

Ouston Primary School

Science Policy (Updated June 2024)

Intent

At Ouston Primary School, we believe that the learning of science promotes a range of fundamental educational, social and emotional skills. We value the children's innate curiosity and wonderment at the world around us and understand that it is crucial in further developing their knowledge and interests.

In our school, we are very fortunate to teach such inquisitive and enthusiastic pupils. We are fully committed to ensuring our children have the opportunity to develop and extend their learning by providing a high-quality, inspiring and motivating education. We want our children to become confident and creative learners who are not afraid to challenge and question the concepts they learn. We want to provide our children with the relevant language to explain processes and concepts in an expert manner.

Science at Ouston Primary School provides a platform to reinforce many other key areas of learning with cross-curricular links like mathematics and English especially.

The 2014 National Curriculum aims to ensure that all children

- develop scientific knowledge and conceptual understanding through the specific disciplines of biology, chemistry and physics
- develop understanding of the nature, processes and methods of science through different types of science enquiries that help them to answer scientific questions about the world around them
- are equipped with the scientific knowledge required to understand the uses and implications of science, today and for the future.

Implementation

Teaching staff at Ouston Primary School will ensure that their own positive attitude towards science mirrors that of the children. Staff will also ensure that their high expectations are reinforced that all children realise their potential to be successful in their learning. At Ouston Primary School, we want all children to believe they are capable of becoming successful scientists with a thirst for learning!

Our whole-school approach to learning in science involves the following:

- The teaching of the programmes of study for Key Stage 1 and Key Stage 2 as outlined in the National Curriculum. Teachers follow the progression map for each cycle in each key stage during weekly lessons. In most cases, a new topic will be taught each half term.
- The provision of high quality and stimulating lessons, equipped with suitable resources to enhance learning.
- An emphasis on ‘working scientifically’ whereby children learn to understand the nature, processes and methods of science.
- Building upon the learning and skill development of the previous years. As the children’s knowledge and understanding increases, and they become more proficient in selecting and using scientific equipment, and collating and interpreting results. They will then have the ability to draw conclusions based on real evidence.
- Key Stage 1 and Key Stage 2 provide children with the school’s proforma for working through science investigations and display the process for this in classrooms.
- A focus on enjoying learning about the world around them and exploring their own lines of enquiry through child-led learning.
- Each child has an objective grid at the start of each science topic. Children are informally assessed on subject matter during lessons to check understanding, with misconceptions being addressed. At the end of a topic, children are assessed against the objectives and colour-coded judgements are made on the grid. At the end of an academic year, children’s assessment in science is reported to parents.

Impact

At Ouston Primary School, our successful approach results in providing the children with the foundations for understanding the world. Our children enjoy being challenged with scientific questions and show determination to find conclusions. They have a high standard of scientific vocabulary to explain their hypotheses and interpret results.

Our Forest School ethos means that much of our science curriculum can be based outdoors where the children can experience science in ‘real-life’. Through a variety of engaging lessons, trips and local experts, our children have the understanding that science is ever-evolving and vital to the world’s future prosperity.

To celebrate science in school, we hold an annual ‘Science Week’ on a designated topic. Children experience a week’s worth of activities linked with a chosen topic. We have worked on STEM projects with external providers and in partnership with local secondary schools.

We aim to provide our children with the opportunity to develop skills required for their learning journey at Ouston Primary School and beyond. We aim to include and enhance skills from other areas of the curriculum with science, particularly maths and English.

Equal opportunities

All pupils, regardless of ability, ethnicity, gender, sexual orientation, disability, age or social circumstances have equal opportunities to take part in a variety of Science activities whilst at school. Activities should be carefully planned by the class teacher and be differentiated where appropriate for children with SEN and equally the more able and Gifted and Talented children. All learning opportunities will be matched to suit the needs of the child and take into account their Individual Education Plan, where necessary.

Inclusion

We recognise that, in all classes, children have a wide range of scientific abilities, and we ensure that we provide suitable learning opportunities for all children by matching the challenge of the task to the ability of the child. We achieve this in a variety of ways:

- setting tasks which are open-ended and can have a variety of responses;
- setting tasks of increasing difficulty (we do not expect all children to complete all tasks);
- providing resources of different complexity, matched to the ability of the child;
- using classroom assistants to support the work of individual children or groups of children;
- grouping children in mixed ability groups encouraging children to work together and peer mentor.

Role of the Subject Leader

The coordination and planning of the science curriculum are the responsibility of the subject leader, who also:

- monitors provision in science throughout the school, including monitoring the standards of children's work.
- supports colleagues in their teaching, for being informed about current developments in the subject, and for providing a strategic lead and direction for science in the school.
- monitors the budget, resources science topics and books trips and workshops to support learning.
- has allocated time for fulfilling the task of reviewing samples of children's work, training, liaising with other subject leaders from other schools and organising science week.

Monitoring of the Curriculum

The Science Coordinator will monitor planning and carry out a regular scrutiny of work produced by our children to ensure both coverage and progression are taking place across the school

S.Exley

Science Co-ordinator