



## Science at Hyde Park Infant School



### Intent

At Hyde Park Infant School, our vision is to be an inclusive school where all children feel safe, empowered and ready to undertake challenging learning. We are resolute in our mission of preparing all our children for the next phase of their scientific learning journey whilst enabling them to contribute positively to their class, school and wider community.

We have designed our curriculum to provide the best learning opportunities for all of our children to be curious and resilient learners. The curriculum we deliver is aligned to the National Curriculum but extended to include areas such as electricity and light. These additional Programmes of Study widen the children's knowledge base ready for Key Stage 2. We also tailor the curriculum to meet the needs of our children as identified by staff. These include barriers to learning for children who are disadvantaged or face adverse childhood experiences as well as developing a secure skills and knowledge progression that allows both elements of the curriculum to support each other. It is ambitious and designed to give all learners the knowledge and cultural capital they need to succeed a scientist.

The Science curriculum is coherently planned and sequenced to engage our learners and provide them with the knowledge and skills needed for future learning and the next phase in their education. We know that a child's ability to learn is rooted in securely gaining knowledge and then being able to apply and extend that knowledge, as well as the ability to use and apply any associated skills with fluency and accuracy.

Our Science curriculum is designed to blend Scientific Knowledge and skills so that children naturally develop a greater depth of understanding and fluency that will lead to mastery. We are proud to have a wide science curriculum that is tailored to our pupils and goes beyond The National Curriculum. It is exciting, challenging and aspirational.

The children are encouraged to be brave and believe in themselves. We have the same ambitions for all learners: to be the very best they can be. We take seriously our responsibility to support their learning and development as scientists. A significant amount of the Science curriculum has a practical element and this motivates children to engage and take responsibility for their own learning. We know that we will need to consider carefully individual needs and, in some cases, individual programmes of study based around the needs of a child.

All learners study the full science curriculum, which is broad and balanced, and which aims to provide our children with a wide range of experiences. We have further enhanced our programme by the use of the school's core values which are 'lived' daily through our relationships and school ethos.

We are determined to provide the best Science educational opportunities for all children at Hyde Park Infant School.



### Implementation

High quality CPD and a commitment to learning from research and best practice lies at the heart of our curriculum implementation and allows teachers and teaching assistants to deliver an interesting and ambitious science curriculum. All teaching and teaching assistants are provided with opportunities to develop their own subject knowledge and pedagogy to ensure the curriculum can be delivered effectively with maximum impact.

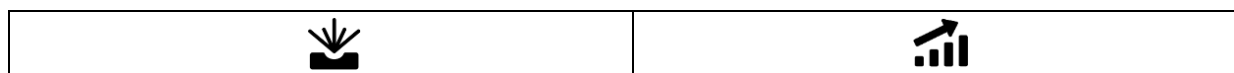
Vocabulary is often a barrier to learning in science so it is taught explicitly in most science lessons and reviewed regularly. It is displayed in the classroom. We ensure that all children can access the learning, by clear coverage of prior knowledge and learning and, within each lesson, consistent scaffolding, chunking of new learning, opportunities for talk and feedback. Opportunities for depth are provided through questioning, reasoning, depth tasks and reading beyond the curriculum. This can be during whole class teaching or as an additional task in a Science lesson.

Formative assessment is used routinely within science lessons, in order to quickly address children's misconceptions and extend their understanding. Summative assessments are used termly to track how pupils are progressing against the curriculum, with regard to scientific enquiry skills and scientific knowledge. Lessons allow pupils to practise our core values within their learning being brave, curious, optimistic, kind, inclusive, enterprising and confident learners.

The curriculum provides children with deep learning experiences that are successively built on across the years, providing children with a sequential understanding of how Science ideas develop and increase knowledge. Repetition also plays an important role in securing knowledge and fluency. Therefore, subject areas are often revisited in successive years to allow knowledge to become sticky. The curriculum provides diverse and rich opportunities from which children can learn and develop a range of transferable skills, such as data handling and Maths or basic micro-biology and baking. Examples include an expert, enrichment or experience all used to gain further knowledge to what has already been taught within the classroom.

We feel it is important to use the children's own communities, heritage and traditions as a starting point for engaging interest. Our curriculum incorporates strong links to our rich geographical and historical areas. As evidenced by the visits we have with Plymouth University to

support our science. We want our children to enjoy science and realise how scientific knowledge can improve their understanding of the world, create opportunities for employment and increase the choices that they will have in life.





<b>Impact</b>	<b>Progress</b>
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Pupils leave Hyde Park Infants School with a secure mastery of scientific concepts and a fluency of enquiry skills. They enjoy science and are ready to engage with the Key Stage 2 curriculum. Through their scientific knowledge they are beginning to have a deeper understanding of naturally occurring phenomena and the world in which they live.

We aim for all of our children to leave The Hyde Park Schools; brave, curious, optimistic, kind, enterprising, inclusive and confident Scientists, with the motivation and passion to continue to learn and empowered and enabled to make the most of their lives.

Children follow a progressive and ambitious curriculum which aligns with The National Curriculum but contains some additional elements. Their curriculum is underpinned by quality teaching that is built around a child's or cohorts needs. In Key Stage 1 progress is measured summatively at the end of a unit once every half term. Formative assessment takes place in EYFS and Key Stage 1 on a continuous basis.

 <b>Cross Curricular Links</b>	 <b>Local Link</b>
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Science – Data handling and recording, measuring and reading scales, mass, length and volume in in real life context.  
DT – Measuring length, mass and volume and shape in a real life context.

At Hyde Park Infant School, we believe that it is important, wherever possible to link to our locality and community. To this end we make use of the local park to when studying plants and have visitors from Plymouth University to support work across other areas of Science.

