

Science Policy for Oasis Academy Hobmoor 2020/21

Introduction

This policy outlines the teaching, organisation and management of Science taught and learnt at Oasis Academy Hobmoor. The implementation of this policy is the responsibility of all teaching staff. The responsibility for monitoring and review rests with the Science leader and the senior leadership team.

Our Aims Through our teaching of Science we aim to:

- Nurture a curiosity within our pupils about the physical and natural world and develop their ability to investigate it and discover more about it
- Enable children to hypothesize, predict and test different scientific claims
- Equip children with a secure knowledge of the human body and how this links to their own life choices relating to nutrition and exercise
- Develop within our pupils a secure understanding of the scientific method and a love of scientific investigation
- Increase our pupils' awareness of different careers in science and possible pathways into these careers

Through the teaching of Science we can also:

- Improve pupils' skills in literacy, numeracy and ICT
- Develop pupils' ability to make connections between existing understanding and new knowledge
- Promote pupils' understanding of their role as active citizens in the world as they consider the ethical and practical implications of scientific research and discoveries.

Entitlement:

Science is a core subject in the National Curriculum. The fundamental knowledge, skills and understanding of the subject are set out in the National Curriculum programmes of study. All pupils are entitled to access the Science curriculum at a level appropriate to their needs arising from race, gender, ability or disability. Trips or work may have to be adapted to meet individual requirements.

Equal Opportunities:

We are committed to providing a teaching environment conducive to learning. Each child is valued, respected and challenged regardless of race, gender, religion, social background, culture or disability.

Strategies for the teaching of Science

1. The Science curriculum is taught AT LEAST once a week in all classes, with some classes doing additional science lessons within the week depending on their half term's topic.
2. Science is taught using combination of using existing planning and resources, *Love to Investigate* resources from the *Cornerstones* curriculum and PLAN BEE science teaching resources alongside ScienceBug activities, that are used both in class, and can be accessed by our pupils at home. Teachers select and adapt these resources in order to ensure each object from the Whole School Overview is taught in an appropriate way for their class.
3. The mode of working in Science is a mix of class teaching, cooperative group investigations and individual work. Groups are encouraged to communicate their findings in a variety of ways, including photographs, diagrams, charts and graphs.
4. Pupils are encouraged to deepen their thinking and make a greater number of connections between their gained knowledge through the use of higher level SOLO taxonomy questioning.
5. Scientific learning and understanding is celebrated through displays and throughout the school's annual science week, which usually takes place in January.

When teaching Science we:

- Focus on enabling children to think as scientists
- Place an emphasis on examining scientific evidence and testing out theories and hypotheses.
- Where appropriate, children are given the opportunity to develop their own scientific investigations using a range of equipment available to them.
- Arrange for STEM outreach visitors to come in and talk about their career in science and the different pathways into science careers
- Recognise and value the importance of established scientific theories and discoveries about the world we live in.
- Focus on helping children understand that different variables can affect results and to think carefully about how to ensure an investigation is fair before forming any conclusions.
- Develop pupil's sense of awe and wonder about the world around through exposing them to a wide range of scientific demonstrations and experiments
- Enable pupils to understand why and how certain results occur through a secure understanding of scientific theories
- Encourage pupils to extend their learning and think about the implications of their discoveries through homework activities and allowing them to make suggestions for the next steps in their learning.

The role of the Science leader is to:

1. Support colleagues in teaching the subject content.
2. Audit current practice.
3. Monitor assessment.

Assessment:

Assessments to be conducted by the class teacher relating to specific scientific skills. These are continually updated by the class teacher in the back of each pupil's science book.

Health and Safety:

Teachers are responsible for reading the academies Health and Safety Policy and Educational Visits Policy. All teachers must carry out a risk assessment prior to taking the children off site for a science session.

Monitoring and Evaluation

To monitor and evaluate science teaching the science leader and senior leadership team:

- Supports teachers via observing / giving feedback
- Science book looks to monitor the teaching and coverage of science.