



St Agatha's Catholic Primary School

Policy	Science Policy
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Governor Committee	
Statutory Policy	Y/N

Rationale

Science is an introduction to the world of living things, materials and physical processes. It is a largely practical subject which develops a spirit of enquiry by encouraging curiosity and thinking skills whilst allowing children the opportunity to develop their God given talents.

“Science has changed our lives and is vital to the world’s future prosperity, and all pupils should be taught essential aspects of the knowledge, methods, processes and uses of science.” National Curriculum, 2013

Curriculum

We aim to deliver a curriculum that ensures 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.
- To foster and inspire a scientific curiosity and become creative and independent in their approach to scientific work
- Build transferrable skills which encourage children to question and investigate whilst developing an awe and wonder for natural phenomena.

Teachers will use the National Curriculum, alongside our chosen scheme of learning to plan and deliver progressive and challenging lessons in a topic based approach. In the Early Years, science is planned for using The Natural World as a driver for learning, in addition to incidental and child led learning. As a school, opportunities to promote spiritual, moral, social and cultural development are systematically planned and delivered to ensure every pupil benefits.

Working Scientifically

The National Curriculum (2013) places a strong emphasis on conceptual knowledge and scientific processes, which we strive to develop and build on throughout the school. Each year group focuses on key features of scientific enquiry and the spoken language to explain and embed these key skills and ask and answer scientific questions reliably. It will also include research using secondary sources and the collection, analysis and presentation of data. These skills are continually built upon and embedded through cross curricular links.

As a school, we promote ‘whole child’ learning and therefore working scientifically may be developed in other subjects such as DT, Maths or Geography and will include enquiries of interest to the children or incidental learning. This is vital to ensure children have built up sufficient understanding of science and developed the skills to engage meaningfully in their further education.

Teaching and Learning

The school uses a variety of teaching and learning styles in science lessons. Our principal aim is to develop the children’s knowledge, skills and understanding. We do this through a mixture of whole-class teaching and individual or group activities. Teachers encourage the

children to ask as well as answer scientific questions. Children have the opportunity to use a variety of secondary sources of information, where it will enhance learning as well as gaining first hand experiences, for example, the use of books, photographs, graphs, diagrams, models and ICT. In addition to this we encourage a range of investigations, trips, visits, workshops and themed activities or days wherever possible.

We recognise the fact that we have children of differing scientific ability in all our classes and provide suitable learning opportunities for all children such as: setting common tasks that are open-ended and can have a variety of responses, providing a range of challenges with different resources and incorporating high order questions that apply to scientific thinking.

Cross curricular links

Science forms a part of many other subjects within our school through skills, research, investigation and recording. Scientific skills such as questioning and observation are used throughout the curriculum. Links with other curriculum areas, especially English, Maths, DT, Geography and ICT are developed discreetly within the curriculum. Teachers are encouraged to do so in order to develop a 'whole child' approach to learning and follow the interests of the children in their class. This also allows for pre teaching and over learning of key vocabulary and concepts.

Inclusion

We employ a range of teaching approaches linked to different learning styles to meet the varying needs and interests of children and to enable them to reach their full potential. We teach all children in the class together whilst working on the same topic. At the same time, we address the need for all to master the curriculum and for some to gain greater depth of proficiency and understanding.

Information Technology

Interactive resources and equipment are used to introduce and consolidate concepts when they can convey scientific ideas and enhance investigative skills.

Assessment

Children are assessed according to the schools Assessment Policy using both formative and summative assessment. This enable the tracking of progress over time and highlights areas or concepts for further development.

Marking and Feedback

Verbal and written feedback are given according to the Marking and Feedback Policy, however feedback in Science lessons would expected to be verbal and in the moment to allow for further discussions and to strengthen understanding.

Home/School Links

The expectations of home learning can be found in the Learning at Home Policy.

Home Learning activities are provided for each year group throughout the year, a number of these activities will make links to the Science Curriculum, whilst embedding investigative skills and working scientifically.