



Aspiration and Achievement for All

Science Policy 2025

Adopted by the Senior Leadership Teams of
New Road and Park Lane Primary and Nursery Schools

Aspire Learning Trust

on 12th June 2025

Science Policy

The subject leader for science is: Mr Allen (New Road Primary and Nursery School)

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Aims and Objectives

Statutory requirements for the teaching and learning of science are laid out in, The National Curriculum in England Framework Document for Teaching, September 2014 and the Statutory framework for the Early Years Foundation Stage, September 2025.

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.

Early Years

We teach 'science' to all children in the school, including those in the Early Years. In both Nursery and Reception, science is an integral part of the topic work covered during the year. We relate the scientific aspects of the children's work to the objectives set out in the Early Learning Goals, which underpin the curriculum planning for children aged three to five.

Teaching Approach

We use the three components of an explicit teaching approach to ensure that all children learn in a clear and supported manner (see Teaching and Learning Policy).

Explicit teaching often follows the "I do, we do, you do" framework. This structured approach ensures that teaching progresses systematically:

1. **I do:** The teacher demonstrates a skill or concept, making their thinking process visible to the class.
2. **We do:** The teacher and students practise together, guided by the teacher.
3. **You do:** Students practise independently, applying what they've learnt.

The Curriculum

(Please also refer to the School's Curriculum Policy)

Each unit of learning contains clearly defined knowledge that children will learn. In addition to what we would like the children to know we also provide opportunities for children to apply knowledge skilfully. This is detailed in our progression of skills document for science.

Teachers are expected to teach Science for up to two hours each week.

	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
	Chemistry Materials and Matter	Biology - Animal Survival	Physics Light and Sound	Biology - Plant	Physics Magnetism and electricity	Biology - Human
EYFS	Floating, sinking, bending, stretching and cutting	Animals we know and love	Banging, rattling, shining and flashing	Plants we eat, play with and like Snack time	metal and non-metal	What can our bodies do?
Year 1	Compare everyday materials and everyday objects	What do different animals eat? How do some eat nothing for so long when they hibernate?	Grouping and sorting Sources of Light: things that reflect shine and give light. Sources of sound	Plants and Trees in Whittlesey Growing Plants: what do plants need to grow - cress	Magnetic compasses – finding North, East, South and West Magnets in the home: fridge magnet challenge – how much can one hold?	The Human Body
Year 2	Identify and compare uses of everyday materials for particular uses.	What do animals need to survive?	Using materials to be seen and heard in the dark.	Mature Plants How seeds and bulbs grow - radish in polytunnel	Magnetic and non-magnetic material sorting and classifying	Humans have babies that grow into adults Inc .healthy diet and hygiene s
Year 3	Compare and group rocks, fossils and soils.	How does a snail's body help it survive?	Properties of light: Dimmer and brighter	Plant needs Water in Plants	Magnets and metal materials – are all metals magnetic?	Human Skeleton, muscles, nutrition
Year 4	States of matter: solids, liquids, gases - water cycle/ Changes associated with heating and cooling.	Food chains in an English garden - Which foods do birds eat the most of?	Properties of Light and Sound: Darker and Quieter	Plant classification: Aquatic plants in Fenland and environmental change	Electricity - constructing electrical circuits, exploring power in circuits.	Digestive system and Teeth
Year 5	Dissolving, mixing and changes of state are reversible changes.	How and why do animals defend a territory – Case study on the robin.	Light and Sound: The science of Emergency vehicles	Animal/Plant Reproduction Compare the life cycle of a sexual plant to that of an asexual plant.	Electro magnetism: exploring and building electrical circuits	Humans: birth to old age
Year 6	Organic materials and microbes: some changes of state result in new materials, and are usually non-reversible -	Evolution and inheritance – Survival of the fittest!	Light and sound in our solar system and beyond.	Plant classification systems and approaches	Forces and Planet Earth: gravity and electromagnetic fields/ plotting electro magnetic fields.	Human circulatory system

Working Scientifically

Each of the above units of study provide experience of the scientific process skills of ‘Working Scientifically, helping children to develop and apply these progressively in meaningful contexts. Scientific investigations are planned and their findings recorded using the following subheadings:

Years 1 and 2	Years 3 and 4	Years 5 and 6
My Question	My question	My Question:
Equipment: What I need	Prediction	Hypothesis: (Based on what I know what do, I think will happen?)
Method: What I did	Equipment	Equipment:
Results: What Happened	Method	Method/procedure:
Conclusion: The answer to my question	Findings	Observations/Results: (Data generated and plotted in a variety of ways)
	Conclusion	Analysis: (What the data suggests)
		Conclusion: (Based on what we know and the evidence from this experiment)

Health and Safety

Children are taught the importance of health and safety during science activities. Teachers assess risks and ensure lessons are conducted safely with appropriate supervision. By embedding these principles and practices, we aim to inspire a lifelong love of science and equip children with the skills and knowledge needed to thrive in a scientific world.

Assessment for Learning Assessment for Learning

Assessment is regarded as an integral part of teaching and learning and is a continuous process. It is the responsibility of the class teacher to assess the progress of individual children. Assessment is built into science throughout the lesson. There is planned opportunity for day-to-day assessment against clear intended learning outcomes.

Assessment of Learning

Individual attainment in science is assessed by class teachers using our school marking policy, to maintain lesson by lesson feedback and understand next steps to be built on and where individual needs sit. Teachers will also use assessment sheets/quizzes at the end of each unit to give a basic assessment of what has been learnt.

Monitoring and Review

The science subject leader is responsible for monitoring the standards of the children’s work and the quality of the teaching in science lesson. S/he is also responsible for supporting colleagues in their teaching, for being informed about current developments in the subject, and for providing a strategic lead and direction for science in the school.

After monitoring either the books or the medium-term planning, the subject leader presents the Headteacher with a report which evaluates strengths and weaknesses as well as indicating areas for further improvement. The subject leader also undertakes lesson observations, giving personalised feedback and pointers for improvements when required. This policy will be reviewed at least every two years

Review of the Policy

The policy will be reviewed within the cycle of the School Development Plan. Alterations and amendments will be incorporated into a revised policy based on the review.