

Nettlesworth Primary School

Science Policy

2023

SCHOOL PURPOSE, POLICY AND THE NEW NATIONAL CURRICULUM (2014)

This policy is written in consideration of our school commitment to the Rights of the Child, and the school's ongoing participation as a Rights Respecting School.

Whilst the National Curriculum provides a clear framework for science, the school is also aware of the need for flexibility and creativity in teaching and learning pedagogy in response to the needs of individual children, and the school's commitment to inclusivity.

Purpose of Study

It is recognised that a high-quality of science education provides the foundations for understand the world through the disciplines of biology, chemistry and physics. Science changes lives, and is vital to the future prosperity of the world. Building key foundational knowledge and concepts will encourage pupils to recognise the importance of rational thought, whilst developing a sense of excitement and curiosity about natural phenomena. Pupils are to be encouraged to understand how key knowledge and concepts can be used to explain what is occurring, predict how things will behave and analyse causes. This understanding should be consolidated through their appreciation of applications of science in society and the economy.

The aim of teaching science is to develop:

- * a positive attitude towards science and a greater curiosity;
- * an understanding of science through a process of enquiry and investigation;
- confidence and competence in scientific knowledge, concepts and skills;
- an ability to reason, predict, think logically and to work systematically and accurately;
- * an ability to communicate scientifically;
- * the initiative to work both independently and in co-operation with others;
- * The ability and understanding to use and apply science across the curriculum and in real life;
- * engender higher aspirations for the future.

Planning, the School Curriculum and Assessment

Foundation Stage:

The EYFS sets out the learning objective for the seven areas of learning, with science discretely embedded in the learning experience when and where appropriate:

- * Physical Development
- * Understanding of the World: via outdoor learning and Forest School
- Communication and Language
- Personal, Social and Emotional Development
- * Mathematics
- * Literacy

The EYFS aims to equip the children with knowledge and skills in preparation for the National Curriculum at Key Stage 1.

Key Stage 1 and 2:

National Curriculum Statutory Requirements are accessed through the Scholastic Science scheme with broader experience also being gained from Outstanding Science and STEM.

The programmes of study encompass a sequence of knowledge and concepts, appropriate to Key Stage, developing a secure understanding in readiness for progress to the next stage.

Pupils should be able to describe associated processes and key characteristics in common language, and also be familiar with, and use, technical terminology accurately and precisely, appropriate to Key Stage. They should progressively build up an extended specialist vocabulary, and be able to apply their mathematical knowledge to their understanding of science, including the collecting, presenting

and analysing of data. The social and economic implications of science may be taught most appropriately via the wider school curriculum.

Children's recording will vary according to the nature of the activity, and may be:

| * Writte | n |
|----------|----------|
| | * Writte |

* Pictorial * Symbolic

* Diagrammatic * ICT

* Graphical * Photographic

Assessment is to be undertaken half-termly, using Rising Stars, and also be:

- * formative and summative
- * used by the teacher to inform future planning
- * promote continuity and progression
- * form a basis for reporting to parents
- * based on observation, participation and writing outcomes

Health and Safety

Pupils will be taught to use scientific equipment safely during practical activities. Class Teachers, Teaching Assistants and the Subject Leader will check equipment regularly and report any damage; removing defective equipment and replacing as appropriate.

The School Policy for Health and Safety will be integrated into science teaching.