



Subject Leadership



Every day getting better in **Science** in every way!



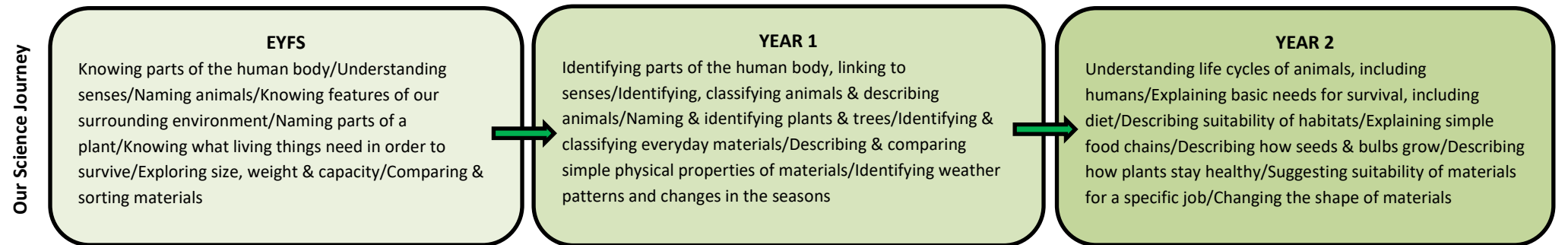
Subject Leadership – Termly Scrutiny of Provision and Impacts

Science

Our Science Curriculum - INTENT

The National Curriculum for Science aims to ensure that all children:

- Develop scientific knowledge and conceptual understanding through the specific disciplines of biology, chemistry and physics
- Master scientific enquiry, asking simple questions, observing, performing simple tests, identifying & classifying things & gathering & recording data
- 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 knowledge required to understand the uses and implications of science, today and for the future



At GTS, we have constructed a Science curriculum that is ambitious and designed to give all pupils, particularly disadvantaged pupils and including pupils with SEND, the knowledge and cultural capital they need to succeed in the subject. We also understand the importance of identifying the impacts of Covid-19 and through our curriculum and high expectations of positive learning behaviours, actively close any gaps in knowledge, revisit and embed prior learning and break down any barriers to achieving in Science.

The school's Science curriculum is coherently planned and sequenced towards knowing more and remembering more, ensuring sufficient knowledge and skills to enable future learning and for children to aspire to be the best they can be in the subject.

At GTS, we approach the teaching and learning of science in various ways. We understand that being a super scientist develops with exploration and therefore we encourage practical science wherever possible. The children develop the core knowledge and vocabulary, develop skills of observation, investigation and fair testing, classification and data handling.

To ensure that children know more and remember more, our learning is continually captured on Graphic Organisers and links are made to other areas of the GTS curriculum where possible.

At GTS, we fully believe that we learn through connections, linking skills and knowledge with other areas of the curriculum. Therefore the curriculum is not 'narrowed' into subject learning journeys, it is broadened into a learning journey that engages the whole child and gives all children every opportunity to achieve.


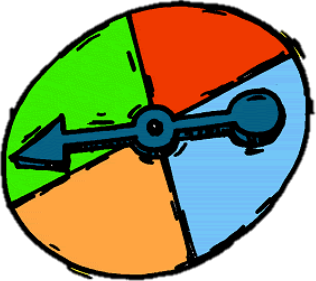


The curriculum is successfully designed and adapted to develop ambitious, aspirational children and at the same time, meets the needs of pupils with SEND and children who are disadvantaged, developing their knowledge, skills and abilities to apply what they know and can do with increasing fluency and independence.

At GTS, we are Scientists!



Science Curriculum Drivers – INTENT



Curriculum Drivers	Our Intent
<p data-bbox="136 256 176 456">Knowledge</p> 	<p data-bbox="689 209 2123 491">Our Science curriculum provides the foundations for a better understanding the world. Through acquiring new skills and knowledge, Children at GTS understand how science can be used to explain what is occurring, predict how things will behave and analyse causes. This knowledge can be gained in many ways, including a practical ‘hands-on’ approach. At GTS, our children develop secure understanding of each concept they are exposed to in order to improve their understanding of the world around them. Our children gain secure knowledge of scientific vocabulary, using technical terminology accurately and precisely. To ensure that our children know more and remember more, strong links are made across the GTS curriculum, including applying mathematical knowledge to improve understanding of science, including collecting, presenting and analysing data.</p>
<p data-bbox="136 568 176 767">Possibilities</p> 	<p data-bbox="689 523 2123 805">Possibilities in Science present themselves in many ways! At GTS, our children are encouraged to be curious and in Science, develop a sense of excitement and curiosity about natural phenomena, the world and how things work. We want our children to experience and observe phenomena, looking more closely at the natural and humanly-constructed world around them. Our children are encouraged to be curious and ask questions about what they notice. At GTS, we follow different types of scientific enquiry to answer questions, find patterns, group and classify and carry out simple tests to gain knowledge and understanding. The learning possibilities at GTS are endless. We love our children to explore, with most of the learning in Science being through the use of first-hand practical experiences. Learning opportunities are everywhere in Science and we want our children to experience them all!</p>
<p data-bbox="136 911 176 1066">Diversity</p> 	<p data-bbox="689 837 2123 1120">Science, at its heart, is rich and diverse. It influences every living thing on the planet and offers much to the evolution of the human race. At GTS, our aim is to ensure that all of our children understand the importance of science and how it shapes the world around us. Through Science and strong links to other parts of the GTS curriculum, we explore significant people and events to ensure that the children, using reflection, can relate this to their own lives and experiences. At GTS, by ensuring that Science is accessible to all types of learners, including disadvantaged and children with SEND, all children are engaged and are able to explore and learn new things. Support and challenge ensures that all children are able to be super scientists! The children understand that anyone can be a scientist and everyone, regardless of creed, gender, race or background, can achieve through exploration and by having strength in their own beliefs.</p>
<p data-bbox="136 1198 176 1398">Community</p> 	<p data-bbox="689 1152 2123 1434">At GTS, we fully understand the importance of our community when it comes to developing children’s skills and understanding of the world around them. We encourage our children to explore our immediate locality and look for inspiration, reflecting on how science is alive and in reach of everyone, including our families. Through cooperation and exploration, children work effectively together to improve their understanding in science. Where possible, we look for learning opportunities through educational visits and visitors. We look to our own locality for inspiration and opportunities to learn more in Science, however we understand that the world is one community living together. Our aspirational citizenship values ensure that children are respectful of equipment and each other, understanding that they have an important part to play in keeping our planet, environment and all living things safe.</p>