

## Science Curriculum

### Intent

Science is a key aspect of the primary curriculum and provides children with the essential skills to understand, explain and possibly ultimately change the world they live in. Our aim is to enthuse and inspire pupils to further their scientific understanding and develop their knowledge of the wider world and the issues and challenges we all face.

Science is a critical part of a child's curriculum. It develops their understanding of the world around them and inspires and enthuses them to discover why and how things happen and how they can begin to solve problems in their own environment and around the world, allowing science to become part of their life both in and out of school. A high quality science curriculum will allow children to develop a wide range of skills which are essential as they build and develop their science knowledge and understanding throughout their school life. They develop skills of working scientifically based around prediction and forming hypothesis, close observation, conducting investigations and evaluating and communicating their findings and ideas. Alongside these key skills of working scientifically children will be continually building their subject knowledge on various features of their immediate environment working up to knowledge of the wider world. As a result children will be able to look critically at the world around them and begin to question and challenge the things they see and start to find their own solutions to the 'big problems': helping them to develop their sense of social responsibility. Science also helps children to develop their social skills as they will engage with activities working independently as well as collaboratively as part of a team enabling them to develop concepts of team-work, sharing ideas, debate and negotiation.

### Implementation

We offer a well-resourced, broad and balanced science curriculum which aims to instil children with a sense of awe and wonder and a passion to question, investigate and problem solve. Our children learn a wide range of key skills of working scientifically allowing them to ultimately conduct their own investigations following each stage from questioning and predicting to conducting an experiment, collecting and analysing results and finally communicating their findings.

In Early Years across a two-week period children will have a dedicated indoor session and scientific activities during their outdoor sessions. In these science sessions learning is based around exploring a range of situations and encouraging a sense of inquisitiveness, teaching children how to observe as adults model and narrate what they can see so the children can develop their understanding of what they are looking at and for. Children will build their

basic scientific knowledge, including a range of appropriate scientific vocabulary, which they will then be able to build upon throughout their school life.

During science lessons children have access to a wide range of resources and texts to enable them to build good subject knowledge alongside their skills of working scientifically. They learn how to observe closely looking for differences, changes and patterns and be able to ask questions about things they can see, starting with their immediate environment and working up to the wider world. Their developing subject knowledge enables them to ask questions about why things have happened and begin to explain how and why different processes happen based on their own understanding.

Children will build their knowledge of the key areas of the KS1 science curriculum in a weekly dedicated lesson through investigation or direct teaching with an emphasis on the use of high quality resources to provide children with real life examples and models of the concepts and facts being taught. Through continuous provision children will engage with topics and concepts covered in lessons and will consolidate and further their understanding of the key learning.

To promote an enthusiasm for science throughout school children will benefit from visits from people involved in scientific sectors in their community as well as the opportunity to engage with parents during learn 2gether sessions. As children move through school they will get involved with hands-on science workshops to provide unique and exciting experiences to engage our children with science for life.