

# Science Curriculum Statement

## Intent

Through Science we aim to ignite curiosity in our children; we want them to question why things happen and the way things work. We believe that a high-quality science education provides the foundations for understanding the world through biology, chemistry and physics content. Science has changed our lives and is vital to the world's future prosperity.

The 2014 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.
- 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.
- are equipped with the scientific skills required to understand the uses and implications of science, today and for the future.

We know that children are naturally curious and we encourage this inquisitive nature throughout their time with us and beyond. Science fosters a healthy inquisitiveness in children about our universe and promotes respect for the natural and life sciences. We believe science encompasses the acquisition of knowledge, concepts, skills and positive attitudes. We ensure that the Working Scientifically skills are built-on and developed throughout their journey at school so that they can use equipment, conduct experiments, build arguments and explain concepts confidently and continue to ask questions and be curious about their surroundings. We are proud to have been awarded PQSM mark for our Science outreach.

## Implementation

Science is taught in planned and arranged topic blocks by the class teacher, to have a project-based approach. Lessons make effective and clear links with the topic work through Cornerstones planning and Let's Learn investigations and other subjects, especially literacy, numeracy and information and communications technology (ICT). This supports development of Science capital by linking science to a purposeful context. Teachers have access to knowledge organisers for each science topic to support their teaching. Teachers plan "inspire activities" to develop the children's interest in science and enquiry skills. Outdoor spaces have been developed to enhance science learning, encouraging curiosity and child-led enquiries. Learning opportunities in the school grounds are planned into all class topics. The impact of this is to develop awareness of the outside world and natural environment and engage all learners including those who find the classroom environment challenging. All classes have Wild Tribe sessions in the school grounds throughout the year, offering many opportunities for child led exploration and independent learning.

Our school councillors and Eco Warriors raise the profile of global issues through termly initiatives which have included an art installation showing on the effects of plastics on ocean animals and a global warming science project. Themed weeks such as Science Week, Healthy Schools Week and Outdoor Learning Week increase engagement. Our annual Science Week raises the profile of science through a planned programme of exciting assemblies, investigations, visitors and extra-curricular activities. Engaging activities and events are organised to develop interest and Science Capital. STEM activities are planned to develop creative problem-solving skills through real-life applications. Visitors are invited into school to enrich the children's science learning through exciting hands-on experiences. Teachers plan trips and visits to enrich the children's learning with first-hand experiences. This results in engagement in real-life applications of science. We involve parents and families in sharing science learning by providing opportunities for them to share science learning experiences with their children.

The school has good links with the different sectors of the local community including the Yealmpton Wildflower Garden group, YAGA and Yealm Community Energy. This gives the children opportunities to take part in community initiatives and events.

## Impact

The successful approach results in a fun, engaging, high-quality science learning that provides children with the foundations for understanding the world. Our engagement with the local environment ensures that children learn through varied and first-hand experiences of the world around them. So much of science lends itself to outdoor learning and so we provide children with opportunities to experience this. Through Wild Tribe sessions, various workshops, trips and interactions with experts and local companies, children have the understanding that science has changed our lives and that it is vital to the world's future prosperity. Children learn the possibilities for careers in science as a result of our community links and connection with national agencies such as the STEM learning, Babcock, The National Marine Aquarium, Science hub and our local STEM co-ordinator. Our children enjoy science and this results in motivated learners.

