Science

Vision

Our vision is to provide our children and families with a safe, welcoming and inclusive environment. We learn together in a Christian community, we strive for excellence for our children to enable them to become confident within the school setting, church parish and the wider community.

Curriculum Intent

At St Anne (Stanley) each child is supported to enable them to reach their full potential through a carefully planned Science curriculum that builds on children's natural curiosity of the world around them. Through Science, we encourage our children to formulate their own questions and explore these through methodical investigations of the physical, chemical and biological aspects of their surrounding environment and the wider world. Through our Science curriculum, we model and support our children in questioning science-based issues that may impact their generation and future generations.

To enable children to achieve these aims we provide an exciting curriculum to promote and develop effective learning in Science. We ensure continuity and progression in Science through collaboration with colleagues and a well-planned and sequence of learning. Together, we provide a wide range of opportunities to develop and apply investigative skills in a variety of settings. At St Anne (Stanley) we provide excellent and innovative resources to ensure effective teaching and learning, we ensure that children are provided with a safe environment in which to explore Science.

Curriculum Implementation

At St Anne (Stanley) we provide a high-quality Science curriculum that embraces individual needs and mental and physical well-being in a safe and enriching learning environment. Children are supported in developing a progressive Scientific vocabulary which is supported through classroom displays and knowledge organisers to enable and encourage independent learning.

We have adapted the Association for Science Education scheme of work to meet National Curriculum requirements and ensure full coverage for our EYFS. In key stage 1 and 2 we use the HEP Science curriculum which provides comprehensive resources for a quality science curriculum.

We have clear progression of skills frameworks from EYFS to KS2 to ensure children are provided with a structured, progressive, inclusive and creative curriculum which creates opportunities for each child individually to reach their full potential and to know and remember more.

All teachers are provided opportunities to develop their subject specific knowledge and skills through subject specific training both internally and externally as teaching staff and in individual year groups. We also participate in Science moderation across the Local Authority to ensure that our teacher assessments are both consistent and accurate.

Our Science curriculum, endeavours to develop our children's knowledge and understanding alongside a progressive use of Scientific subject specific vocabulary. It details clear progression of the individual elements of Biology, Chemistry, Physics and Working Scientifically. Our knowledge organisers equip our children with key learning relating to each unit of work, along with key vocabulary to support them in learning and remembering more.

To support learning and retaining of subject specific ideas and vocabulary, each classroom uses an agreed format for display boards to showcase children's work and provide them with reference points to secure learning.

At St (Anne) Stanley we foster and encourage unity between home, church and the wider community through clear communication and clear expectations of learning objectives. Our Science curriculum broadens are children's horizons through exposure to new experiences for example, whole-school visits to Chester Zoo, Minibeast Rangers visits, Professor Bubble workshops and museum visits.

Curriculum Impact

During Key Stage 1 and 2, there is formative and summative assessment of Science according to the National Curriculum Programme of Study for Science. Formative assessment of children's learning is a continuing monitoring of children's knowledge, understanding and skills against learning objectives for each unit of work. We support this form of assessment by clear and direct lesson plans which set out a clear expectation for the children, levels of support required to meet these expectations and ways in which these may be exceeded. We also incorporate a range of quizzes and activities to enable children to revisit and recap key information. Formative assessment is used to inform differentiation, support and challenge during lessons.

Summative assessment of children's learning in Science takes place at a distance from the unit of work for example, at the beginning of a new topic to establish prior knowledge and at a distance of the end of the unit to assess how much information has been retained. This is achieved through a variety of activities such as: quizzes, matching activities and planning an investigation. These assessments are recorded as: "working towards" the outlined objectives, "meeting expectations" or "exceeding expectations". This information is given to the Science Lead who collates and analyses the data. The impact of the curriculum is further measured through a variety of monitoring methods such as: book looks, lesson visits, learning walks and pupil voice.