

St Anne Line Catholic Infant School

part of the wider Christus Trust, Multi Academy Trust

Science Policy



Love Learn Pray

Vision

At St Anne Line Catholic Infant School, our mission to Love, Learn, Pray is at the heart of everything we do. Rooted in our Catholic faith and guided by our motto, En Magna Constantia – With Great Determination, we nurture a sense of awe and wonder in the world God created. Science plays a vital role in helping our pupils appreciate and care for the world, encouraging them to explore, question, and celebrate the intricacies of life.

Aims

This policy ensures consistency in the teaching and learning of Science across the school, equipping pupils with the skills and knowledge to explore, discover, and investigate. First-hand experiences help children understand the world they live in, fostering curiosity and a love of learning.

We aim to:

- Build on children’s natural curiosity through purposeful questioning and exploration.
- Teach scientific knowledge and key vocabulary.
- Develop scientific skills and investigative attitudes.
- Inspire wonder in the world around them through reflection and discovery.
- Encourage respectful communication using scientific language.
- Support the evaluation of findings and the development of explanations.

The Intent, Implementation, and Impact of Our Science Curriculum

Intent

We believe a high-quality Science education provides the foundations for understanding God’s creation through the disciplines of biology, chemistry, and physics. Our curriculum reflects our Catholic values by fostering a love of learning, inspiring awe at the natural world, and encouraging stewardship and care of God’s earth.

With Love, we nurture children's sense of wonder and respect for all living things.

Through Learning, we develop scientific thinking by encouraging curiosity, creativity, and a desire to question and understand.

In Prayer, we reflect, give thanks, and appreciate the beauty and complexity of creation.

Our Science curriculum is enquiry-led and book-linked:

- Each unit is anchored by a high-quality book, providing context, inspiration, and a narrative framework for scientific exploration.
- Units begin with an overarching enquiry question, giving learning purpose and direction.
- Every lesson includes a lesson-specific enquiry question to probe thinking, stimulate curiosity, and deepen understanding.

This approach ensures that learning is meaningful, coherent, and rooted in curiosity, while connecting science to real-life contexts and faith-based values. We intend to provide a bespoke curriculum accessible to all pupils, offering rich learning experiences that build both knowledge and skills progressively.

Implementation

To maintain high standards, we implement a progressive, inclusive, and engaging Science curriculum:

- Teachers plan collaboratively to ensure curriculum coverage, clear progression, and appropriate differentiation, embedding the values of Love, Learn, Pray throughout.
- Topics begin with a central enquiry question, and each lesson includes a lesson-specific enquiry question to promote curiosity, critical thinking, and independent learning.
- Units are linked to high-quality books, which contextualise learning, provide real-world examples, and stimulate discussion, observation, and reflection.
- Lessons are sequenced in small, manageable steps, allowing pupils to revisit key knowledge and vocabulary, develop secure understanding, and build confidence in scientific enquiry.
- Practical investigations, observation, discussion, and reflection are central, enabling pupils to test ideas, explore materials, and make sense of the world.

- Science learning is enriched through cross-curricular links, Forest School sessions, outdoor learning, and opportunities for reflective prayer.
- Pupils learn to collaborate, share resources respectfully, and value others' ideas, fostering both scientific skills and moral and spiritual understanding.

Impact

Our approach ensures that children:

- **Love** learning about the world and show care for the environment.
- **Learn** to think critically, ask questions, and apply scientific methods to new situations.
- **Pray** and reflect, appreciating the wonder of creation and their role in protecting it.

Children leave St Anne Line with:

- Secure scientific knowledge appropriate for their age.
- Well-developed enquiry and investigative skills.
- A rich scientific vocabulary to articulate understanding.
- Confidence, aspiration, and determination inspired by En Magna Constantia to succeed in future learning and life.

Procedures and Practice

Roles and Responsibilities

Staff continue to model Catholic values in all roles, encouraging spiritual growth alongside academic success.

SMSC and British Values Integration

- **Spiritual:** Science provides opportunities to pray, reflect, and marvel at God's creation.
- **Moral:** Pupils consider the impact of scientific discoveries with love and compassion.

- **Social:** Pupils collaborate, listen, and respect diverse viewpoints.
- **Cultural:** Global contributions to Science are celebrated, fostering respect for all cultures.

Planning

Science is planned to ensure rigorous, sequenced learning that enables progression over time:

- Planning builds on prior knowledge and introduces new concepts through enquiry-based learning.
- Opportunities for investigations and exploration help pupils answer key questions and develop knowledge and curiosity.
- In Key Stage One, *Working Scientifically* objectives are woven throughout units.
- In EYFS, planning prioritises first-hand experiences, child-led exploration, and questioning to lay the foundation for scientific thinking.
- Planning is underpinned by Love, Learn, Pray and guided by En Magna Constantia, ensuring purposeful, reflective, and joyful learning.

Teaching

Teachers model perseverance, determination, and resilience, helping children overcome challenges in scientific enquiry. Lessons include discussion, reflection, and links to Catholic social teaching. In EYFS, Science encourages awe, wonder, and exploration, establishing strong foundations for future learning.

Parent Partnership

Families are involved in science fairs and home learning, supporting children to love, learn, and grow. Reflecting on creation at home strengthens both scientific and spiritual development.

Assessment, Monitoring, and Review

Assessment supports academic and spiritual progress. The Science coordinator monitors progression and ensures that enquiry-led learning and Catholic values are embedded and celebrated in pupils' work.

Conclusion

At St Anne Line Catholic Infant School, Science is more than a subject—it is an invitation to discover the world with love, seek truth through learning, and honour creation through prayer. Through enquiry-led Science, children live out En Magna Constantia – With Great Determination, growing in faith, knowledge, curiosity, and respect for God’s incredible world.