



## Science Overview



St Mary's Catholic Primary School  
**Educate, Protect, Love, Serve**  
*#weareStMary's*

### **Our Vision Statement**

With the love of Jesus and the inspiration of Mary at our heart, we will be the best we can be.

At St. Mary's we provide every member of our school family with the opportunity to achieve academically and thrive spiritually and socially.

## **Science Curriculum Overview**

*'be a scientist'*



## Science Overview



### Intent

At St Mary's, we recognise the importance of Science in every aspect of daily life. As one of the core subjects taught in Primary Schools, we give the teaching and learning of Science the prominence it requires.

The Scientific area of learning is concerned with increasing pupils' knowledge and understanding of our world, and with developing skills associated with Science as a process of enquiry. It will develop the natural curiosity of the child, encourage respect for living organisms and the physical environment and provide opportunities for critical evaluation of evidence.

In conjunction with the aims of the National Curriculum, our Science teaching offers opportunities for children to:

- 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.
  - be equipped with the scientific knowledge required to understand the uses and implications of Science, today and for the future.
    - develop the essential scientific enquiry skills to deepen their scientific knowledge.
  - Use a range of methods to communicate their scientific information and present it in a systematic, scientific manner, including I.C.T., diagrams, graphs and charts.
    - Develop a respect for the materials and equipment they handle about their own, and other children's safety.
    - Develop an enthusiasm and enjoyment of scientific learning and discovery.

The National Curriculum will provide a structure and skill development for the science curriculum being taught throughout the school, which is now linked, where possible to the theme topics to provide a creative scheme of work, which reflects a balanced programme of study.

### Implementation

Science is taught across the year groups in a cohesive and sequenced curriculum. It builds on knowledge and skills over time to enable pupils to develop a love of scientific learning and eventually become young scientists. It is an inclusive subject and all pupils are able to access the science curriculum to build on knowledge and skills over time.



## Science Overview



	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer2
Reception/ Nursery	<i>Growth- Humans/ our bodies</i>	<i>Seasons and changes over time</i>	<i>Materials and their forces</i>	<i>Seasons- spring Animal + life cycles</i>	<i>Habitats and environments</i>	<i>Natural world</i>
Year 1	<i>Plants</i>	<i>Seasons and seasonal change</i>	<i>Materials</i>	<i>Sound</i>	<i>The animal kingdom</i>	<i>Human lifestyle</i>
Year 2	<i>Extraordinary scientists</i>	<i>Mixing and making</i>	<i>Changing materials</i>	<i>Habitats</i>	<i>Space</i>	<i>Building things</i>
Year 3	<i>Rocks cycle</i>	<i>Light and dark</i>	<i>Adaptations (building on from habitats/animals)</i>	<i>Plants</i>	<i>Raw and Synthetic materials</i>	<i>Magnetism</i>
Year 4	<i>States of matter</i>	<i>Human Anatomy</i>	<i>Particles in physical and chemical changes</i>	<i>Sound</i>	<i>Scientific skills</i>	<i>Notable Scientists</i>
Year 5	<i>Separating mixtures</i>	<i>Space</i>	<i>Reproductive cycle/life cycles</i>	<i>Forces</i>	<i>Physical and chemical changes</i>	<i>Sustainability</i>
Year 6	<i>Humans and Animals over time</i>	<i>Adaptations</i>	<i>Diet and Lifestyle</i>	<i>Ecosystems</i>	<i>Light</i>	<i>Electrical circuits</i>



## Science Overview

Resources for each unit

The school uses Oak Academy as the main resource to ensure that there is clear coverage over time. Areas of learning are focused around physics, chemistry and biology with some being a combination of a few or at least two.

<https://teachers.thenational.academy/subjects/understanding-the-world/key-stages/early-years-foundation-stage>

<https://teachers.thenational.academy/subjects/science/key-stages/key-stage-1>

<https://teachers.thenational.academy/subjects/science/key-stages/key-stage-2>

Each unit taught has a clear focus on the learning question; introduction and quiz, resources including film etc, worksheets if needed and exit quiz. This can be adapted to ensure we cater for all pupils. This looks like, support and more scaffolding for SEND and less able pupils as well as extending the more able pupils by deepening learning through challenges and big questions; this can be using one key question or a couple of questions to ensure pupils are developing their thinking and drawing on their learning to wonder why?

Alongside these resources please can you also plan for a scientific investigation- again scaffolded for those who need to access the learning but deepening the learning for the more able pupils.

Proforma that he uses can be adapted in key stage 2 and year 2.

[Method for a science investigation.docx](#)

[Science INVESTIGATION.doc](#)

[Science Symbols.doc](#)

### **Vocabulary:**

[I am sharing 'Science-Vocabulary \(1\)' with you.docx](#)

## **Progression of science**