

# Science Overview.



At Our Lady of the Rosary Catholic Primary School, we want every child to be happy and enthusiastic learners of science. We follow the national curriculum programmes of study for each year group.

Year group	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
1	Everyday Materials 1	Movement, forces and magnets 1	Plants 1	Animals and humans 1	Earth and space 1	Seasonal changes 1 throughout
2	Uses of everyday Materials 2	Electricity 1	Plants 2	Animals and humans 2	Living things and their habitats 1	Science project
3	Animals and humans 3	Movement, forces and magnets 2	Plants 3	Materials Rocks 3	Living things and their habitats 2	Light and seeing 1
4	Animals and humans 4	Electricity 2	Sound and hearing 1	Materials States of Matter 4	Living things and their habitats 3	Earth and space 2
5	Animals and humans 5	Movement, forces and magnets 3	Sound and hearing 2	Properties and changes in Materials 5	Living things and their habitats 4	Earth and space 3
6	Evolution and inheritance 1	Electricity 3	Light and seeing 2	Animals and humans 6	Living things and their habitats 5	Science project

## Intent

- Our principal aim is that children leave Our Lady of the Rosary School with a wealth of knowledge in science formed through interesting and exciting experiences that enhance a child's awareness of their own abilities and strengths as a learner.
- Children see learning in Science as an ongoing process not a one-off event, and can make links with how their learning fits with the world around them, including careers.
- Children will meet the National Curriculum expectations in Science, which will be taught by highly-qualified staff who will support children to develop mastery of concepts and inspire enthusiasm and interest in the subject.
- Opportunities will exist for children of all ages to experience learning beyond the classroom. This will allow them to enrich their knowledge by, for example, visiting science museums and universities and workshops.
- Children will develop a deep understanding of the subject they are studying. They will increasingly use their prior knowledge to solve problems and develop the sophistication of Science.
- Children will develop the skills to appropriately use and select research and sources.
- Children will develop a real understanding and appreciation of the world, learning from the best that has been developed and said.

## Implementation

- The curriculum hours in science are non-negotiable and will be followed by all staff in the school. Fixed timetables will be set before the academic year and monitored by subject leads and Senior Leadership.

- Our children begin their science experience in Early Years Foundation Stage, with informal investigation within the setting. Teachers facilitate children's curiosity with open-ended questions and clearly thought-out learning experiences, which are both child led and adult led.
- In KS1, children continue to build on their science knowledge with more formal weekly science lessons where they are taught to use the following practical scientific methods, processes and skills: asking simple questions and recognising 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 and gathering and recording data to help in answering questions.
- Moving in to KS2 children, are to use the following practical scientific methods, processes and skills: asking relevant questions and using different types of scientific enquiries to answer them; setting 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 to report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions; using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions; identifying differences, similarities or changes related to simple scientific ideas and processes and using straightforward scientific evidence to answer questions or to support their findings.
- Subject specialists from our partner secondary school, are and will continue to be integral to the planning process. Staff in Primary and Secondary phases work collaboratively to plan the very best progression in science. This will aid transition to Key Stage 3.
- Full and adequate CPD in Science is provided.
- Our curriculum includes guest speakers who are specialists in their field, workshops, trips to businesses, science museums and universities, fieldwork to relevant places of interest, innovative use of technology to name but a few.
- Success criteria in every Science lesson are set in order to guide children to achieve their potential. This ensures work is demanding and matches the aims of the curriculum.
- High quality teaching responds to the needs of children. Feedback is effective.
- High quality input from experts and educational resources complement the delivery of specialist learning admirably.

### **Impact**

- Children are happy, feel cared for, and have excellent relationships with others. They know how to deal with challenges and have a range of strategies to overcome them.
- Visits within Science have enriched the lives of the children and they are able to discuss how the experience impacted their knowledge and understanding.
- All children achieve well in Science, reflected in outstanding progress that reveals a clear learning journey. Children talk enthusiastically about their learning in Science.
- There is a proven track record of outstanding outcomes as shown in pupils' scientific ability, their books and their enjoyment of the subject.
- Clear outcomes focus and guide Science development plans and drive improvement.
- Children are confident, resilient and actively engaged in the wider society.

- Inspire the students to follow a pathway towards a scientific career

Through wider reading in Science, children will know how science influenced and is central to our everyday lives and how scientist influenced improvement to our lives.