

Intent

At Pentland Infant and Nursery School we believe that a broad and balanced science education is the entitlement of all children. Science is about giving children the tools to develop their ideas and ways of working that enable them to understand the world through investigation with independence, resilience and enjoyment. We encourage this by providing children with experiences extending beyond the national curriculum such as inviting in visitors and holding science days in school.

Implementation

In Science we have a clear and comprehensive scheme of work in line with the requirements of the National Curriculum and Development Matters. Children have access to key language and meanings in order to fully understand and readily apply their science knowledge. Children are encouraged to reflect on previous learning and cross curricular links wherever possible. Teachers build on the children's prior knowledge and link ideas together, enabling them to question and become enquiry-based learners.

Impact

- If we are successful in implementing our Science curriculum:
- Children will be excited and enthralled during Science lessons.
 - Children will retain knowledge that is pertinent to Science with real life context.
 - Children will be able to question ideas and reflect on knowledge.
 - Children will work collaboratively and practically to investigate and experiment.
 - Children will be able to explain the process they have taken and be able to reason scientifically.
 - Most children to reach age related expectations.

In Science lessons, you will see/hear:

- A large emphasis on children's discussion and ideas, as well as vocabulary rich lessons, with the introduction of key words and concepts.
- Practical hands on learning, giving the children to explore and investigate.
- Children going out in the environment for outdoor learning.
- Children recording their own ideas and findings.



Science at Pentland 'In a Nutshell'



How do we assess our children?

- In KS1 science is assessed on Target Tracker which includes other core subjects such as English and Maths. This is used throughout the year and will assess the children against the different science strands.
- At the End of Year 2 children are assessed against the Teacher Assessment Framework for Science.
- In the EYFS, the children are assessed using the Birth to Five matters framework under the strand of Understanding the World.

Our priorities to improve Science are:

- To embed a fully accessible Science curriculum across the EYFS and KS1. To ensure that our children can access a wide range of equipment to aid in their understanding and progress.
- To embed Science vocabulary in lessons.
- Children to have a clear understanding of what Science is, and be able to recall the previous science lessons.
- For children to have a strong acquisition of knowledge and be able to recall scientific facts

What do our pupils say about Science?

- Children are excited for science lessons and are always willing to share additional facts they may know.
- I like science we can learn about what we can do and one day we can become real scientists- M Kara (Year 2).
- I like doing experiments, like making snow- Khadijah (Year 2)
- I like learning about animals, like mammals. I am a mammal. – Zara (Year 1)
- It's nice because you learn new knowledge. – Hafsa (Year 1)

To excite and engage our pupils we...

- World Science Day
- British Science Week
- Eco-School
- Woven (Grow Colour Together project)

Non-Negotiables

- For all strands of the science curriculum to be covered throughout the year.
- All Science topics will include enquiry-based learning.
- Outdoor learning will be incorporated into the children's learning throughout the year.
- KS1 Science data will be logged on the Target Tracker.
- Science lessons will be rich in vocabulary, with a strong emphasis on recall.
- Evidence of children's work will be present via exercise books.
- Both Year 1 classes will have a seasons display.