



## Trinity School Curriculum Statement for Science

### INTENT

At Trinity School, we believe that through high quality teaching and learning of science, children will be taught transferable skills, attitudes and scientific vocabulary that will equip them for their future. We aim to provide an education in Science which will stimulate and excite children's interest and provide a variety of scientific experiences which are realistic and relevant to the child's future. We want to facilitate an inquisitive and motivated approach to science through discussion, investigation and active learning, where children are encouraged to ask and answer scientific questions. We want to facilitate an inquisitive and motivated approach to science through discussion, investigation and active learning, where children are encouraged to ask, answer and investigate scientific questions. By the end of their primary education, we want children to be able to plan and carry out scientific investigations choosing the most appropriate equipment for themselves, with consideration for their own safety and others. They will be scientists – wanting to learn more about the world and how it works.

### IMPLEMENTATION

At Trinity School we follow the Jersey National Curriculum and plan lessons using the CSHC science pathways approach. We use the Big Ideas of Forces, Matter, Energy and Survival as an overview for all the units planned.

Within the EYFS, Science is developed through purposeful, play-based experiences and will be represented throughout the indoor and outdoor provision. The learning will be based on pupils' interests or current themes and will focus on the expectations from Birth to Five Matters/ Early Learning Goal Outcomes. Through the real life experiences, for example, investigating snow and ice, allow children the opportunity to use the skills learned in lessons in a practical way, outside of the subject specific time. Resources are continually available so that children have time to practice their skills throughout the school day. As the pupils progress through, more focus is placed on representing their scientific knowledge through more formal experiences.

In Key Stage 1, the principal focus is to enable pupils to experience and observe phenomena, looking more closely at the natural and humanly constructed world around them. They are encouraged to be curious and ask questions about what they notice. They are helped to develop their understanding of scientific ideas by using different types of scientific enquiry to answer their own questions, including observing changes over a period of time, noticing patterns, grouping and classifying things, carrying out simple comparative tests, and finding things out using secondary sources of information. Most of the learning about science is done through the use of first-hand practical experiences, but there is also some use of appropriate secondary sources, such as books, photographs and videos.

Science is taught for 1 hour a week in KS1.

In Lower Key Stage 2, the principal focus is to enable pupils to broaden their scientific view of the world around them. They do this through exploring, talking about, testing and developing ideas about everyday phenomena, the relationships between living things and familiar environments, and by beginning to develop their ideas about functions, relationships and interactions. They ask their own questions about what they observe and make some decisions about which types of scientific enquiry are likely to be the best ways of answering them, including observing changes over time, noticing patterns, grouping and classifying things, carrying out simple comparative and fair tests and finding things out using secondary sources of information. They draw simple conclusions and use scientific language, first, to talk about and, later, to write about what they have found out.

In Upper Key stage 2, the principal focus is to enable pupils to develop a deeper understanding of a wide range of scientific ideas. They do this through exploring and talking about their ideas; asking their own questions about scientific phenomena; and analysing functions, relationships and interactions more systematically. At upper Key Stage 2, they encounter more abstract ideas and begin to recognise how these ideas help them to understand and predict how the world operates. They also begin to recognise that scientific ideas change and develop over time. They select the most appropriate ways to answer science questions using different types of scientific enquiry, including observing changes over different periods of time, noticing patterns, grouping and classifying things, carrying out comparative and fair tests and finding things out using a wide range of secondary sources of information. Pupils draw conclusions based on their data and observations, use evidence to justify their ideas, and use their scientific knowledge and understanding to explain their findings.

Science is taught for 1 hour a week in KS2, but can extend if needed and appropriate.

From Year 1 to Year 6 teachers are expected to teach one Cornerstones Investigation per science unit and set out in the Cornerstones planning document.

## IMPACT

By the time children leave Trinity School they will:

- Be able to articulate their understanding of scientific concepts and be able to reason scientifically using rich language linked to science.
- Know more, remember more and understand more about the world around them.
- Demonstrate a love of science and an interest in further study and work in this field
- Retain knowledge that is pertinent to Science with a real life context.
- Be able to question ideas and reflect on knowledge.
- Demonstrate a high love of mathematical and scientific skills through their work, organising, recording and interpreting results.
- Work collaboratively and practically to investigate and experiment.

By the time children leave in Year 6 the majority will achieve age expected outcomes.

We measure impact by the triangulation of lesson observations, work scrutiny and pupil voice, as well as this we carry regular Curriculum Team discussions – where areas for development are discussed, and for which targets for the year are collaboratively developed. The outcome of this all goes together to form the coming years action plans.