



Newton International Academy, Barwa

Science Policy (EYFS & Primary)

*An International Community of Learners,
Striving for Excellence and Celebrating
Success*



NEWTON
INTERNATIONAL
ACADEMY | **BARWA**

Our vision, mission and values:

Vision: An international community of learners striving for excellence and celebrating success.

Mission: We aim to provide the highest quality of education possible for students of all abilities. In doing so, we aim to positively encourage each student to achieve academic excellence at their level, enjoy creative diversity, develop critical thinking skills, and become lifelong learners and responsible citizens.

Values



Rationale

At NIA, we believe that a high-quality science education provides the foundations for understanding the world. Science is vital to our future and should inspire curiosity, critical thinking, and a love for learning through exploration and questioning.

Aims

- In line with the National Curriculum (2014), our aims are to ensure that all pupils:
- Develop scientific knowledge and conceptual understanding through biology, chemistry, and physics.
 - Understand the nature, processes, and methods of science through different types of scientific enquiry.
 - Are equipped with the scientific skills needed to understand the uses and implications of science, today and in the future.

Science Curriculum Overview

- A progressive, well-structured curriculum is delivered from Years 1 to 6.
- Scientific vocabulary is explicitly taught and reinforced.
- Pupils engage in meaningful scientific questions and hands-on investigations.
- Philosophy for Children (P4C) thinking moves are used to encourage reasoning and reflection.
- DR ICE teaching model supports independence and engagement.

Teaching and Learning Approach

- Science is taught two to three times per week using the White Rose Science Scheme.
- In Years 3 to 6, a weekly practical lab lesson strengthens enquiry skills.
- Lessons are designed around a three-part structure:
 - a. Knowledge input
 - b. Scientific enquiry and investigation
 - c. Conclusion and reflection
- Enquiry types include: observing over time, pattern seeking, classifying and grouping, fair testing, and using secondary sources.

Early Years Foundation Stage (EYFS)

In EYFS, science is integrated within the 'Understanding the World' area. Children learn through exploration, observation, and play, laying the foundations for future enquiry-based learning.

Assessment in Science

- Ongoing formative assessment through questioning, observation, and marking.
- Mid-term assessments track understanding of key knowledge and skills.
- End-of-term assessments provide summative data to inform planning and pupil progress review.
- Additional tools include book scrutiny and pupil voice feedback.

Inclusion and Differentiation

- Every pupil, including those with SEND and EAL, has access to the full science curriculum.
- Tasks are scaffolded and adapted to meet varied needs.
- Greater Depth learners are extended through reasoning tasks, open-ended investigations, and dialogue using P4C strategies.

Enrichment Opportunities

- Science is enriched through cross-curricular connections, trips, outdoor learning, visiting experts, STEM clubs, and Science Week events.
- Links to subjects such as maths (data collection) and English (scientific writing) enhance relevance and application.

Health and Safety

- Pupils are taught safe handling of materials and equipment.
- Risk assessments are conducted for all practical and off-site science activities.
- Safety routines are explicitly taught and reinforced in every lesson.

Monitoring and Professional Development

The Science Coordinator:

- Oversees planning, teaching quality, and student outcomes through monitoring activities.
- Provides staff training and supports collaborative planning.
- Leads science-themed school events and CPD initiatives.

Policy Review

This policy will be reviewed every two years or earlier if changes in national curriculum guidance or school priorities require it.

