understanding the World' objectives. It is our hope that, through the creation of a more accessible scheme of work, the implementation and learning of science is more enjoyable for both our teachers and students alike.

Impact

Our science impact is tracked through careful assessment and is integral to science teaching at Bowerhill. Children's ideas form the basis of teaching and learning, and formative assessment takes place throughout each lesson to ensure children's understanding. Elicitation of children's conceptions and, importantly, misconceptions is achieved by questioning, observations, discussions and written work (varied dependent on the child, class and topic). Before each science topic, classes will complete simple mind maps/KWL charts to show their prior learning and, upon completion of each topic, they will be assessed on their end of topic knowledge. This assessment technique will vary depending on the children and year group – for instance, Year 6 may complete a 2-page written test, whereas Year one may complete an interactive class quiz. In each topic there will also be a practical assessment, which will eventually follow a TAPS Bath assessment structure. These assessments will allow teachers to see how their classes are progressing in their scientific (practical) knowledge and understanding and where the children need extra support or further challenge.