



Rowde C of E Academy

Science Policy

Date agreed: September 2021

Review Date: July 2022

Intent, Implementation & Impact at Rowde Primary Academy

Science stimulates and excites children's curiosity about the world in which they live. Through practical experiences and ideas, science enables children to develop their knowledge and understanding of their world, and events that take place within it. Encouraging children to look at the world as a scientist develops life-long skills, which can be applied to a variety of situations within their own lives, to issues in society and the future of our world.

Intent

At Rowde Primary Academy we believe that a high quality science education provides the fundamentals for understanding the world through the particular disciplines of biology, chemistry and physics. We intend for the children to receive this, both in class, as well as in collective and class worship.

Science is vital to the world's future prosperity and has changed our lives, and all pupils should be taught crucial 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 interest about natural wonders. They should be encouraged to understand how science can be used to explain what is happening, predict how things will behave, and analyse the causes.

Science in our school is about developing children's ideas and ways of working that enable them to make sense of the world in which they live through investigation, as well as using and applying process skills. The staff at Rowde ensure that all children are exposed to high quality teaching and learning experiences, which allow children to explore their outdoor environment and locality, thus developing their scientific enquiry and investigative skills. They are immersed in scientific vocabulary, which aids children's knowledge and understanding not only of the topic they are studying, but of the world around them. We intend to provide all children regardless of ethnic origin, gender, class, aptitude or disability, with a broad and balanced science curriculum.

Implementation

In ensuring high principles of teaching and learning in science, we implement a curriculum that is progressive through the whole school.

Planning for science is a process in which all teachers are involved to ensure that the school

gives full coverage of, 'The National Curriculum programmes of study for Science 2014' and, 'Understanding of the World' in the Early Years Foundation Stage. Science teaching at Rowde Primary Academy involves adjusting and extending the curriculum to match all pupils' needs. Where possible, Science is linked to class topics. Science is taught as discrete units and lessons where needed to ensure coverage. Science is taught consistently, once a week, but is discretely taught in many different contexts throughout all areas of the curriculum.

Teachers plan to suit their children's interests, current events, their own teaching style, the use of any support staff and the resources available.

We ensure that all children are provided with rich learning experiences that aim to give children:

- A clear and complete scheme of work in line with the National Curriculum where teaching and learning should show progression across all key stages within the strands of Science.
- Children have access to key language and meanings in order to understand and readily apply to their written, mathematical and verbal communication of their skills.
- Children will use a variety of resources to develop their knowledge and understanding that is integral to their learning and develop their understanding of working scientifically.
- Clear and broad scheme of work in line with the National Curriculum where teaching and learning should plan for practical investigative opportunities within Science lessons.
- Children will reflect on previous learning and cross curricular links will be made wherever possible
- Where applicable links to Science will be made to develop the children's topical learning.
- Children will be able to build on prior knowledge and link ideas together, enabling them to question and become enquiry based learners.

Science	T1	T2	T3	T4	T5	T6
Year 1/2*	Seasons	Materials and their properties	Living things and habitats	Animal Classification	The Human Body	Plants
Year 3	Human Classification	Light	Biology - plants	Magnets	Flowers – Life Cycle study	Rock classification
Year 4	Materials	Electricity	Food Chains	Sound	Sound	Human Biology
Year 5	Reversible and irreversible reactions	Reversible and irreversible	Space	Properties of Materials	Forces	Animal Life Cycles

		reactions				
Year 6	Light	Electricity	Nutrition and Health	Adaptation and Evolution	Classification	Science links to PHSE

Progression in Science is tracked through each year group to ensure children revisit and build upon prior learning, and this progression (available to view under Curriculum on our website, in the link What We Mean By Progression at Rowde) is mapped and assessed in each of the Knowledge Organiser booklets.

In AY 2021/22, the new Science Lead has an action plan (viewable on request to the Head Teacher) which focuses upon:

- Securing high quality learning in all science classes in every year group
- Addressing learning gaps created by the national Covid-19 restrictions in 2020
- Increasing pupil engagement through more practical opportunities and links to local secondary schools

The delivery of science is monitored by the Science Lead through Learning Walks, Work Sampling, Pupil Voice activities and observations with staff.

Impact

The effect and measure of this is to ensure children not only gain the appropriate age related knowledge linked to the science curriculum, but also skills which equip them to progress from their starting points, and within their everyday lives.

All children will have:

- A wider selection of abilities linked to both scientific knowledge and understanding, and scientific enquiry/investigative skills.
- A richer vocabulary which will enable to articulate their understanding of taught concepts.
- High ambitions, which will see them through to additional study, work and a successful adult life.