

Science Subject Intent

At Braeburn Primary and Nursery Academy, it is our intent that pupils will develop a fascination and love of **science**. Our science curriculum is structured to provide lessons to ensure children can;

Que**St**ion
C**re**ate
Expl**ai**n
Eng**ag**e
Fi**nd**
Coll**ab**orate
Expl**or**E

We aspire to develop inquisitive, collaborative and creative scientists. We intend that the children understand and use scientific vocabulary appropriate for their stage of learning by carefully planning opportunities for oracy, enabling them to ask and answer questions, become effective communicators and use the specific scientific vocabulary. We aim to provide a range of wider opportunities including family events, clubs and more recently outdoor activities which both enrich the curriculum ensuring increased engagement and further provide opportunities to build on oracy skills.

Science Subject implementation

Our science curriculum consists of teaching the scientific areas of learning for each year group in each year. These have been planned to ensure progression is evident from the beginning of school, in EYFS (using the knowledge and understanding of the world) to Year 6 with a Science progression document made with each strand. Most lessons are enquiry based, providing children with authentic experiences, context and relevance for the key idea they have been learning. This allows children to make cross-curricular links and see how science relates to the world around them. The lessons follow a 3 part lesson plan structure to ensure consistency across the school as well as differentiating teaching to support all of our children.

- **The thinking bit** - making sure the children are properly equipped for learning the new concept/idea and that their prior knowledge has been assessed and discussed.
- **The learning bit** – Learning the new concept/idea and seeing it in action (*aiming to prove*).
- **The applying bit** – Challenging the children to question the idea and use the idea to solve a problem.
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Our school has a clear focus on the development of speech and language and allowing children to make links and embed key scientific vocabulary. We use working walls, visual prompts and pre-teach some vocabulary to enable children to develop a deeper understanding and apply it in different contexts. This also supports children to make links and develop their speaking and listening skills as well as their writing across the curriculum. Our engagement with the local environment ensures that children learn through varied and first hand experiences of the world around them. Frequent, continuous and progressive learning outside the classroom is embedded throughout the science curriculum. Through various workshops, trips and interactions with experts and local charities, children have the understanding that science has changed our lives and that it is vital to the world's future prosperity. Children learn the possibilities for careers in science, as a result of our community links and connection with national agencies including the STEM association. They learn from and work with professionals, ensuring access to positive role models within the field of science from the immediate and wider local community.

Science subject impact.

With our Science curriculum, children will gain and retain knowledge that is pertinent to science with a real life context. Children will be able to question ideas and reflect on knowledge. In addition, we measure the impact of our curriculum through the following methods:

- A reflection on standards achieved against the planned outcomes of Scientific knowledge.
- A celebration of learning for each term which demonstrates progression across the school;
- Tracking of knowledge in pre and post learning quizzes, topic pages and KWL grids.
- Pupil discussions about their learning
- The recording of their experiments and findings in work books and on individual google sites.

Our school's science provision is recognised by the achievement of the nationally recognised 'Primary Science Quality Mark', which the school currently holds at silver level and is working towards Gold.