Overview of Science at St Paul's C of E Primary School

Walk On Water

School Vision:

To inspire a community which values everyone and their God given potential, encouraging all to flourish, achieve and believe in future possibilities.

Science Vision:

For every pupil to leave as curious and practical scientists with a clear understanding of both scientific knowledge and skills enabling them to flourish and achieve well. Regular investigative science inspires curiosity and enables pupils to develop their skills in predicting, investigating and evaluating.

Intent

We believe that through science, children have the opportunity to investigate and develop the skills of observation, enquiry, analysis, interpretation and problem-solving. We encourage collaborative and independent working.
Resources provide appropriate and stimulating scientific experiences which encourage pupils to make sense of the world around them. Pupils will:

- Develop a positive attitude to science and an awareness of the influence of science in daily life
- Meet the requirements of the National Curriculum in a way that is appropriate and challenging
- Develop knowledge, investigation skills and an understanding of cause and effect
- Apply their scientific knowledge and skills to solve problems in a variety of contexts
- Develop an understanding of safe ways of working and become increasingly independent
- Use scientific contexts to develop and consolidate the cross curricular skills of English, mathematics and computing

Implementation

Teachers will plan lessons where children can become more independent learners. Key vocabulary will be displayed in classrooms and children are encouraged to engage with science 'working walls' regularly. Displays around the school and some collective worship sessions are dedicated to promoting science in daily life.
In the Early Years Foundation Stage:

- Science learning focusses on developing enquiry skills and high quality observations as set out in the early learning goals.
- Children are taught science through 'Understanding the World'. This is taught through teacher-led activities and consolidated through child-initiated learning.
- Forest school visits are weekly and visits to the farm are regular.

Key Stage 1 and Key Stage 2

- Weekly science lessons.
- Science units show progression from previous year groups.
- Lessons explore both scientific knowledge and understanding.
- Key scientists are explored in lessons adding to pupils' cultural capital.
- A 6-week environmental science unit takes place each year.
- 'Investigation wheels' are referred to in practical lessons so pupils develop and understanding of the different scientific enquiry skills.
- End-of-unit knowledge quizzes are used to assess children's learning.

Our Science learning also incorporates our vision and encompasses our five aims:

Inspire- Be inspired by significant scientists throughout the curriculum.

Belong - Pupils work collaboratively to problem solve and investigate concepts.

Achieve and Flourish – The challenging curriculum enables children to know more and remember more.

Believe – Pupils are encouraged to reflect on the wonder of the natural world.

Impact

By the time the children at St. Paul's leave our school, they will have been inspired in science. They will have developed positive attitudes to the subject and be aware of science in their everyday lives.

Pupils will have experience of managing risks enabling them to work safely and independently across the subject. They will be able to apply their scientific knowledge and skills to solve a variety of problems.

Pupils achieve highly in standardised assessments. Their strong foundations in both scientific knowledge and skills will enable them to access their forthcoming secondary education.

Cross Curricular Links

Maths—displaying results from scientific enquiry

Geography—understanding of different climates zones and biomes and the natural life that is found there. Physical geography including local wildlife (flora and fauna in our school).