Whitfield St James’ CE (VC) Primary School

***Science***

***Intent, Implementation and Impact statement***

**Intent**

**Our Science Curriculum is based on the 2014 National Curriculum programmes of study supported by Cornerstones and aims to ensure that all children:**

* Develop scientific knowledge and conceptual understanding through the specific disciplines of biology, chemistry and physics.
* Develop an 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 skills required to understand the uses and implications of science, today and for the future.

We understand that it is important for lessons to have a skills-based focus, and that the knowledge can be taught through this at Whitfield St James’ Primary School, we understand that children have a natural inquisitiveness. Using Cornerstones as a platform it is shaped to ensure it is fully inclusive to every child regardless of their learning needs. Science fosters this curiosity of the universe, an understanding of the world around us and a respect for both living and non-living things. We believe that a broad and balanced science curriculum must comprise of several aspects; knowledge, conceptual understanding, skills and a positive attitude towards the subject. The programmes of study in the National Curriculum science document promote a deep understanding of knowledge and concepts that are built upon through Primary School. We have strengthened knowledge of the Science Curriculum at our school – using Cornerstones as a platform - to show what is taught and where regarding the teaching of Science (as evidenced through a whole-school, yearly topic plan).

**Implementation**

Fundamental to the implementation of our science curriculum is an insistence of high standards of learning, supported by enthusiastic and highly skilled staff.

Our whole school approach to science involves the following:

* Early Year Foundation Stage science is linked to the Specific Area of ‘Understanding the World’. Our outside areas which are in the development stage will play a large role in this, allowing pupils the opportunity to observe animals and plants and understand the differences between living things.

At Whitfield St James’ a long-term plan, with carefully constructed units of work covering the full range of skills, is in place in order to achieve this. Medium term plans, created by Cornerstones, ensure coverage of both the required knowledge and the subject specific skills. Individual sessions are planned to inspire, engage and challenge pupils in response to their needs. Children are given a wide variety of experiences both in the classroom and out. We encourage school visits and visitors into school to enable the children to gain first-hand experiences such as “Science Days” to support and supplement their learning.

**Impact**

The successful approach at Whitfield St James’ results in a high quality, challenging and engaging science curriculum, that provides children with the foundations for understanding the world. Through trips, outside visitors and hands on learning, pupils understand the real-world context for science and the applications of accurate scientific investigation skills. Children understand the contribution that scientists have made through the ages, drawing on cross-curricular skills to appreciate the contributions made by those before them. Children at Whitfield St James’ overwhelmingly enjoy science and this results in motivated learners.

Our whole school Science display board showcases the learning in Science here at Whitfield St James’ Primary School.

**Our children’s view of Science is** positive. They describe experiments as enjoyable, especially when they have to work as a group and organise themselves. Children can recall what they have learnt in Science. Leaders regularly meet with children and answer questions about their experience in Science. The outcome of this demonstrates the enjoyment and the broadening use of scientific vocabulary shows good clear progression. Children particularly enjoyed our whole school Science Day based around “Explosions!” They talked with enthusiasm about this special day.