St Mary's Catholic Primary

Science Policy

Date Approved	September 2024
Date Reviewed	September 2025
Date of next review	

Strategic Vision

St Mary's will be an inspirational school where we all love to work, learn and grow together, following in the footsteps of Christ.

Through creating a stimulating learning experience, our children will become confident, independent and resilient with a social conscience for their journey through life. They will develop skills alongside knowledge to equip them to thrive in an ever-changing world. Our school will be a place where all learners are happy and safe in a stimulating environment where the values of Jesus Christ are at the centre of everything we do.

Definition

Science is a way of working that allows children, through practical first-hand experiences and secondary sources, to develop their knowledge and understanding of the world in which they live. These experiences should enable children to observe, question, investigate, make sense of and communicate and evaluate their findings.

Aims

To encourage children to:

- develop a questioning and reflective mind by providing a range of exciting and enjoyable activities.
- develop a systematic and logical way of working.
- apply their skills and knowledge to investigative work.
- come to a deepening understanding of scientific concepts.
- work safely and carefully.

Teaching and Learning

All children have access to the Early Years Foundation Stage Curriculum (Understanding of the World – ELG: The Natural World) and Science National Curriculum. At St. Mary's we use a long term Science curriculum plan delivered over a two year period to ensure that all units are covered. Our plans show the breadth of study as well as how 'Working Scientifically' is embedded within each unit of work.

Plans also include the scientific vocabulary to be taught with each unit of work to enable children to articulate scientific concepts clearly and precisely. The teaching of Science at St. Mary's may be as a whole class, in small groups or individual work.

Curriculum enrichment

We ensure that children have access to a wide range of educational experiences outside of school through trips and links with science outreach work, including links with Warwick University and the Primary Science Teaching Trust. We celebrate national science week in March and invite visitors, speakers, companies leading workshops in order to inspire learning.

Working Scientifically

Working Scientifically must always be taught through and clearly related to the programme of study, White Rose Science. Pupils at St. Mary's learn to use a variety of approaches to answer relevant scientific questions by collecting, analysing and presenting their findings. Children will:

- Explore
- Observe over time
- Notice patterns
- Identify, group and classify
- Carry out fair-tests

Through this approach we aim to develop the following skills:
observing, raising questions, predicting, hypothesising, planning, controlling factors (fair testing),
measuring, collecting and interpreting data, constructing tables and graphs, explaining,
communicating and evaluating findings, researching information.

Attitudes

Through Science we endeavour to foster the following qualities:-
Excitement, curiosity, perseverance, open-mindedness, self-discipline,

sensitivity to others, independence, adaptability, co-operation, and care for living things.

Equal opportunities

All children at St. Mary's are given equal opportunities in all areas of Science. We monitor the attainment and engagement of all groups of children to ensure there are no patterns of attainment causing concern.

Progression

We recognise that our curriculum planning must allow for children to gain a progressively deeper level of knowledge, understanding and skill competency as they move throughout the school. Our Science plans are progressive and enable teachers to adjust plans to meet the particular needs of individuals or groups of children.

A science skills map helps teachers to plan for progression and is used to support medium term planning.

Information Communication Technology

We see ICT as an important tool in Science. Children research, communicate, collect and interrogate data in a variety of ways. This is detailed in teachers' medium-term planning.

Records and Assessment

Assessment of children's development is made through a combination of end of unit assessments, ongoing teacher assessment, formal tasks and year tests where appropriate. A record is kept of children's achievements in Science including 'Working Scientifically' through teacher's own notes and our school record system. Children to complete "exit ticket" at the end of each unit to reflect on

learning and progress. Progress and achievement in Science is reported to parents through end of year reports and during autumn and spring parent meetings.

Safety

It is important that children are taught the rules of safety when undertaking experiments and investigations. Materials and equipment need to be handled sensibly and we try to ensure that children do this. It is the teacher's responsibility to make sure that all helpers (TAs, parents etc.) are aware of safety implications connected with any Science activity they are undertaking.

Monitoring

The Science curriculum is monitored by the science co-ordinator through staff meetings, observation of teaching, monitoring of medium-term plans, children's work and analysis of data.

Resources

The science resources are kept mostly in the Science cupboard, in Shepherds class, for the use of all classes. Teachers also have access to a list of Primary Science resources complied by the Science Lead.

Science Lead: Mrs Sammie Vale
Reviewed September 2024