Science Curriculum

Intention, Implementation and Impact

Intent

At Hazelbury Bryan Primary School it is our intent to enthuse and engage all children in scientific learning through the teaching of biology, chemistry and physics. Science has changed our lives and is vital to the world's future prosperity. Therefore it is important that all children are encouraged in learning and continue to foster a natural curiosity for the world and how it works. We want to inspire children to ask those questions and find the answers. We aim to give children a solid foundation for scientific learning by equipping them with a broad knowledge and a wide range of skills which they will have the confidence to use. Our curriculum aims to give purposeful learning opportunities to all children at their own level. Children should be taught through inquiry based learning, where they are given time to investigate, prove and justify theories and reasons. We also feel it is important to immerse and enrich our children's learning in a wide range of scientific vocabulary, which they will learn, use and understand.

Implement

- The teaching of science at Hazelbury Bryan Primary focuses on expanding children's knowledge, encouraging them to ask questions, use and understand new vocabulary and acquire the scientific skills they need to carry out investigations safely by using the correct equipment.
- All teachers are responsible for planning their own science lessons which cover the programs of study on our two year rolling programme from the National Curriculum 2014 and Understanding the World in the Early Years. A progression grid is in place to ensure that science is taught in a systematic and progressive way.
- Science is taught consistently as a stand alone subject, at least once a week for one or two sessions, but is discretely taught in many different contexts throughout all areas of the curriculum. For example, through English, i.e. writing a letter to a local politician regarding the closure of a park or a biography of a famous scientist's life.
- All classes have an interactive learning wall where science vocabulary, children's work and questions to further children's knowledge can be found. These displays support children in learning current themes and objectives, whilst also reminding them of prior knowledge and celebrating their achievements.
- At the beginning of each unit the children complete an activity where they show what they already know about the theme and what they would like to find out. This means lessons can be planned based on what children need to learn next and will also match their interests. We return to this document after the unit has been taught to find out what the children know now.
- Most year groups will have a school visit relating to their science theme throughout the year. This allows children to gain different experiences which will impact upon their learning.
- We also have whole school special scientific events, such as 'science week' where all children are involved in a variety of different science activities. We hope that these days will inspire children and encourage their curiosity for scientific learning.

Impact

- Children will achieve age related expectations in science for the end of their cohort year.
- Some children will achieve 'Greater Depth' in science.
- Gain a wider variety of skills linked to both scientific knowledge and understanding, and scientific enquiry/investigative skills.
- Have a richer vocabulary which will enable children to articulate their understanding of taught concepts.
- Have high aspirations, which will see them through to further study, work and a successful adult life.
- Have a general knowledge of biology, chemistry and physics which will allow them to make sense of the world and be ready to take on further learning and acquire new skills.