



Kirk Langley Church of England Primary School

Science

Kirk Langley is a Church of England Primary School and our family believe that 'Every Child Can Shine.' Our visions and values, built on the living Gospel of Christ within daily life, are at the core of everything we do. They underpin our teaching and learning and provide an environment which prepares our pupils in being respectful, confident, thriving citizens.

Daniel 12:3

'Those who have insight will shine brightly like the brightness of the expanse of heaven, and those who lead the many to righteousness, like the stars forever and ever.'

We aim to provide a thriving, inspiring and stimulating learning environment where children achieve the very best they are capable of because all the staff value their different learning styles. Kirk Langley Church of England Primary School is committed to Christian values where children, parents/carers and our community know us by our actions.

Within a Christian ethos we aim to:

- Promote a positive attitude to life-long learning, nurturing the development of self-esteem; leading to aspirational, independent learners that are prepared to be challenged and take risks in a diverse and ever changing world.
- Provide the children with valuable experiences and opportunities, through a broad, balanced and exciting curriculum, where learning is purposeful and engaging.
- Use a variety of teaching strategies and resources effectively and creatively; encouraging each child to progress and attain to the highest possible standards, in relation to their age and ability.
- Strongly believe in the partnership of parental involvement in the education of our pupils.

- Demonstrate and foster respect for ourselves and others within the school, local community and the global community.
- Respect the belief of others and celebrate cultural diversity.
- Encourage spiritual and moral values.
- Explicitly promote the fundamental British values of democracy, the rule of law, individual liberty and mutual respect and tolerance of those with different faiths and beliefs through a 'living' curriculum.
- Value each child as an individual within the school and respect personal beliefs.

Science: Intent, Implementation and Impact

Curriculum Intent: Science teaching at Kirk Langley aims to give all children a strong understanding of the world around them whilst acquiring specific skills and knowledge to help them to think scientifically, to gain an understanding of scientific processes and also an understanding of the uses and implications of Science, today and for the future. At Kirk Langley we strive to ensure:

- scientific enquiry skills are embedded in each topic the children study and these topics are revisited and developed throughout their time at school. Topics, such as Plants, are taught in Key Stage One and studied again in further detail throughout Key Stage Two. This model allows children to build upon their prior knowledge and increases their enthusiasm for the topics whilst embedding this procedural knowledge into the long-term memory.
- All children are appropriately challenged at their level which builds upon prior learning.
- Children are encouraged to develop and use a range of skills including observations, planning and investigations, as well as being encouraged to question the world around them and become independent learners in exploring possible answers for their scientific based questions. Whilst also reflecting on their investigations.
- Specialist vocabulary for topics is taught and built up, and effective questioning to communicate ideas is encouraged. Concepts taught should be reinforced by focusing on the key features of scientific enquiry, so that pupils learn to use a variety of approaches to answer relevant scientific questions.

Curriculum Implementation:

- knowledge (including vocabulary) all children must master as per the national curriculum expectations;
- A cycle of lessons for each subject, which carefully plans for progression and depth with appropriate support enabling every child to succeed;

- Challenge questions for pupils to apply their learning in a philosophical/open manner;
- Trips and visits from experts who will enhance the learning experience;
- Investigative questions in the form of: guided questions or pupil-led, which children can investigate to develop their scientific enquiry.
- Appropriate feedback, written or verbal, so children can understand their next steps.

Curriculum Impact:

Our Science Curriculum is high quality, well thought out and is planned to demonstrate progression. If children are keeping up with the curriculum, they are deemed to be making good or better progress. In addition, we measure the impact of our curriculum through the following methods:

- Children have a broad understanding of the scientific world around them. They can discuss their learning.
- Their knowledge can be applied through other scientific topics.
- They can ask scientific questions and, with guidance, design and carry out appropriate investigations.

Termly summative assessments will be carried out and analysed for gaps in the data.