

SCIENCE CURRICULUM INTENT

Science teaching at Bishops Itchington Primary School aims to give all children a strong understanding of the world around them while teaching them specific skills and knowledge to help them think scientifically and gain an understanding of scientific processes. It also aims to develop children's understanding of the achievements of scientists, both from the past and present, and the uses and implications of science today and for the future.

At Bishops Itchington Primary School, scientific enquiry skills are embedded in each topic the children study. Topics are mostly taught as a half-termly unit with the content being revisited and developed further throughout the children's time at school. For example, topics such as Plants are taught in Key Stage One and studied again in further detail throughout Key Stage Two. This model allows children to build upon their prior knowledge and increase their enthusiasm for the topics studied whilst embedding procedural knowledge into the long-term memory.

IMPLEMENTATION

In science lessons, all children are encouraged to question the world around them and to gain and use a range of skills including planning and carrying out investigations, in order to facilitate becoming independent learners. They are taught how to plan and implement different stages of an investigation, according to a progression of skills across the year groups. These skills include gaining a good understanding of the investigation's aim, identifying the variables involved and conducting a fair test, carrying out investigations safely, methodically and cooperatively, designing and using a results chart, making accurate observations or measurements and drawing conclusions from their results.

Specialist vocabulary for each topic is taught progressively, and effective questioning to aid understanding of vocabulary and subject matter is encouraged. Children have regular opportunities to practise saying and writing scientific explanations to communicate their knowledge and understanding, and to draw conclusions from their scientific enquiries. Children are encouraged to answer scientific questions by drawing on their own experiences and on their findings from scientific enquiries, with consistent and accurate use of the relevant specialist vocabulary.

Children learn about a range of significant scientists from the past and the uses of science today, and they consider the developments of science and the work of scientists into the future. A whole afternoon is given to Science for each year group every week. This practice is historical at our school.

IMPACT

Pupils appreciate that Science is a core subject due to the importance the school places on it. Children enjoy science and develop an excitement about the subject. Science investigations are shared with school during assemblies. Pupils show what they have learnt through mind-mapping, producing recall posters and similar.