



Queens Church of England Academy

Learning and Growing in the Love of God

Science Policy

Adopted by the Leadership team

January 2022

Approved by full Governing Body

7th February 2022

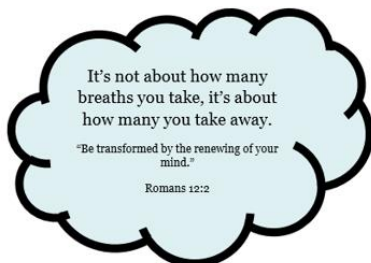
Signed by Chair of Governors

7th February 2022

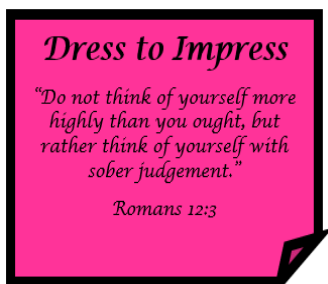
Paul N. Altes

To be reviewed

January 2024



LOVE
IN
ACTION
Romans 12:10



Science Subject Policy

1. Intent

The 2014 national curriculum for science aims to ensure that all pupils:

- Develop scientific knowledge and conceptual understanding through the specific disciplines of biology, chemistry and physics
- Develop understanding of the nature, processes and methods of science through different types of science enquiries that help them to answer scientific questions about the world around them
- Are equipped with the scientific knowledge required to understand the uses and implications of science, today and for the future.

At Queens C of E Academy, we believe that all our children deserve the best and our aim is to help them reach their potential in every area of school life. We endeavour to make learning a positive experience which will stay with the children long after they have left Queens Academy and help shape their future. Our Science curriculum will enable all children to explore and discover the world around them and beyond their everyday experience, creating citizens who make positive contributions to the future of our planet. We teach Science in a way that inspires our children to be innovative, independent and imaginative, with the hope that they will foster a life-long love for the subject. They will all acquire and apply core knowledge and skills that will help enthuse scientific leaders of the future.

2. Implementation

The 2014 National Curriculum provides the basis for our Science curriculum at Queens C of E Academy. This is supplemented by an additional unit of work as selected by the Science Subject Leader to help promote our curriculum drivers of aspiration, respect and opportunity as well as encouraging pupils to be global citizens. Science topics have been organised in such a way that the acquisition of knowledge and skills is progressive as children work their way through both each year group and the key stage. Children are also encouraged to make wider links to their curriculum topics and the overarching 3 areas of science: chemistry, biology and physics. Working Scientifically skills are embedded throughout the curriculum. Opportunities for children to experience all 5 different types of Scientific Enquiry are planned for throughout each year group. Skills and enquiry types become increasingly more challenging as pupil's progress through each year.

Each Science unit is focused on answering a "Big Question" to support children's intellectual curiosity. In addition to this, at the beginning of each unit of work children are introduced to a list of key vocabulary. Pupils are asked to self-assess their understanding of key terminology prior to accessing new learning and then again at the end of the topic.

Science is taught for 75 minutes per week. Year group teams are able to plan sequences of lessons, using the Long Term Plan as guidance. Teachers are encouraged to use combination of both creative and enquiry based learning to support children in their acquisition of both knowledge and skills. Use of Scientific equipment and the Immersive classroom is encouraged to further support pupils in their understanding of more abstract concepts within the Science curriculum.

3. Impact

Chris Quigley's milestones provide a breakdown of the progression of skills and knowledge over a two-year cycle. These have been mapped out by the subject leader to ensure that each skill within the Working Scientifically curriculum is taught multiple times throughout the cycle. Class teachers are able to assess pupil's attainment through a range of informal strategies. In order to gain a well-rounded view of pupil's attainment, teachers are encouraged to use evidence from verbal discussions, drawings, conclusions and explanations. Evidence of this is recorded on pupil "checklists" at the back of exercise books.

The subject leader monitors the impact of the taught curriculum through learning walks, work trawls, pupil interviews and staff discussions. This monitoring is recorded termly on Subject Snapshots, which are shared with SLT. Feedback is given to staff, including individual or year-group feedback as appropriate. The findings feed into annual Subject Status Reports, which are used to identify key priorities for the subject, including changes to Long Term Plan, as part of the SIDP.