**Recognising and celebrating the presence of Christ in one another**

* we aim to follow Jesus through the teaching of the Gospels and inspire each other to be Christ-like;
* we all work as a big team to encourage everyone to be the best that they can be, at work and at play;
* we create a safe, positive, fair environment where all feel respected and valued



 **Science Policy**

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| --- | --- |
| **Current date approved:** | **January 2022** |
| **Approved by:** | **Full Governing body** |
| **Date of next review:** | **January 2024** |

# Aims and Objectives

The 2014 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 skills required to understand the uses and implications of science, today and for the future.

At St. Mary of the Angels, we aim to:

* provide stimulating environments, thereby developing children’s curiosity and interest in science
* develop basic scientific knowledge and conceptual understanding
* encourage children to use and develop their knowledge and understanding of Science
* develop the children's communication and co-operative skills
* develop children's sensitivity to the living and non-living environment
* encourage children to develop creativity and inventiveness
* develop children's powers of observation and investigation
* encourage children to develop ideas which will enhance their understanding and questioning of the world
* Adhere to the Progression in Working Scientifically document on the Science Page of Our Learning on the school website.

In their own work, children should be able to:

* plan science investigations safely, taking account of fair testing
* observe, test, record, hypothesize and make comparisons
* measure and collect relevant data and information
* identify patterns when they occur and record findings using a variety of ways
* Analyse and communicate outcomes to investigations
* accept that re-testing is sometimes needed to confirm scientific findings
* know and use appropriate scientific language
* use Key Knowledge Organisers as a tool for embedding knowledge and increasing knowledge of vocabulary

**Roles and Responsibilities**

The Science Lead teacher will:

* develop policy and practice throughout the school
* Ensure that National Curriculum 2014 requirements are met.
* offer help and advice, wherever possible
* order and audit resources necessary to deliver the science curriculum
* keep informed about changes in government policy
* monitor the quality of activities provided for the children and levels of achievement attained in relation to National Curriculum Age Related Expectations
* ensure that health and safety guidelines are acknowledged and adhered to
* monitor teaching and learning in science through lesson observations and book trawls
* Coordinate a yearly science extravaganza to inform governors and parents of the progression in scientific enquiry in all year groups.
* Ensure the EYFS new statements are linked to KS1 and KS2 working scientifically objectives so all staff know starting points.

# Equal Opportunities

Science is taught to all pupils at our school regardless of their personal faith commitment, their parents' commitment, their faith tradition, their gender, race, ability or family circumstances.

**EYFS**

The Foundation Stage deliver science content through the ‘Understanding of the World’ strand of the EYFS curriculum. This involves guiding children to make sense of their physical world and their community through opportunities to explore, observe and find out about Past and Present, People, Culture and communities and the Natural World. They are assessed according to the new statement attainment targets.

**Assessment and Monitoring**

The school follows National Curriculum 2014 programmes of study.

Assessment is undertaken for the benefit of the children to help future learning.

Formative assessments are continuous and undertaken by the class teacher or teaching asst in the following ways:

* By observation of children working, planning investigations and outcomes.
* By discussion with the child in the learning process, including pupil voice.
* Through feedback against Age Related Expectations for each topic taught.

Children should be given the time to read, correct or develop their work once feedback has been given. This can be in both written and oral form.

Teacher will assess pupils using National Curriculum Age Related Expectations as each topic progresses, using internal “Show Off” sheets, “Boastful Bubbles” and “Reflection” sheets which are tools used in our foundation subjects and R.E, to gather pupils’ knowledge informally These are supplemented by a summative termly working scientifically phased assessment grid which is RAG rated against the National Curriculum 2014 working scientifically objectives. Children will also be given opportunities to self-assess using the same criteria. The intention is, by the end of the summer 2022, that new planning and assessment materials will have been trialled, to assist with embedding knowledge and key skills in the minds of all pupils, to enhance our focus of “knowing is remembering more” Should this be successful; the new scheme will be rolled out across the autumn and spring terms 2022,23.

**Health and Safety**

The school is responsible for teaching science in a healthy and safe environment. Teachers are

aware that certain science activities can be dangerous. Therefore, they must ensure demonstrations of how to use specialist equipment are given. All science equipment should be checked and any

faulty equipment reported to the Science Lead teacher

# Communication with Parents

 Parents are informed through the termly class curriculum overviews of the current Science topics. Each Year a Science Extravaganza will take place-showcasing progression in scientific enquiry skills and knowledge from nursery to Year 6. Parents also have full access to the Progression of skills and Science topics explored, along with Key Knowledge Organisers each year on the Science Curriculum Page, which is available on the school website under the “Our learning “Tab. Each topic is linked with

# Pupils with SEN

Staff are fully aware of the needs of children in their class and are fully inclusive wherever possible, within the needs of all. Work is differentiated to meet the needs of all learners. Please refer to the SEN Policy.

**Monitoring and Review.**

This policy will be reviewed in line with Science Monitoring and the priorities of the School Development Plan on a two-yearly cycle or earlier if curriculum changes need to be implemented.

Next review Spring 2024