Unlocking….

Minds that learn, Hearts that love, Faith that gives

Subject Intent, Implementation and Impact

Subject	Subject Lead	Scheme
Science	Laura Edwards	St Peter's

Science Intent

At St Peter's school we are recognise the importance of science and scientific enquiry. A good understanding of scientific concepts and working scientifically is essential to support student's work across the curriculum as well as in the wider world.

Science at St Peter's aims to inspire future learning through a fun, practical and engaging high-quality science curriculum. We do this through fully adhering to the science national curriculum and developing curiosity through experimentation.

Wherever possible we intend to deliver lessons through a variety of different means including investigations, questioning, research and using real world examples of science in action.

We believe in encouraging an understanding and respect of the wider world through the use of our outdoor spaces and forest school sessions along with giving the students chances outside of school to engage with science and scientists.

Science Implementation

Teaching and Learning

In ensuring high standards of teaching and learning in science, we implement a curriculum that is progressive throughout the whole school. We ensure that all children are provided with rich learning experiences to prepare them for life in an increasingly scientific and technological world, by developing the use of computing in investigating and recording, developing their scientific vocabulary and making links between different topics.

Teachers of science create a positive attitude to learning science within their classrooms by following our vision and values document for science.

Our values are:

We are moving our skills and knowledge forward.

We are testing out.

We are learning practically and through discussions.

We are engaged and doing.

We are scientists.

We are curious about the world

We are asking questions.

We become investigators.

Science is taught consistently, once a week for two hours (an afternoon session), but is also discreetly taught in many different contexts throughout all areas of the curriculum. For example, through English, i.e. writing a letter about a current scientific issue or a biography of a scientist. We are lucky to have an extensive site and regularly use the outdoor space for our learning. EYFS and KS1 have weekly forest school sessions through which science objectives are taught and reinforced. The whole school has access to forest school, the pond area and the wider site in order to conduct science based investigations and enrich their curriculum learning.

Planning

Planning for science is a process in which all teachers are involved to ensure that the school gives full coverage of 'The National Curriculum programme of study for Science 2014' and 'Understanding of the World' in the Early years and Foundation stage. Science is taught as discreet units on a two-year rolling programme fitting in with class topics as appropriate. Teacher's plan to suit their children's interests, current events, their own teaching style, the ability of the children in the class and the availability of any support staff or resources.

As part of each topic the teachers provide a KCV document which includes key vocabulary and concepts for students to refer to. Rising star assessments are used at the beginning and end of a topic to assess learning and progress of the national curriculum objectives and working scientifically objectives are assessed through in-class investigations which are tailored to specific outcomes.

Pupil voice is used to further develop the science curriculum, through questioning of pupils' views and attitudes towards science, to assess the children's enjoyment of science, and to motivate learners.

Our place in the world

Through enrichment days such as science week and events such as the Big Science Event, we promote the profile of science and allow children the time to freely explore scientific topics. Students are provided with opportunities to continue their learning outside by observing real time changes in their environment and investigating the natural world. By investigating the biodiversity on our school site we are making changes to increase the diversity of species and plants and improve our environment -while collecting real time data and forming action plans. We try to use our 'outdoor classroom' as much as possible to enrich our learning experiences.

What is the impact of our teaching?

The impact and measure of our science curriculum is to ensure children not only acquire the appropriate age-related knowledge linked to the science curriculum, but also skills which equip them to progress from their starting points, and within their everyday lives.

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We will measure the impact of our curriculum through the following:

- Tracking of knowledge in pre and post learning assessments.
- Pupil reflection on learning outcomes.
- Pupil discussions about their learning.