Science Policy 2021-22

Intent

Science stimulates and excites pupils' curiosity about phenomena and events in the world around them. It also satisfies this curiosity with knowledge. Science links practical experience with ideas and it engages learners at many levels. Through science, pupils understand how major scientific ideas contribute to technological change - affecting industry, business, medicine and quality of life. Pupils recognise the cultural significance of science and trace its worldwide development. They learn to question and discuss science–based issues that may affect their own lives, the direction of society and the future of the world.

Scientific studies should help pupils:

- To maintain and/or stimulate pupil curiosity, interest and enjoyment in science, to encourage future study.
- To enable pupils to be familiar with a body of scientific knowledge, principles and vocabulary.
- To enable pupils to see science in the context of a wider body of knowledge and skills.
- To enable pupils to understand and use scientific methods safely, by incorporating risk assessment as normal practice.
- To give children the experience to acquire practical skills e.g. using a thermometer.
- To provide experience of the scientific process skills of 'Working Scientifically', helping children to develop and apply these progressively in meaningful contexts.
- To help children acquire a progressive understanding of scientific knowledge.
- To prepare children for life in an increasingly scientific and technological world, so that they can make informed decisions and choices in future life.

Implementation

Teaching:

The Science curriculum is mainly taught through topics. Carefully chosen topics enable the children to engage in challenging, motivating and enriching activities, which enables all pupils to achieve success. We encourage a sense of wonder of the world around them.

The planned topics also enable the teacher to teach the knowledge required by the National Curriculum whilst giving the children a purpose to develop and apply their skills. This ensures that children in our school are given opportunities to learn in cohesive blocks and 'stick' their learning together each year, building on previous knowledge, skills and experiences. The detail of our learning journey for science is contained in the unit plans for each year group.

Curriculum Planning and Organisation
The Science Long Term plan has been organised into different units, designed to cover the knowledge, skills and understanding of Science, whilst at the same time using links to other areas of the curriculum, where appropriate. This plan is continuously evaluated to meet the needs of the children in our School.

Questioning is a key element in Science. Pupils should be asking the questions *where* and *what, how* and *why* in order to help them make sense of the world around them.

Impact

Assessment
Assessment of children's work in Science is ongoing. The assessment will include the children's skills and the outcomes they produce. Some of these outcomes are celebrated in the Best of Me books.

- Assessment of the pupil's scientific work is made through oral and written responses.
- The children in Years 1-6 will be assessed on one Scientific Investigation each term related to a unit of work that they are covering and this is recorded in accordance with the School's Assessment, Record Keeping and Reporting Policy document.
- A judgement is given at the end of the year – Working Towards / On-Track / Met.
- The Children in Year R will be assessed using the new Base Line Assessment and Early Years Learning Goals.

Resources
Science resources are kept in the Science Lab.

Health and Safety
Reference should be made to:
- The school's 'Health and Safety' guidelines.
- The Risk Assessment Procedures.
- The Cleapps laboratory handbook.
- The School Health & Safety Officer.
- The Off Sites Visit policy.

Risk Assessments
Due to the range of equipment used and the range of allergies and food intolerances of our children it is essential that thorough risk assessments are completed before any unit of teaching begins. The class teacher must ensure these are completed using current information for the pupils in their class and the generic risk assessments in Staff Shared: Curriculum Risk Assessments.

The policy should be read in conjunction with the Science National Curriculum, which sets out in detail what pupils will be taught in different Key Stages.

National Curriculum Science Programmes of Study:

https://www.gov.uk/government/publications/national-curriculum-in-england-science-programmes-of-study
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