

Curriculum Statement



Intent

We want children to be able to work scientifically as well as develop their scientific knowledge as this also underpins our birds of learning and our Trust wide capabilities. Children should develop their life skills and knowledge through Science which shows how the world around them has evolved, how it works and how it could improve. All our Science units link to Eco learning and looking after our planet. e.g. Light - saving energy, Living Things and Their Habitats – improving local habitats and looking after them by litter picking, The Water Cycle links to green house gases and changes of state. We want children to be able to use their understanding of Science to explain why our world is as it is and how they can use this knowledge to make the world a better place.

Implementation

When teaching science, teachers ensure to create a positive attitude to science learning within their classrooms and reinforce an expectation that all children are capable of achieving high standards in science. Vocabulary is taught throughout the block of work and revisited frequently to empower children to use this themselves. Through the progressive nature of our rolling programme, prior knowledge is built upon and misconceptions are addressed to ensure a secure understanding for all children. Assessments are carried out as we teach and at the end of each unit.

During Key Stage one, pupils observe, explore and ask questions about living things, materials and the world around them. They begin to work together to collect evidence to help them answer questions, find patterns, classify and group objects, research using a variety of sources and carry out fair testing. Pupils use reference materials to find out more about scientific ideas. They share their ideas and communicate them using scientific language, drawings, charts and tables. Science lessons in Key Stage one are either taught discretely or where possible connected to other curriculum areas. The resources used include TigTag, Explorify, and TAPS Working Scientifically focused assessment activities. Children are encouraged to extend the scientific questions that they ask and answer about the world around them. Pupils carry out a range of scientific enquiries including: observations over time, pattern seeking, classifying, grouping and researching using other sources (including computing resources). Children in Key Stage Two learn to plan science investigations by only changing one variable to make it a fair test. As well as the above resources, Research projects are supported by Babcock sets of pre-ordered themed books, and Headstart tests are used as assessment materials at the end of each unit. We ensure that suitable adjustments are made for children with SEND.

Impact

Learners at Princetown are enthusiastic and passionate about science, asking questions to deepen their understanding. Throughout the school, learners are proactive and apply a range of investigative skills not only in science but to other aspects of the curriculum. They develop a detailed knowledge of the world in which they live and feel empowered to

challenge and ask questions to further their understanding. Progress is at least good with children showing a secure understanding of key concepts and it is clear where misconceptions have been addressed. Our engagement with the local environment where appropriate to the topic ensures that children learn through varied and first-hand experiences of the world around them. Through workshops, trips and interactions with experts and local companies, children have the understanding that science has changed our lives and that it is vital to other world's future prosperity.