



# Our Science Curriculum: Glastonbury Thorn School

The Science curriculum at GTS is accessible to all and provides the children with endless possibilities to learn about human and plant biology, the weather and every day materials. In line with our curriculum ethos, Science is taught through the children's own experiences and learning possibilities within the community and beyond, ensuring that engagement and involvement is high. Our Science provision is practical and visual, ensuring that learning opportunities are accessible to all types of learners. The children at GTS are given the opportunities to develop individual skills through the teaching of the National Curriculum objectives within the school's Long Term Plan and Curriculum Intent.

In EYFS, the children begin their journey as Super Scientists by focusing on themselves. The children get a better understanding of their body parts and some of their basic functions. The children gain a better understanding of animals, beginning with pets and then more abstract animals such as classifying jungle animals. In keeping with our curriculum ethos, the children develop an understanding of Science all around them, including plants, materials and the weather, including seasonal changes.

In KS1, teachers follow the National Curriculum objectives, which have been organised to increase children's understanding in the scientific key areas, showing progression from EYFS through to the end of Year 2. In Year 1, the children develop their understanding of the human body, including gaining knowledge of the human senses. The children gain a better understanding of classifying animals, trees and plants with some developing understanding of the effect of climate change on the environment. The children also learn more about the seasons and how weather effects the world around them. Building on knowledge previously taught, the children test materials for suitability focusing on properties and characteristics. In Year 2, the children's scientific knowledge is developed further by learning about habitats and adaptation, including what plants and animals need in order to survive and how living organisms adapt to changing environmental conditions.

Much of the teaching of Science is incorporated into the GTS focus of 'The Natural World.'

To assess the children's progress and understanding, teachers complete ongoing assessments which focus on the National Curriculum objectives and those children who are meeting the objectives or working below/above. This in turn informs weekly planning to ensure that the provision is adapted accordingly and all children are making expected or better progress. Where written work is appropriate, learning is captured in the children

Learning Journey writing books. Science Scrapbooks for each year group capture evidence of learning and to aid 'knowing more and remembering more.'

Our Cultural Capital intent in Science is through enrichment and building aspirations. (*see Cultural Capital Intent document for Science*)

## Sticky Knowledge

When studying human and animal biology, our 'Sticky knowledge' begins by looking at ourselves. The children name human body parts and their senses. Gaining the knowledge that living creatures have different features for a purpose, the children understand more about woodland, jungle and farm animals and are able to classify them. Within this area of Science, the children understand basic life cycles. Developing their knowledge further, the children gain a better understanding of the basic needs of animals and humans to survive in their habitats and understand that all living things need to adapt to survive, including understanding the importance of food chains.

When studying plant biology, the children at GTS begin by remembering the names of trees and their parts, including parts of a plant and their purpose. To compliment what children learn about adaptation and survival, the children also gain knowledge on what a plant needs in order to survive.

'Sticky Knowledge' in Physics is acquired by naming the seasons and recognising changes in daily weather. This is then developed further in Geography and Science.

To develop their knowledge of materials, the children at GTS begin by talking about different materials and their similarities and differences. The children develop this understanding further by identifying simple properties and their suitability to perform various tasks. The children also explore changes in materials and how they can be manipulated. This is developed further and tested in DT.

Our aim in Science is to continually develop our children's knowledge and understanding in order to not only become Super Scientists of the future, but to also develop curiosity in thinking 'what if?' and 'Why?' We want our children to see the learning opportunities that are all around them and be excited to develop their scientific enquiry further.

