

Trevisker Primary School Curriculum Overview for Science

Subject Lead: A O'Boy



Rationale

Our whole school ethos is reflected in our motto 'Friendship and Respect, Learn for Life'. At Trevisker, we adopt an approach of supporting our children to become "Young Scientists." Children are supported to develop scientific knowledge and conceptual understanding through the specific disciplines of biology, chemistry and physics. Furthermore, we wish for them, while at Trevisker, to develop an understanding of the nature, processes and methods of science through different types of science enquiry that help them to answer scientific questions about the world around them. Children must be equipped with the scientific knowledge required to understand the uses and implications of science, today and for the future.

Planning

At Trevisker, we use the National Curriculum to help us create practical and engaging lessons focusing on specific topics in Science. Our 6-7-week units across the school help to create progressive lessons across an array of practical and engaging topics which promote curiosity, intrigue and discovery. Children are encouraged to learn through 6 areas of interest: comparative/ fair testing, research, observing over time, pattern seeking, grouping/ classifying and problem solving. We are also supported in our planning by fantastic resources from "Developing Experts" and "Explorify".

Delivery

Through an array of progressive lessons, our children explore Science in the variety of lesson types as stated above. Through these key principles, children are able to challenge their learning in a progressive nature that allows them to build their knowledge and attempt to solve Scientific problems for themselves. Scientific skills are also supported through our whole school cross-curricular approach where Science can be learnt through a range of engaging learning experiences.



Assessment

Within Science, assessment is a continuous practice. Through our high-quality teaching and monitoring, each year group team is able to support and assess learners based on their individual needs. In Science, teachers are able to create environments where misconceptions can be challenged and evaluated upon while lessons can be adapted and follow a path based on where the children take their learning. Effective formative assessment is carried out at the start of each lesson to revisit previous learning and to ensure children are ready to progress confidently within the well-planned sequence of lessons. From EYFS, through to year 6, across all subjects, our children are able to assess their own learning through the use of colour-coded assessments and our learning lines. Reflection of learning is an important feature of our school ethos and is key to developing thoughtful and inquisitive learners. Also, criteria points are matched against Developing Experts while termly quizzing is used to gather children's attainment. Finally, across all subjects end points are used to celebrate the success of the unit of learning.

Monitoring and Evaluation

Subject leadership time is provided for co-ordinators to monitor planning, attend training, meet with colleagues and offer support. The school leadership team supports in this, and any outcomes inform the action plan and school improvement plan and any future priorities.

Connectivity – how it links to other subjects

Trevisker school follows an immersive curriculum where subjects flow together to allow an all-encompassing platform for learning. Whether it be using Maths to measure time or distance in Science or using ICT to record Science data, Trevisker brings a unity to curriculum learning. By bringing these subjects together, we allow the children to have a simmering experiences of Science more frequently.

Visits, visitors and extra-curricular activities

Experiential learning is at the heart of everything we do at Trevisker. Through our links with The Ogden Trust, Trevisker have been given whole school opportunities of Space Dome visits, guest Science speakers, trips to Newquay Space Port, as well as offering fantastic Science Fairs across the whole academy. Our children flourish whilst putting into practice what they have learned in school in different environments whilst mixing with children from other schools. Providing these rich opportunities to our children is what will help to make scientists of the future.

EYFS

Alongside our EYFS curriculum framework, our aim is to help our children to engage in Scientific learning in the key area of: Communication and Language • Personal, Social and Emotional Development • Understanding the World. Children are encouraged to explore their environment and build their questioning skills as they begin their journey into Science.

Use of ICT

ICT is an integral part of creating a wider experience within scientific learning. Recording information, researching areas of interest as well as using an array of engaging and enjoyable apps and websites such as "Explorify". Likewise creating time-lapse videos, collecting photo evidence to compare and contrast observations using ICT helps to build and support a rich delivery of Science.

Staff Professional Development (CPD)

CPD is a continual focus every year at Trevisker, where staff are given the opportunity to improve their pedagogy in different areas of all subjects. Developing an up to date and rich curriculum is the responsibility of all subject leads and this is supported through subject leader monitoring, release time, observing others, guest speakers and working with our peers in other schools across the academy, just to name a few.

Budget

The Science budget is managed by the SLT along with the subject lead and the LGB. Spending is focused on enabling successful delivery of the subject and fulfilling the subject action plan, which is regularly reviewed in line with the School Improvement Plan..

Governance

At Trevisker, each LGB member is linked to a curricular area and meets with the subject lead to review action plans and agree focus points for discussion and for learning walks. The subject lead will compile a presentation to update the LGB on how Science is developing across the school.



SCIENCE IN ACTION





