



Statement of Intent for Science 2023-24

Learning Growing Believing Together

“Encourage one another and build each other up”
Thessalonians 5:11

At Trinity Church School we recognise the importance of Science in every aspect of daily life. Our science curriculum aims to prepare children for the wider world. We strive to ensure that the lessons we deliver achieve the three aims of the science national curriculum so that pupils understand the science and have the skills to engage with the knowledge and recognise where it fits in the wider world.

It is our aim that children will:

- develop scientific knowledge and conceptual understanding through the specific disciplines of biology, chemistry and physics
• develop 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
• be equipped with the scientific skills required to understand the uses and implications of science, today and for the future.

Implementation/Breadth of Study

Teachers create a positive attitude to science learning within their classrooms and reinforce an expectation that all children are capable of achieving high standards in science. We follow the National Curriculum for our lessons. Throughout the programme of study, the children will acquire and develop the key knowledge that has been identified within each unit and across each year group.

Table with 3 columns: EYFS, KS1, and KS2. It details the science curriculum content for each year group, including topics like 'Everyday materials', 'Animals including humans', and 'Plants'.

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| <p>Naming parts of the body and senses and understand our needs.<br/>Understanding the affect humans have on the world.</p> |  | <p><b>Rocks</b></p> <p><b>Plants</b></p> <p><b>Living things and habitats</b><br/>Grouping living things (Y4)<br/>Life cycles (Y5)<br/>Classification system (Y6)</p> <p><b>States of matter</b></p> <p><b>Sound      Electricity</b></p> <p><b>Properties and changes of materials</b></p> <p><b>Earth in Space      Evolution</b></p> |
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- Progression in science is ensured through the design of our curriculum where knowledge and skill builds year on year as children revisit prior learning and broaden and deepen their scientific knowledge.
- Recall tasks form part of every lesson. As the children’s knowledge and understanding increases, and they become more proficient in selecting, using scientific equipment, collating and interpreting results, they become increasingly confident in their growing ability to come to conclusions based on real evidence.
- Working Scientifically skills are embedded into lessons to ensure that skills are systematically developed throughout a child’s science journey at Trinity and new vocabulary and challenging concepts are introduced progressively through direct teaching.
- Teachers use precise questioning in class to test conceptual knowledge and skills, and assess children regularly to identify those children with gaps in learning, so that all children keep up.
- At the end of each unit a summative test is carried out and a ‘pop’ task is completed to gage children’s level of understanding.
- Each class has a science working wall, which children make regular use of. Key vocabulary is displayed and their scientific journey is made clear, allowing children to reflect on their previous learning.
- Trips and visits are tailored to extend and deepen children’s knowledge.
- Visitors linked to topics are encouraged to come into school, to allow children to ask questions, be curious and broaden their understanding.
- After school clubs run by mad science are offered.

### **Impact/Assessment**

#### **As a scientist leaving Trinity, every child will:**

- Have a sense of awe, wonder and curiosity in the science in the world around them and have the skills to investigate, experiment and discover for themselves
- Be confident to ask their own questions and use their scientific skills to try to discover the answers
- Understand, and be inspired by the fact, that science is ever-changing and science changes our lives
- Have experienced a wide range of inspiring engagement and enrichment activities including educational visits and expert visitors
- Have a firm grounding in the disciplines of biology, chemistry and physics and a secure bank of knowledge and scientific skills which they can build on in the next stage of their science education.

#### **We measure the impact of our curriculum through the following methods:**

- A reflection on standards achieved against the planned outcomes;
- A celebration of learning for each term which demonstrates progression across the school;
- Headstart summative assessments at the end of each unit
- Tracking of knowledge in pre and post learning quizzes;
- POP tasks
- Pupil discussions and conferences to assess their understanding of key knowledge and vocabulary
- Book Monitoring
- Learning Walks including drop ins and formal lesson observations