

St Ambrose Roman Catholic Primary School

Science Policy

2022-2023

Mission Statement

**In God’s family, we grow and learn in love, hope and faith.**

**Intent**

Science enables our children to be critical thinkers as it develops their natural curiosity and encourages respect for living organisms and the physical environment whilst providing opportunities for critical evaluation of evidence. Children are encouraged to be advocates for change increasing their knowledge and understanding of our world; developing skills associated with Science as a process of enquiry. It also encourages independence and resilience with a recognition of the importance of Science in every aspect of daily life.

Implementation

Our Science curriculum has been designed around the requirements of the National curriculum. We have carefully selected the published scheme Collins Snap Science to support the curriculum needs ensuring appropriate challenge and progression is provided across the year groups. This scheme is used in conjunction with other supporting resources to ensure full curriculum coverage and revisitng opportunities. We include a range of activities across the curriculum taking into account other curriculum areas to provide where possible a connected curriculum to enhance learning.

Enrichment opportunities are utilised throughout the year to develop and enhance learning further.

Collaborative planning meetings take place each half term to support staff in creating a clear sequence of lessons within a unit of work. During this meeting key concepts, vocabulary and big questions are considered and knowledge organisers are planned out. Working scientifically is also carefully mapped to ensure full coverage. These collaborative planning meetings involve teachers creating engaging lessons. The knowledge organisers support children throughout the unit and can be used to refer to in other units to enable the children to remember more of what they have been taught. The knowledge organisers also unlock a technical vocabulary linked to Science which means they can clearly articulate what they are doing and why. Planning meetings also review prior and future knowledge for that topic to ensure this can be revisited and that essential knowledge is taught.

The planning meeting model therefore, ensures that whole school science skills are mapped logically and sequentially and also that each class teacher understands what, why and how their individual lesson content fits into the overall science curriculum.

We follow the principles of Collins Snap Science which asks children an enquiry-based question in which to achieve their objective thus allowing children to find out for themselves and develop critical thinking skills. This cycle ensures that children learn not only the National Curriculum content but do so through applying the appropriate Working Scientifically strand. Children are encouraged to ask their own questions and given opportunities where possible to use their scientific skills to research the answer.

Children are taught explicitly about assessing risks when carrying out a range of Science activities. Teachers demonstrate how to use scientific equipment, and the various Working Scientifically skills in order to embed understanding and safety.

Teachers regularly check children’s understanding through their practical and recorded work, asking effective questions to understand children’s Scientific knowledge as well as their Working Scientifically skills. Working Scientifically skills are embedded into lessons to ensure these skills are being developed throughout their time at school and that these skills are both meaningful and purposeful for children. Children are given effective feedback on how to improve their enquiry. They are taught how to critically evaluate their Working Scientifically skills in order to see where further improvements can be made. Assessments made by teachers are used to support children further in their development and through the use of classroom monitor (a linked assessment model) that information is communicated effectively at transition to ensure that children’s individual needs are being met throughout their journey in school.

Impact

The impact of the Science Curriculum can be seen in the fun, engaging, high-quality science education provided that gives the children foundations for which to understand the world we live in. Children learn about the possibilities for careers in Science as a result of community links and STEM visits. More importantly the way in which children can articulate what they have learnt in Science, and what they have discovered, demonstrates our children’s views and enjoyment of the subject which is further evidenced through regular and positive pupil voices.

Assessments are carried out each half term after each unit and that information is used to inform the child’s next teacher what support or challenge may be needed in this particular subject area.