

ST PETER'S CHURCH OF ENGLAND PRIMARY SCHOOL

'In Jesus, we learn, live and grow together'

Be The Good Soil (Mark 4: 1-20)

Curriculum Intent, Implementation and Impact for Science

Science Curriculum Intent

At St Peter's Church of England Primary School, we have designed our characteristic Science curriculum with the intent that our children will become resilient, accepting, mindful and inquisitive learners. Our Science curriculum allows children to discover and gain an insight into the world that we live in. We see the teaching of Science is vital for children to understand their own world, the world of others and the world around them.

Our Science lessons are intended to offer a broad and rich Science curriculum to allow for coverage of the areas prescribed following the national curriculum as well as adding additional units specific to St Peter's including opportunities to explore the grounds we are located in; apply prior knowledge learnt earlier in the school; and preparing for learning in Key Stage 3.

The curriculum lessons have an intention of providing a high quality, coherent and progressive experience of the subject, with space for cross-curricular learning. Through each unit, children will discover which strand of science – biology, chemistry or physics – it belongs to which will further prepare them for Key Stage 3 where they are taught separately.

The curriculum ensures opportunities for children to develop positive attitudes and values towards the subject. This is aided by the inclusion of the St Peter's Science Principles. The intent is to make sure that children understand the relevance of Science in today's modern world and how it affects our lives.

We will deliver a curriculum that:

- Celebrates the diverse and rich community at St Peter's Church of England Primary School.
- Inspires creative learning through brilliant teaching practices that build on prior Science learning and allow for repetition and progression of skills that build upon starting points of our pupils.
- Encourages our children to be inquisitive about the world in which we live in and how our actions impact upon it

Science Curriculum Implementation

- The Science curriculum is led and overseen by Mr T. Jolly who will monitor, evaluate, review and celebrate good practice.
- The Science curriculum will follow the 2014 National Curriculum with the statutory units taught as well as supplementary units that are specific to the needs of St Peter's pupils
- Science follows a whole school approach, which will be taught discretely twice a week with annual 'STEM Week' where we look deeper at a common theme linked to a school value.
- Science Lessons build upon prior learning and develop skills year upon year.

In addition:

- The Science subject leader will be given training and the opportunity to keep developing their own subject knowledge, skills and understanding, so they can support curriculum development and their colleagues throughout the school.
- Assessment of Science will be in line with the whole school feedback policy and teachers will assess progress and attainment of Science.
- Assessment will include inputting data termly relating to the units taught and an end of year statement stating the children's proximity to their age related expectation in Science.
- Opportunities to visit external museums and educational visits **St Peter's Church every half** term, as well as visits of other places of worship throughout the children's time at our school.

In Years 1-5, children are taught an additional unit to supplement the curriculum. Year 1 study habitats to consolidate their EYFS 'In the Garden' work and prepare them Year 2. Year 2 study bees prepare them for future learning about pollination and life cycles. Year 3 study the life cycle of a frog, to allow them the opportunity to use the school pond and prepare them for Year 5. Year 4 study trees, as they form a prominent part of our school grounds and provide a link between Year 3 and the additional St Peter's unit in Year 5. Year 5 study plants to consolidate their learning further down the school as well as preparing them for new learning in Key Stage 3.

Each teacher has been provided with documentation to support them and their pupil's understand of the structure and implementation of the St Peter's Science curriculum overview and how it relates to future and prior learning. These are prominent both in pupil's books and on teaching resources to allow for reference. The St Peter's Science Principles, which show the requirements expected across Science lessons, are also displayed in books and on display books. Children evidence the use of these in each lesson in Key Stage 2.

Science Curriculum Impact

Here at St Peter's, we believe that the impact of using a combination of the statutory National Curriculum and additional supplementary St Peter's units will enable the children to have a better understanding of their own world, the world of others and the world around them.

<u>All</u> children will be more informed about Science in the local and wider world and the impact it has on them and others. Our curriculum enables high quality work to be produced and evidenced, showcasing a deep understanding of the core Science knowledge that will allow them to be prepared for and thrive in the future education when moving into Key Stage 3. This evidence will be seen through using the correct vocabulary, explanations and respectful opinions even though it can contradict the school's and their own faith's beliefs. Impact will be seen by all teachers and children enjoying the experience of teaching and learning Science, linked to our core St Peter's Principles, and understanding how it can help them in their future. Science at St Peter's develops pupils'...

- core knowledge and understanding of the three strands of Science: biology, chemistry and physics;
- understanding and respect for views they learn in Science which may contradict their own worldly, cultural or religious beliefs;
- skills of enquiry and response through the use of Scientific vocabulary, predicting, questioning, investigating and evaluating;
- skills of persevering through challenge and personal enjoyment and how to appropriately respond to these.

Science at St Peter's encourages pupils to...

- use the correct and appropriate age related scientific vocabulary;
- make predictions based on the tier own knowledge and the information they have;
- to ask questions of themselves and others;
- to evaluate their learning and opinions/work of others;
- to challenge their own thinking;
- to enjoy their learning.

Science at St Peter's enhances pupils'...

- awareness and understanding of Science in the world around them.
- knowledge of the impact of Science on the world around them

Science at St Peter's offers...

- opportunities for indoor and outdoor learning experiences;
- education visits to places of significance to pupil learning such as the Museum of Science and Industry and 'Communitree' as well as many others.