

Science

At Elmlea Schools Trust, our teaching of Science allows children to learn about, explore and feel a sense of awe and wonder about the natural world. Our aim is to promote a positive image of Science so that children enjoy exploring and investigating the world around them, as well as developing skills and understanding.

We give children the opportunities to develop their scientific understanding through active 'hands-on' activities, building on children's natural curiosity and using children's interests and prior understanding as our starting point. Above all, we encourage our children to be curious. Children are taught to ask questions, develop ideas and find out answers through investigation and observation and we make fantastic use of our wonderful school grounds, which include several large wooded areas.

[Hyperlink to curriculum map and curriculum map +](#)

In Reception, pupils are taught by all staff. Children develop their scientific knowledge through a mixture of discrete group activities and having the opportunity to access self-initiated science activities as part of our continuing provision. Learning diaries are used to record children's observations and scientific understanding. Key vocabulary is introduced through stories, rhyme and song.

In KS1, pupils are taught weekly, by their class teacher. Science is often linked to each term's topic and through the stories and books that we share. Science can also be taught discretely. Vocabulary is introduced and reinforced through discussion and in displays. The children demonstrate their learning through written work including drawings and annotations and oral explanations such as video clips.

In KS2, pupils are taught weekly, by their class teacher. Lessons are organised into termly themes. In every lesson, pupils acquire scientific knowledge through practical exploration. Progression in scientific skills is acquired throughout the year. Pupils keep a record of new scientific vocabulary in the back of their books which they are encouraged to use in their independent written work and verbal explanations.

In addition to our curriculum lessons, pupils' learning is enriched through our annual STEM Week, where they have the opportunity to work as part of a team to design, build and solve real life problems by linking their scientific and design technology skills. During this week, they are introduced to engineering as a potential career choice and visiting speakers provide role models for STEM subjects and careers. Pupils have the opportunity to take part in the Royal Society Young Persons' Book Judging which promotes the use of excellent quality STEM texts. Lesson plans, resources and activities are differentiated so that all pupils can access the Science curriculum. Knowledge organisers are provided to SEND pupils who require prior teaching to enable them to access the curriculum.

Impact – evidence

- Pupils and their work (check permissions/consent)
- Learning environment/ display/ resources – Curioscope pic from Y6, Pic of children outside (pond dipping?)
- Pupil voice quotes – after STEM Week
- Vocab – example photo of the back of science book

Helen Cooke, Jon Friesner and Sarah Wilson

In Reception, scientific studies are included in the Early Years' Curriculum as a core element of Understanding the World. Through the learning outcomes in the EYFS, children are taught to comment and ask questions about aspects of their familiar world and talk about some of the things they have observed, such as plants, animals, natural and found objects. Children begin to explore ideas around growth and talk about why things happen and how things work. Through simple investigations, we introduce them to the skills, concepts and scientific vocabulary that they will go on to develop in KS1.