

Science

EYFS

The Early Years Foundation Stage Curriculum supports children's understanding of Science principally through learning and exploration based around the early learning goal of understanding the world. This is delivered through a holistic curriculum which maximises opportunities for meaningful cross-curricular links and learning experiences, as well as promoting the unique child by offering extended periods of play and sustained thinking following children's interests and ideas. We value imagination and creativity and seek to create a sense of enjoyment and fascination in learning through a vibrant continuous indoor and outdoor provision, alongside trips, visits and visitors.

Intent

At John Blow Primary School, science and the teaching of science threads through the curriculum. Our main aim is to ensure every single child is aware and confident in the knowledge and application of science in daily life, preparing them for future learning and adulthood.

Science at John Blow is taught explicitly with appropriate connections being made to other areas of the curriculum for example states of matter and the water cycle in geography. Teaching focuses on both the development of concepts and facts as well as developing an understanding of scientific development and processes. The aim of the science curriculum is to provide children with a foundation of skills and knowledge both the encourage curiosity about the world around them and to provide the basis on which to build further understanding as the progress through their education.

At John Blow, our vision of creativity is woven through science encouraging children to explore problems and learn new skills in a fun and engaging way.

Implementation

Our whole curriculum is shaped by our school vision which aims to enable all children, regardless of background, ability or additional needs, to flourish and become the very best version of themselves they can possibly be. We teach the National Curriculum, supported by a clear objectives and knowledge progression. This ensures that vocabulary, objectives, skills and knowledge are built on year by year and sequenced appropriately to maximise learning for all children.

At John Blow Primary School:

- Science units are structured to allow children to focus on developing their knowledge and skills, building upon and linking to prior knowledge.
- We have developed a progression of objectives, with each year group, which enables pupils to build on and develop their skills each year. This is supported with specific vocabulary for each topic.
- In order to support children in their ability to know more and remember more, there are regular opportunities to review the learning that has taken place in previous year groups as well as previous lessons.
 - To support teaching, staff access a range of resources and planning including Plan Bee, Grammarsaurus, and Reachout CPD.
 - Medium term planning for units will cover: previous learning and objectives; cross curricular links; speaking and listening opportunities. Medium term planning will also highlight links with the National Curriculum.

- We plan for effective use of educational visits and visitors and whole school theme days/weeks, to enrich and enhance the pupil's learning experience and the Science curriculum.
- Teachers use highly effective Assessment for Learning at different points in each lesson to ensure misconceptions are highlighted and addressed.
- Effective modelling by teachers ensures that children are able to achieve their learning intentions, with misconceptions addressed within it.
- Through using a range of assessment tools, differentiation is facilitated by teachers, to ensure that each pupil can access the science curriculum.
- Cross-curricular links are planned for.
- Our Assessment Tracker (EAZMAG) allows us to use data to inform future practice.

Impact

Sustained learning and transferrable science skills.

We aim that by the end of KS2 all of our children have made considerable progress from their starting points in EYFS.

Progressive planning across the school enables children to become confident and enthusiastic about science. By the time they reach upper Key Stage 2, children have experienced a range of science activities and can make links between knowledge and concepts.

Children are provided with opportunities to apply their knowledge and skills in science across other areas of the curriculum; this shows consolidation of skills, progression and a more comprehensive understanding of scientific processes. We hope that as children move on from us to further their education they are inspired to explore the whole spectrum of science and it's application within our world.