Subject on a Page

SCIENCE

Plymouth Science

Explore, Discover, Achieve

Intent – We aim to….

- Deliver an investigative based curriculum where children are encouraged to ask questions and search for answers.
- Provide children with real life scenarios where they are required to use their knowledge of the world around them to solve problems as faced by scientists.
- Develop an enquiry-based approach to Science by including key questions within all lessons
- Supporting all children in accessing high-quality Science teaching, while challenging diversity stereotypes both in and outside the classroom
- Foster a love of learning where children develop their passion for Science

Implementation– How do we achieve our intent?

Our approach – At Beechwood, we follow an exciting and robust Science scheme of learning which is enquiry based, allowing the children to develop their scientific skills, knowledge and concept through practical experimentation. Teachers support children to develop their curiosity for scientific exploration, so that by the time they leave in year 6, children can work independently and collaboratively.

Flying Start – In Foundation Stage our children explore their own bodies and their senses, learning to name parts of the bodies and what we use them for. They learn about animals and their habitats, including pets, farm animals and wild animals. The children observes changes such as chicks hatching and caterpillars turning into butterflies, the seasons changing , plants and flowers growing. They have started to notice and talk about what is happening and why. Children learn about being healthy , including food and exercise choices. They develop a sense of curiosity and exploration through a range of resources relating to our topics, e.g magnets, magnifying glasses, things to smell and taste etc, and through the continuous provision areas such as sand, water and small world. Children also experience key vocabulary such as experiment, predictions and observe.

Progression- As a school we have carefully selected Plymouth Science as our scheme to ensure there is balance of knowledge and skill development. As a school we ensure children's scientific enquiry skills develop throughout the school and their key skills (e.g predicting and concluding) progress with the children's understanding.

Vocabulary -At Beechwood we acknowledge that we have a diverse intake of children and therefore vocabulary has to be thoroughly taught. We ensure key vocabulary is displayed on our working walls and word mats as well as ensuring the children are reminded of any key vocabulary at the start of each lesson. Children who are new to English will have pictures to support their learning of new vocabulary. We ensure we use the correct terminology right from the start to ensure our children build scientific dialogue.

Inclusion - SEND & EAL: As a school we have a diverse intake of children with a high mobility rate and therefore we ensure we start each lesson with a recap of prior learning to support all children in making connections between their learning. Teachers carefully consider what provisions and scaffolds will support the children to access the learning – this may be pre teaching the key vocabulary, vocabulary prompts on the table, visual representations, activity scaffolds, peer or adult support, addition discussion time or any other scaffold they feel will benefit each child to access the learning. We believe it is important to not cap our children's learning and have high aspirations for all.

Assessment: The children are assessed on the units at the end of each unit, using a variety if assessment tasks. We want our children to know how to write scientifically, so we ensure all writing is in an appropriate style for the subject. Children are assessed on their scientific skills and knowledge not on their writing ability.

Impact– How do we know we have delivered a successful curriculum?

- Children are engaged in their learning, sharing a passion for science
- Pupils are confident in the use of key vocabulary in a range of contexts & are ambitious in achieving age-related expectations
- Pupils know more and remember more, demonstrating good progress from their starting points
- Pupils feel they are all capable of achieving high aspirations in the field of science. They understand that science has changes on our lives and is vital l to the world's prosperity.
- Pupils can recognise and appreciate the diversity of Scientists in Britain and around the world