



Brandesburton Primary School

Subject area: Science



### Science Statement of Intent, Implementation and Impact

By the time pupils leave Brandesburton Primary School we aim to develop pupils who:-

#### Science

First and foremost develop a sense of excitement and curiosity about natural phenomena. Science has changed our lives and is vital to the world's future prosperity and we want our pupils to understand how science can be used to explain what is occurring, predict how things will behave and analyse causes. The skills of 'working scientifically' are embedded into our lessons to ensure these skills are developed and built upon over time. **We have recently developed the use of class floor books for recording scientific investigations to more easily show progression from year group to year group. Suggested investigations to demonstrate and develop working scientifically skills have been mapped to the Key Stage One and Key Stage Two long-term plans.** We endeavour to increase children's knowledge and understanding, so that they become more proficient in selecting and using scientific equipment, collating and interpreting results as well as becoming increasingly confident in their ability to draw conclusions based on real evidence. Our curriculum delivery is designed to promote critical thinking, questioning skills and the use of a wider range of vocabulary in communicating with their peers. We aim to help them understand the uses and implications of science, today and for the future.

#### Pupil Voice

My favourite part of science week was the balloon flight because on the string it went really far. Grace class 2

My favourite part of science week was Delia the Marine Medic because I loved learning about plastic pollution. Thomas Class 2

## Photos



## Educational visits, visitors and theme days

These experiences provide great enrichment opportunities for pupils and help to foster a love of learning through hands on activities. They also make a major contribution to the acquisition of knowledge and development of skills.

Here are just some of the things our children have experienced to enrich their learning experiences and increase their science capital.

- Attending a STEM in Action Day at Hull Collegiate
- Working with a STEM ambassador on a K'Nex Challenge
- Enjoying a visit from Sam's Safari
- Taking part in the annual British Science Week
- Accessing the Forest Schools Programme
- **Accessing virtual visits from people working in STEM based careers**

## Careers Mark

One of our aims is to allow pupils to gain knowledge about the world we live in and the world of work and broaden their knowledge of different career opportunities. Through our themed Career weeks, our pupils have had the opportunity to meet with many people linked to the world of science including a vet, a nurse, an astrophysicist and a laboratory scientist. **In March 2021 class 5 accessed a virtual visit (due to Covid-19) from a STEM ambassador working within the construction industry. Class 3 and 4 accessed a virtual visit from two female engineering and business management graduates both now working within STEM industries, who were able to support our cluster aim of raising the profile of women within STEM.**

## STEM

We aim to increase our pupils' engagement, enjoyment interest and attainment in STEM (Science Technology, Engineering and Maths) subjects. We want to develop important life skills through enrichment and facilitate our

pupils to engage with the wider community in practical, enjoyable and meaningful ways. We hope to ignite new interest or raise attainment in STEM subjects through more imaginative and interactive teaching including practical investigations and the development of an after school STEM club. **As a result of Covid-19 making visitors to school impractical, Key Stage One have instead accessed a virtual visit from the Cornish Plastic Pollution Coalition linked to both the National Curriculum topic on materials and also the wider environmental issue of pollution.**

### **Enthuse Partnership**

We are one of a small cluster of East Yorkshire schools involved in a STEM Learning partnership with Orsted, the renewable energy company responsible for creating windfarms along the East Yorkshire coast. Orsted are funding a two year intensive improvement programme to raise achievement and aspiration in STEM subjects. Fran Dainty, Head of STEM Expertise at STEM Learning, stated: "Through excellent STEM teaching and by building awareness of STEM careers and the opportunities they offer, we can improve the life chances of some of the most vulnerable young people in the East Riding area."

### **Useful Websites**

<https://www.bbc.co.uk/bitesize/primary>

<https://www.stem.org.uk/>

<https://bpes.bp.com/>

<https://www.nationaltrust.org.uk/50-things-to-do>

<https://explorify.wellcome.ac.uk/>

<https://www.nasa.gov/kidsclub/index.html>

<https://pbskids.org/designsquad/games/>

<https://wowscience.co.uk/>

<https://pstt.org.uk/>