



Science Policy

Date of Policy: September 21

To be reviewed: Annually

This policy should be read in conjunction with other relevant school policies: Teaching and learning policy and Assessment and Recording Policy and communication policy.

Overview

Developing and increasing pupils' understanding and enjoyment of science is core to our curriculum. This policy will put into place the provisions for science which are set out in the National Curriculum 2014, and incorporated into the specific Delamere science Curriculum. We will ensure that all pupils develop scientific knowledge, skills and understanding through the appropriate teaching of biology, chemistry and physics. Effective teaching and learning will help them develop an understanding of the nature, processes and methods of Science. They will experience different types of research and experimentation which will help them answer scientific questions about the world around them and this policy will ensure that high standards are achieved and that pupils make good progress at every stage.

Intent

For pupils to show / have emerging awareness of activities and experiences.

To pupils to explore by trial and improvement, leading to learned responses over short periods of time

To support pupils to cooperate with shared exploration.

To explore objects and materials observing the outcomes.

To recognise distinctive features of objects [for example, the features of living things in their environment, and know where they belong, for example, feathers on a bird, leaves on a tree]

To understand the scientific use of some simple vocabulary and be able to communicate related ideas and observations using simple phrases.

To show they have observed patterns or regular changes in features of objects, living things and events.

To make their own observations of changes that result from actions and can describe the changes when questioned directly.

To promote and develop children's enjoyment and enthusiasm for science through exciting, practical, first-hand learning and opportunities to experiment, explore and investigate including the cultural capital offer

To help pupils to explore and develop their problem solving and reasoning skills so that they can apply their scientific thinking in a cross curricular manner.

For pupils to work independently and in teams.

To ensure that all pupils are encouraged and support to become confident and apply their basic skills in science and that they build upon their prior learning at every stage.

To allow children to develop and use their increasing knowledge, skills and understanding of science [the world around them] within the programme of study strands to investigate, ask questions and solve challenging problems and make critical judgements.

To develop pupils' confidence and skill in scientific methods as they explore the areas of science and address increasingly complex problems.

To bring science to life and make it real so that children understand the importance of science in the world and in their everyday day lives.

To raise their own questions by using practical scientific methods, processes and skills by asking simple questions and recognising that they can be answered in different ways

- observing closely, using simple equipment
- performing simple tests
- identifying and classifying
- using their observations and ideas to suggest answers to questions
- gathering and recording data to help in answering questions

Our vision, our values and our rights underpin all of our policies and the education we deliver. Article 3 of the United Nations Convention on the Rights of the Child states that: “The best interests of the child must be a top priority in all decisions that affect children”. This policy has been created to keep the children at Delamere School safe and happy.

Implementation

- An appropriate range of teaching and learning strategies will be used in all science lessons to capture pupils’ interest and to promote effective learning and progress.
- Teachers will use the schemes of work and guidelines, supported by an appropriate range of teaching and learning resources, to develop the knowledge, skills and understanding of every child, ensuring that all pupils, including those with SEND, achieve high standards for their ability and make appropriate progress.
- To ensure that all children are well supported through the use of specific learning resources. For example; Visual aids such as PODD mats and symbols, Snap Core First.
- Children will be encouraged to; ask questions, solve problems, discover new information, apply and consolidate their knowledge, skills and understanding through first-hand experience, investigations and practical work.
- Teachers will make use of the immediate and wider environment to help pupils apply their scientific knowledge skills and understanding to see the relevance of science to their own lives. They will set challenging work, tasks and problems to increase children’s’ knowledge, skills and understanding, to extend their thinking and build their self-confidence.
- Teachers will explore opportunities for scientific study in the outdoors by linking learning objectives from the Delamere Outdoor Learning curriculum.
- Teachers will assess children’s work in science through formative and summative judgements by; asking questions, observing learners during lessons, observing pupils solving practical problems and listening to pupils’ discussions. Work will be marked in accordance to the school marking policy.
- The science co-ordinator will support the teaching and learning of science by; providing strategic leadership and direction, monitoring progress and standards across the school, reviewing and revising the science policy, monitoring and supporting teachers in the teaching of science, keeping staff up to date on new developments in science, monitoring the effectiveness of the planning and development of science, auditing, monitoring the effective and appropriate use of resources and obtaining new resources.

Impact

All children will have the opportunity to experience / explore the wider environment.

All children will be supported to develop their scientific skills and knowledge in line with their overall ability.

Evidence for Learning is collated through;

- Bsquared Assessment software
- Evisense
- Class Floor books / Individual work books
- End of Year reports

References

- Delamere Science Programme of Study with supporting document can be found in Staff Read / Curriculum / Current Delamere Curriculum / Science
- Bsquared Science assessment software
- Statutory framework for the Early Years Foundation Stage effective from 1st September 2021
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/974907/EYFS_framework_-_March_2021.pdf