



Together Everyone Achieves More

Through....Loving learning, loving each other and loving life itself

AGAPE: The Good Samaritan (Luke 10: 25-37)

North Curry C of E Primary School
Science Intent, Implementation and Impact Statement

Intent – our agreed ways of working

Our intention at North Curry Primary School is that children understand the importance of science not only as a subject taught to support their basic understanding of how things work, but also as a tool for major social and environmental change and improvement. We want our children to understand that scientific principles underpin everything humans understand about the world. Our curriculum promotes spiritual development by enabling them to make better sense of the world around them and the wider universe by making connections between science and everyday life and appreciating the awe and wonder of science e.g. natural phenomena and an openness to the fact that some answers cannot be provided by science.

We believe that at a time when environmental and climate issues are at the fore, children need to understand how science and advancements in scientific understanding can support the development of renewable and carbon neutral initiatives such as wind and solar power, buses powered by biomethane and the development of products with a lower carbon footprint such as electric cars. We also want children to see how science advances and improves the health of our nation and the world population – to understand that scientists work tirelessly to create vaccines for diseases, including the rapid development of a vaccine for COVID 19.

Implementation – everyday delivery

At North Curry we pride ourselves on delivering high quality, weekly science lessons which excite and inspire our pupils. Teaching is of an excellent standard and staff deliver content accurately and with a high level of scientific understanding, following Curriculum Maestro. We prioritise practical science; carrying out a range of scientific investigations throughout the year and building upon previously learnt skills. Children in EYFS and KS1 will learn to independently ask scientific questions, make predictions and conclusions. In lower KS2 they will understand more about making a test fair and how to plan and record a method and evaluation. As they progress through KS2 we will build on these skills but ensure that children can record results in tables and graphs. By year 6 the children will have the tools to plan and carry out a full scientific experiment.

Science is delivered in an exciting and multi-faceted way, which means the children love it. We prioritise science trips, whole school science weeks and Fizz Pop Science club.

Scope and sequence of working scientifically

EYFS	KS1	Lower KS2	Upper KS2
<ul style="list-style-type: none"> • Choose the resources they need for their chosen activities and say when they do or don't need help. • Know about similarities and differences in relation to objects, materials and living things. Make observations of animals and plants. • Explain why some things occur and talk about changes 	<ul style="list-style-type: none"> • Asking simple questions and knowing that they can be answered in different ways • Observing closely, using simple equipment. • Performing simple tests • Identifying and classifying • Using their observations and ideas to suggest answers to questions • Gathering and recording data to help in answering questions. 	<ul style="list-style-type: none"> • Asking relevant questions and use different types of scientific enquiries to answer them. • Set up simple practical enquiries, comparative and fair tests. • Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment including thermometers and data loggers. • Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions. • Recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts and tables. • Report on findings from enquiries including oral and written explanations – displaying results and conclusions. • Draw simple conclusions, make predictions for new values suggest improvements and raise further questions. • Identify differences, 	<ul style="list-style-type: none"> • Plan different types of scientific enquiries to answer questions including recognising and controlling variables. • Take measurements with increasing accuracy and precision, taking repeat readings where appropriate. • Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs. • Make predictions based on previous test results to set up further comparative and fair tests. • Reporting and presenting findings from enquiries, including conclusions, causal relationships, and explanation of a degree of trust in results,

		similarities and changes. <ul style="list-style-type: none"> • Use scientific evidence to answer questions. 	in oral and written forms. <ul style="list-style-type: none"> • Identifying scientific evidence that has been used to support or refute ideas or arguments.
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Scope and sequence of progression of study

EYFS – Understanding of the World

Miss Cordwent follows Curriculum Maestro as well as the interests of the children and ensures that she achieves the objectives set out in *development matters*:

- Use all their senses in hands-on exploration of natural materials.
- Explore collections of materials with similar and/or different properties.
- Talk about what they see, using a wide vocabulary.
- Explore how things work.
- Plant seeds and care for growing plants.
- Understand the key features of the life cycle of a plant and an animal.
- Begin to understand the need to respect and care for the natural environment and all living things.
- Explore and talk about different forces they can feel.
- Talk about the differences between materials and changes they notice.
- Understand the effect of changing seasons on the natural world around them.

Impact – How are we making a difference?

Progress and attainment is measured in a variety of ways at North Curry School but, primarily, it is measured by talking to the children about what they know and what they would like to find out. This informs the planning and delivery of our science curriculum.

At the beginning of a topic, teachers will find out what the children already know by asking targeted questions and introducing subject specific vocabulary.

At the end of each academic term, teachers complete attainment trackers showing what has been covered in their classes and which children have exceeded, met or not met the age related expectations. This is a useful tool in supporting teachers to plan for how to support those children to catch up and attain better in subsequent subjects.

Skills linked to working scientifically are recorded in tracking documents in the children's books and books are sent on to the next class teacher so that progression in these skills can be clearly seen and measured.

When questioned during an internal review, children repeatedly sighted science as their favourite subject. This shows the impact the subject has on the children at our school.