

St Veronica's RC Primary School



Not just a school; a family.

Science Policy

The Mission Statement of St Veronica's RC Primary School

Secure in the love of Jesus, we

Try to do our best.

Valuing all God's family, we recognise that

Each one of us is special.

Respecting everything God has made, we use

Opportunities to explore and learn.

Never overlooking the needs of others, we

Include everyone, helped by our

Caring, friendly, Catholic community.

Always forgiving, we

Share and celebrate the life of Jesus

Our Vision

In line with our Mission Statement, our prime aim in the teaching and learning of science is that every child is encouraged to do their best. Our vision is to provide all our children with a science curriculum that encourages and enables them to explore God's wonderful world. Our aim is that they will develop a deeper understanding of how the world works and they will achieve this through a wide range of opportunities. They will work collaboratively, asking questions and seeking answers. They will work practically on investigations whilst extending their scientific knowledge, developing skills and vocabulary and becoming life - long super scientists.

The Governing Body:

Reports are made to the governors on the progress of science provision and to our Science Governor. This policy will be reviewed periodically or in the light of changes to legal requirements.

Statutory Requirements:

Statutory requirements for the teaching and learning of Science are laid out in, The National Curriculum in England Framework Document for Teaching, September 2014 and the Statutory framework for the Early Years Foundation Stage, September 2014.

Aims:

At St. Veronica's R.C. Primary School we believe that Science is a body of knowledge built up through experimental testing of ideas. Science is also a practical way of finding reliable answers to questions we may ask about the world around us. Science in our school is about developing children's ideas and ways of working that enable them to make sense of the world in which they live through investigation, as well as using and applying process skills.

We believe that a broad and balanced science education is the entitlement of all children, regardless of ethnic origin, gender, class, aptitude or disability. Our aims in teaching science include the following:

- Preparing our children for life in an increasingly scientific and technological world today and in the future.
- Helping our children acquire a growing understanding of the nature, processes and methods of scientific ideas.
- Helping develop and extend our children's scientific concept of their world.

- Building on our children's natural curiosity and developing a scientific approach to problems.
- Encouraging open-mindedness, self-assessment, perseverance and developing the skills of investigation – including: observing, measuring, predicting, hypothesising, experimenting, communicating, interpreting, explaining and evaluating.
- Developing the use of scientific language, recording and techniques.
- Developing the use of computing in investigating and recording.
- Making links between science and other subjects.

These aims have been simplified into our six “child friendly” science principles.

These are displayed in classrooms and around the school.

How Science is structured through the school:

Planning for science is a process in which all teachers are involved to ensure that the school gives full coverage of, 'The National Curriculum programmes of study for Science 2014' and, 'Understanding of the World' in the Early Years Foundation Stage.

Science teaching at St. Veronica's R.C. Primary School involves adapting and extending the curriculum to match all pupils' needs. Where possible, science will be linked to class topics. Science will also be taught as discrete units and lessons where needed to ensure coverage

Teachers plan to suit their children's interests, current events, their own teaching style, the use of any support staff and the resources available.

To ensure complete coverage of the N.C 2014 and progression, the Lancashire KLIPS are used alongside the progression in knowledge and progression in working scientifically matrices.

Foundation Stage (reception pupils):

Pupils explore science topics through making predictions, using their senses and investigating materials and their properties. Science is taught through the strand of, 'Understanding the World'. Science teaching and learning is also linked to the other strands of The EYFS Framework for Learning, 2014.

Teachers and teaching assistants support pupils to develop a solid understanding of things occurring around them in their day-to-day lives. Children are encouraged to be creative and inquisitive as they participate in activities. Pupils are encouraged to use their natural inquisitiveness, while taking part in exploratory play in specific scientific areas as well as areas that link across the EYFS framework.

Key Stage One (year one and two):

During Key Stage One, pupils observe, explore and ask questions about living things, materials and the world around them. They begin to work together to collect evidence to help them answer questions, find patterns, classify and group objects, research using a variety of sources and carry out fair testing by working scientifically. Pupils use reference materials to find out more about scientific ideas. They share their ideas and communicate them using scientific language, drawings, charts and tables. Science lessons in Key Stage One are either taught discretely or where possible connected to other curriculum areas. Pupils also use the outdoor areas in their science learning.

Key Stage Two (years three – six):

Children are encouraged to extend the scientific questions that they ask and answer about the world around them. Pupils carry out a range of scientific enquiries including: observations over time, pattern seeking, classifying, grouping and researching using other sources (including computing resources). Children in Key Stage Two continue to learn to work scientifically by planning fair tests, carrying them out, recording results and drawing conclusions about their investigations. Pupils in Key Stage Two often extend their scientific learning using the outdoor areas.

Cross-curricular Science Opportunities:

Teachers will seek to take advantage of opportunities to make cross-curricular links. They will plan for pupils to practise and apply the skills, knowledge and understanding acquired through Science lessons to other areas of the curriculum and vice versa. Evidence of developing literacy through science will be apparent through opportunities to explain findings in writing.

The Use of Computing:

We recognise the important role computing skills have to play in the development of scientific skills. We also recognise the importance of being computer literate.

Computing skills are used to enhance teaching and learning of science and to give all children the opportunity to use computing to research, collect, analyse and present scientific findings (see Computing policy).

Assessment:

Pupil's work will be assessed in line with the LCC Key Learning Indicators of Performance Documents for each year group, which are also used for English and Maths. Guidance to improve knowledge, skills and understanding will be given verbally and through marking feedback/ next steps marking.

Inclusion:

We aim to provide for all children so that they achieve as highly as they can in science according to their individual ability. We will identify which pupils or groups of pupils are under-achieving and take steps to improve their attainment. Gifted children will be identified and suitable learning challenges provided (see inclusion and SEN policy).

Equal Opportunities:

At St Veronica's R.C. Primary School, we believe that children learn and thrive when they are healthy, safe and engaged. In order to engage all children; cultural diversity, home languages, gender and religious beliefs are all celebrated.

Role of Subject Leader:

The Subject Leader should be responsible for improving the standards of teaching and learning in Science through:

- Monitoring and evaluating pupil progress
- Provision of Science
- The quality of the Learning Environment
- Taking the lead in policy development
- Auditing and supporting colleagues in their CPD

- Purchasing and organising resources
- Keeping up to dates with changes in the subject.

Parental Involvement:

We aim to involve parents directly in the life of the school, and thus in the development of children's skills, knowledge and understanding in science. There are opportunities in autumn and spring term when parents can discuss their children's progress with their teacher and at other times by appointment. A written report is sent home each summer term.