Brookfield School

Science Curriculum Intent statement.

“Somewhere, something incredible is waiting to be known.”
— Carl Sagan

“Nothing in life is to be feared, it is only to be understood. Now is the time to understand more, so that we may fear less.”
— Marie Curie

Intent

Science has changed our lives and is vital to the world’s future prosperity, and all pupils should be taught essential aspects of the knowledge, methods, processes and uses of science. Through building up a body of key foundational knowledge and concepts, pupils are encouraged to recognise the power of rational explanation and develop a sense of excitement and curiosity about natural phenomena. They will be encouraged to understand how science can be used to explain what is occurring, predict how things will behave, and analyse causes. We intend to provide all children with a broad and balanced science curriculum.

We ensure that all children are provided with rich learning experiences that aim to:

- Prepare our children for life in an increasingly scientific and technological world today and in the future;
- Help our children acquire a growing understanding of the nature, processes and methods of scientific ideas;
- Help develop and extend our children’s scientific concept of their world;
- Build on our children’s natural curiosity and developing a scientific approach to problems;
- Encouraging open-mindedness, self-assessment, perseverance and developing investigation skills – including: observing, measuring, predicting, hypothesising, experimenting, communicating, interpreting, explaining and evaluating;
- Develop the use of scientific language, recording and techniques; and
- Make links between science and other subjects.

Implementation

Staff at Brookfield ensure that all children are exposed to high-quality teaching and learning experiences, which allow children to explore their outdoor environment and engage with practical experiments. They are immersed in scientific vocabulary, which aids children's knowledge and understanding not only of the topic they are studying, but also of the world around them.

Science teaching at Brookfield involves adapting and extending the curriculum to match all pupils' needs. Where possible, science is linked to class topics. Science is taught as discrete units and lessons where needed to ensure coverage. We maintain a high level of subject knowledge of science in our school by regular training and professional development.

- Teachers use assessment for learning to tailor lessons around our children and help us plan for next steps.

- In our school we strongly encourage all pupils to use specific topic related vocabulary.

- Through effective teaching of science, we develop children's knowledge and key skills during each topic.

- With effective subject management we are a well-equipped and resourced school.

- Regular monitoring shows that our children understand and apply key scientific principles within their work.

- Children are provided with regular opportunities to develop strategies for questioning and thinking.

Impact

Children enjoy and are enthusiastic about science in our school.

Pupils at Brookfield access a Level 2 qualification at the end of KS4.

There is a clear progression of children's work and teachers' expectations in our school.

Children's work shows a range of topics and evidence of the curriculum coverage for all science topics.

Children are becoming increasingly independent in science, selecting their own tools and materials and choosing their own strategies for recording.

Feedback from teachers has impact on our pupils, often with next step questions to push learning on.

Standards in science at the end of the key stages are good and issues arising are addressed effectively in school.

Teachers' judgements are moderated internally and externally at Science cluster meetings.

Our SLT and governors are kept up to date with developments in the way science is run in our school with subject reports, action plans and review meetings.