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**Statement of Intent for Science**

Across the school we aim to inspire curiosity about the natural world and how we can protect it.

We aim for our children to be inquisitive and to ask questions about the world around them and for our children to understand how Science relates to their lives and how it can shape the future.

**Early Years**

Within the Early Years, we seek to develop children’s scientific vocabulary and understanding of concepts through practical, first hand experiences, effective interactions with adults and the sharing of quality stories, songs, rhymes and non-fiction books. We recognize that many children have limited experiences outside of school to promote this vocabulary learning, so we plan a rich programme within the school including cooking, gardening, visitors, exploration of the grounds and off-site visits.

**KS 1**

As children move through the school, we maintain a strong focus on developing vocabulary to support the many children within our school who are new to English or have delays in their expressive language. Vocabulary teaching is explicitly planned for within each lesson and reinforced through displays, songs and linked texts shared outside of the Science lessons. We use sentence stems and sensitive reframing to teach children to use their observations to develop clear expectations.

Each Science lesson includes explicit teaching of carefully sequenced substantive knowledge and the opportunity for children to work scientifically and connect this theory to what they observe as they work practically.

The disciplinary knowledge that children need to engage in this scientific enquiry is also taught explicitly and progressively. For example, children are taught how to draw and label simple scientific diagrams in Year 1, then more complex diagrams such as life cycles or food chains in Year 2.

Within KS1, the longitudinal studies for each year group and the majority of half-termly units of learning\*include an opportunity for children to follow the full scientific enquiry process:

1. Ask a a question
2. Make a prediction
3. Make a plan and follow it
4. Observe
5. Record the results
6. Draw a conclusion

This process is scaffolded carefully so that children become more confident and independent over time. \*There are a couple of exceptions e.g: the Y2 unit ‘Habitats around the world’, which due to the nature of the content is more focused on research using secondary sources.

The learning of substantive knowledge is also carefully scaffolded so that children can acquire, organize and remember new learning.

Each lesson begins with a ‘recap’ of prior learning to enable children to practice retrieval of their existing knowledge and make connections. This also allows teachers time to re-address any misconceptions so that learning is secure before moving on.

We seek to raise children’s aspirations within Science and help them to understand the contribution that Science makes to their lives and our school community. As part of our Early Years learning about ‘Real Life Superheroes’, we look at scientists and the importance of scientific discovery. Our use of the ‘Developing Experts’ resources in KS1 helps children to see the relevance of their science learning to the world around them and to learn about different careers within Science.

As a church school, we aim to teach children the importance of caring for the environment, in line with the Christian beliefs about safeguarding God’s creation, and to instil in them the confidence that they can make a difference to become a courageous advocate.