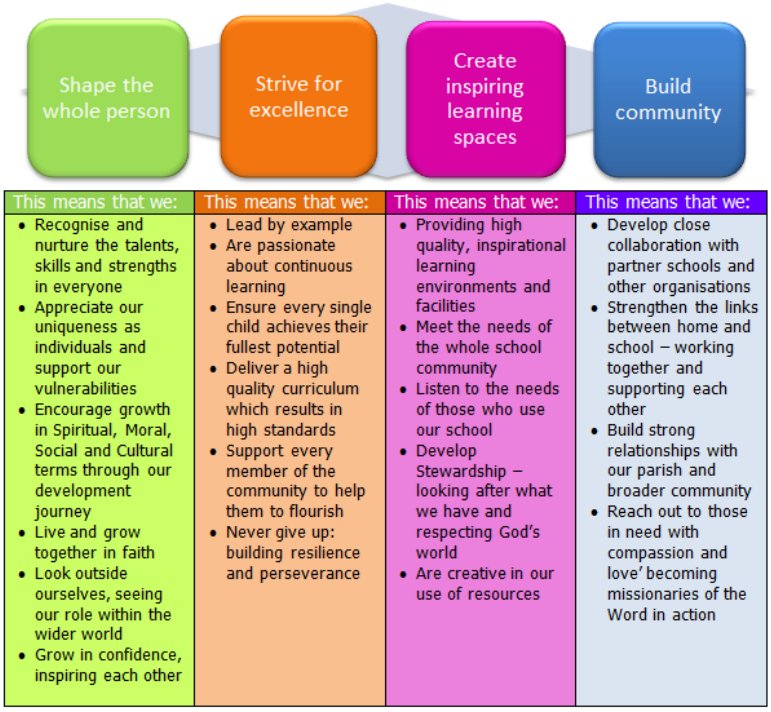
Science Curriculum Statement

Mission Statement

Our school community is rooted in the Gospel and the vision of St. Catherine of Siena. This inspires each of us *'To be who God wants us to be and so set the world on fire.'*

- We are called to love one another as we seek to be the best in all that we learn and do.
- We celebrate and nurture the gifts, talents and skills of everyone.
- We commit ourselves to grow together in faith, love and service.

More specifically, this means we aim to:



This means that we:	This means that we:	This means that we:	This means that we:
• Recognise and nurture the talents, skills and strengths in everyone • Appreciate our uniqueness as individuals and support our vulnerabilities • Encourage growth in Spiritual, Moral, Social and Cultural terms through our development journey • Live and grow together in faith • Look outside ourselves, seeing our role within the wider world • Grow in confidence, inspiring each other	• Lead by example • Are passionate about continuous learning • Ensure every single child achieves their fullest potential • Deliver a high quality curriculum which results in high standards • Support every member of the community to help them to flourish • Never give up: building resilience and perseverance	• Providing high quality, inspirational learning environments and facilities • Meet the needs of the whole school community • Listen to the needs of those who use our school • Develop Stewardship – looking after what we have and respecting God's world • Are creative in our use of resources	• Develop close collaboration with partner schools and other organisations • Strengthen the links between home and school – working together and supporting each other • Build strong relationships with our parish and broader community • Reach out to those in need with compassion and love' becoming missionaries of the Word in action

Intent

At St Catherine's Primary School, the aim of our Science curriculum is to ignite curiosity in our pupils and offer them the opportunity to question why things happen and the way things work. Furthermore, as a Catholic school, we believe through our teaching and learning of science we can promote respect for nature and the environment in accordance with Pope Francis' many appeals to care for our 'common home'.

We believe that science is much more than just a core subject: science inspires pupils, encouraging them to be inquisitive about the world; fosters their natural curiosity and enables them to develop a range of skills that are valuable across their learning.

As children progress through the year groups, they build on their skills in working scientifically, as well as on their scientific knowledge, as they develop greater independence in planning and carrying out fair and comparative tests to answer a range of scientific

questions using the five types of enquiry: observation over time, identifying and classifying, pattern seeking, research and comparative and fair testing.

We aim to provide children with opportunities to ask questions, make observations, investigate their ideas and ultimately improve their understanding. By providing a range of practical experiences, we develop pupils' investigative skills and allow children to take risks and learn from their mistakes; enabling them to become more confident, independent learners.

We believe science is for everyone and that understanding science will support children throughout their lives by allowing children to make informed decisions about new technologies, their health and the environment, consequently becoming responsible members of society.

Implementation

Through our teaching, we aim to ensure that every child has a positive experience of science in primary school. Science at our school is a vastly practical subject in which children are not just learning scientific facts, but they are learning how to experiment and conduct scientific enquiries with growing independence.

Teachers plan opportunities to consolidate develop other skills such as maths and language skills within a scientific context. Some of these opportunities include: use of graphs and tables, writing tasks, oracy skills in discussions and presentations.

The curriculum is enriched by visits to the local environment, museums and outside scientific agencies. STEM challenges, science assemblies and workshops take place to promote science during STEM week. We also greatly benefit from our partnership with Barlow High School.

Increasing pupils' understanding of our world and developing skills associated with Science is carried out through the use of the five types of enquiry: observation over time, identifying and classifying, pattern seeking, research and comparative and fair testing.

Impact

Within science, we strive to create a supportive and collaborative ethos for learning by providing opportunities for children to question and investigate to discover answers for themselves and take their learning in a direction they are interested in.

Our science curriculum is high quality, well thought out and is planned to demonstrate progression. We focus on progression of knowledge and skills the use of key scientific vocabulary.

We measure the impact of our curriculum through the following methods:

• Assessing children's understanding of topics using pre- and post-learning assessment tasks.

• Feedback of written work in books

• Images of the children's practical learning

- Interviewing the pupils about their learning (pupil voice)
- Moderation of books where pupil's books are scrutinised and feedback given
- Annual reporting of standards across the curriculum to parents
- O-track curriculum tracker is used to record the progress that pupils are making towards science objectives, ensuring children have learnt new skills and concepts by the end of each academic year. These assessments allow subject leaders to measure the impact of teaching and inform future learning. Children are assessed as meeting age-related expectations, working towards or exceeding age-related expectations.

The science subject leaders will continually monitor the impact science teaching is having on the children's learning through book scrutiny, as well as to ensure the progress of knowledge and skills is being taught. They will also ensure the knowledge taught is retained by the children and continually revisited and that the learners are able to apply the skills they have been taught to a variety of different settings, showing independence with their learning.