Rishton Methodist Primary School

Science Policy 2024 - 2025

Our Christian Vision

As a Methodist school, our values lie at the heart of all we are and do. Within our caring Christian community, where all are welcome, everyone is encouraged to be the best that they can possibly be. We promote respect, compassion and resilience to prepare our children for the challenges of an ever-changing world and encourage our whole school community to 'Rise up...take courage and do it" (Ezra 10:4).

Agreed by Governing Board on 15/04/2025

Policy will be reviewed by January 2026

Created by Louise Thompson - Subject leader

POLICY PRINCIPLES

At Rishton Methodist Primary School we want our children to think like scientists by developing enquiring minds and analytical thinking skills. Science continues to evolve and new findings about the world in which we live are constantly being discovered. We want our children to be able to engage with our ever-changing world by providing a curriculum that covers the three scientific disciplines of biology, physics and chemistry.

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'.

The teaching of science at Rishton Methodist aims to foster the children's natural curiosity and support their understanding of the subject as a process of enquiry, as well as build the acquisition of relevant scientific knowledge.

Curriculum Design and Delivery

We have designed a spiral curriculum in Science, using Plan Assess as a starting point, which allows pupils the opportunity to revisit and embed key national curriculum objectives within and across year groups and key stages. P.L. and A.L. questioning allows the children to recap prior knowledge and learning. The fact that topics are repeated allows pupils to revisit their prior learning, recalling it and using it in new ways, thus aiding retention and leading children to a deeper understanding of the content they have been taught previously before learning new, associated content with an increased level of complexity.

Throughout the curriculum, the children are encouraged to ask, predict and answer questions using close observations, reasoning and explanation, as well as present their findings in increasingly sophisticated ways developing a rich schema of scientific knowledge and ability to act scientifically.

Throughout all of their learning children are encouraged to think of how they are working scientifically:

- Observation over time –e.g. season, chocolate melting, animals growing
- Pattern seeking –e.g. do plants grow well? Does the size of Planet affect its orbit?

- Identifying, classifying and grouping –e.g. grouping materials, animals
- Comparative and fair testing
- Research using secondary sources

Each year, we participate in British Science Week in March, a ten-day celebration of science, technology, engineering and maths. We also run a Science after-school club where children across both key stages will be given the opportunity to take part in stem activities and fun and engaging science experiments.

Assessment

Science will be assessed formatively across each lesson and summarily through enquiry questions completed by the children at the end of each unit. The assessment data from these will then be recorded on Sonar As a result of these assessments, pupils' misconceptions or gaps in subject knowledge, skills, behaviours and attitudes are addressed and additional teaching and support is provided.

The children's work will be marked regularly according to the school's marking policy. Any misconceptions should be addressed by the teacher and discussed with their class and spellings identified, in particular the key vocabulary for that unit.

Monitoring and Reporting

The subject leader will monitor the effectiveness of the Science curriculum through regular subject monitoring, which will include book looks and lesson walk throughs. These evaluations are quality assured by the Senior Leadership and Governors.

The effectiveness of Science is also monitored through regular informal pupil conversations throughout the course of the year.

The subject leader will give a report to the Head Teacher and Governors detailing progress and attainment within the subject, actions taken towards targets and whole school data.

In addition, parents will receive formal written feedback annually detailing their child's attainment in Science.