



www.emmausfederation.co.uk

Science Policy

Curriculum Statement

A high-quality science education provides the foundations for understanding the world through the specific disciplines of biology, chemistry and physics. Science has changed our lives and is vital to the world's future prosperity, and all pupils should be taught essential aspects of the knowledge, methods, processes and uses of science. Through building up a body of key foundational knowledge and concepts, pupils should be encouraged to recognise the power of rational explanation and develop a sense of excitement and curiosity about natural phenomena. They should be encouraged to understand how science can be used to explain what is occurring, predict how things will behave, and analyse causes.

Aims

The national curriculum for science aims to ensure that all pupils:

- 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.

Teaching and Learning

Topics of study are arranged over a two year rolling programme, with the exception of Years 3 and 4 at Swineshead, to ensure continuity and progression of learning. Teaching may be conducted in a whole class format or with small groups. All science lessons should contain an element of scientific enquiry and wherever possible learning is achieved through structured practical activity, leading to the acquisition of investigative skills.

Weekly lesson plans include:-

- a) The Learning Objective of the lesson to be taught.
- b) The Main Teaching Activity to be covered during the Science lesson.
- c) Differentiated Activities allowing all children to achieve the learning objective at their own level of understanding.
- d) Any particular provision made for those on the extremes of the ability range represented.
- e) The deployment and objectives of all support staff.
- f) A risk assessment for the activity, where necessary.
- g) How the learning will be supported by the use of IT.
- h) Key questions.

Working scientifically

'Working scientifically' specifies the understanding of the nature, processes and methods of science for each year group. It should not be taught as a separate strand. These types of scientific enquiry should include: observing over time; pattern seeking; identifying, classifying and grouping; comparative and fair testing (controlled investigations); and researching using secondary sources. Pupils should seek answers to questions through collecting, analysing and presenting data.

Safety

All activities need to be risk assessed and adequate precautions taken where appropriate. These need to be clearly stated in the lesson plan.

Support Staff

The Class Teacher will define the role of any support staff and activities within the class to best promote pupil attainment. This may include leading teaching for groups, supporting the work of individuals or assessing pupil achievement and attainment.

Assessment Recording and Reporting.

On entering the Federation children will be observed at work and play in order to make an entry assessment of what they already know and can do. Reception Baseline Assessment scores are used to establish a baseline measure of individual ability

Throughout the year staff continue to monitor children's progress in order to plan purposeful and appropriate activities to support them in the next steps in their learning.

By the end of the Reception year an EYFS Profile report will be completed for each child which sums up their progress and learning needs at the end of the Foundation Stage. The EYFS Profile report is based on ongoing observations and assessments over all seven areas of learning within the Foundation Stage Curriculum. Each child's typical developments and achievements will be recorded against the Development Matters Ages and Stages. Completed Profiles will be used as part of our annual report to parents. The numerical results are collected by the LEA as they are required as statutory assessment at the end of the Foundation Stage.

Formative assessment takes place daily through oral and written feedback to the child on their performance and targets for improvement. Parents are informed of their pupil's performance at parent-teacher consultation evenings and through the annual written statement on their child's progress about science during the summer term. However, the school operates an open door policy to discuss children's progress.

Provision for children with special educational needs

Teaching and Learning for children with SEND support and EHCP is managed through pupil progress meetings and the pupil provision map. Work of an appropriate level is administered with support, where appropriate from an assisting adult.

Teaching and Learning for children with SEND and EHCP will be managed in accordance with the advice provided by specialist outside agencies.

Provision for children recognised on our Gifted and Talented Register

Teaching and Learning for children with recognised Gifts and Talents is managed through extension within the class teaching and enrichment through the provision of additional learning opportunities of an appropriate level of challenge.

These may include:

- Using established knowledge to develop their problem solving and knowledge application abilities

- Being challenged to complete specific tasks of a standard appropriate for their heightened level of ability.

Equal Opportunities

The Governing Body ensures that the school does not discriminate against any pupil on the ground of disability, sex or race in deciding admissions, providing the curriculum, teaching and guidance; in applying standards of behaviour, dress and appearance; and in the allocation of resources and other benefits and facilities which the school provides. The school prides itself on its ability to welcome and involve children of all abilities, backgrounds and heritage. Children are recognised as individuals and both supported and challenged at their own level of development. Our main principal aim is that all children achieve the best that they can be, in all aspects of their development, during their time within the Federation

Monitoring, Review and Development

School performance in Science is being constantly monitored and reviewed by the following means:-

- Monitoring of planning
- Classroom observation
- Scrutiny of work
- Seeking the views and opinions of the teaching team
- Seeking the views and opinions of the children
- Seeking the views and opinions of the parent body
- Analysis of pupil attainment and achievement, both individually, as a cohort and as a class
- Analysis of pupil performance in different aspects of scientific understanding

Opportunities for improvement in provision are identified in the School Improvement and Development Plan.

Transfer between class groups

On Transfer between classes all previous assessment data and records are passed from one teaching team to the next. At the end of the summer term the relinquishing teacher meets with the new teaching team to review each child in data and pass on key information regarding performance and temperament.

Transfer to Higher Education

On transfer to High School all records of pupil achievement and attainment are passed to the receiving setting. The class teacher meets with a staff representative of the setting to discuss each child in detail.

Signed:

Claire Collett
Executive Headteacher

Ros Blowers
Chair of Governors