



Hampton Hargate Primary School

Science Policy

Date: DECEMBER 2022
Review date: DECEMBER 2023

Hampton Hargate Primary School believes that all children, regardless of ability and behaviour are valued equally. Groups of pupils (eg. SEND pupils, children in care, EAL pupils etc) are not viewed as separate but are part of the whole school approach. Different children's needs are recognised and met through varied and flexible provision and the use of different styles of teaching & learning throughout the curriculum. Every Child Matters (ECM) is an important part of the school ethos and we encourage all staff, governors, visitors, helpers etc to play their part in promoting this. This policy therefore applies to all our children, regardless of their gender, faith, race, culture, family circumstances or sexuality.

This school is committed to safeguarding and promoting the welfare and safety of all children and expects all staff to share in this commitment. All staff must follow the guidelines set out in the relevant section of **myconcern®** which is available online.

Science Subject Leaders: Clare Bayliss and Jade Griffin

Why we believe Science is important

Science is everywhere, we are surrounded by technology and we all exist in a complex natural world both of which illustrates infinite scientific concepts. As children grow up in an increasingly technologically and scientifically advanced world, they need to be scientifically literate to succeed. We believe by providing a high quality science education, provides the foundations for understanding the world through the disciplines of biology, chemistry and physics. Science in our school is about developing children's ideas and ways of working that enable them to make sense of the world in which they live through investigation. We want children at Hampton Hargate to leave us capable, curious, inquisitive, analytical and enquiring individuals. We aim to do this by providing a curriculum that is broad, challenging and fun and thus we can commit to increasing our children's science capital, encouraging all children to see that science is relevant in their lives now and in the future. Teaching science to students is teaching them how to think, learn, solve problems and make informed decisions. These skills are integral to every aspect of a student's education and life, from school and beyond.

Intent -what we aim for our pupils to be:

- Curious and inquisitive thinkers who are keen to explore the world around them and to question the unknown.
- Curious about the world in which we live and understand how their learning links to real life situations eg; Farm to Fork Topic.
- Able to draw upon and build on their prior scientific knowledge in order to make effective predictions, explaining their reasoning.
- Equipped with accurate and appropriate scientific vocabulary so that they are able to communicate and contribute to scientific discussions, explaining their learning and different concepts.
- Able to plan and carry out a scientific investigation, thinking carefully about what equipment they will require and what recordings they could make, always developing their scientific enquiry knowledge and working scientifically skills.
- Reflective learners who can consider the science behind different concepts, able to articulate what they have learnt, not just what they have done.
- Able to evaluate their practice, considering what has worked well and how they would improve in the future.
- Effective communicators who can communicate their ideas, opinions, questions and scientific findings to others through both the written and spoken word using the key vocabulary where necessary.
- Involved in whole-school science weeks, cross-curricular enrichment activities where they can share their learning with other learners, parents and governors.
- Have the opportunity to find out about a diverse cross section of famous scientists who have made, and continue to make, a huge difference to our world today.
- Positive and enthusiastic about their learning.

Implementation: How do we do this?

- Science is timetabled as a core subject and monitored rigourously.
- Excellent advice and on going support from a local STEM Learning consultant has helped raise the profile of Science within the school.
- By providing a broad, practical fun curriculum linked using the guidance from PLAN documents to support the progression.

- A focus is made on the vocabulary linked with each topic and where possible a book eg: Y3/4 will use a Pebble in My Pocket for rocks and soils
- Working Scientifically skills run throughout the whole school and progressively develops through three milestones. There is also mapping to show EYFS progression to KS1, KS1 to LKS2 and LKS2 to UKS2.
- Science MTP for each year group is monitored by the science leader to ensure knowledge and skills are taught progressively as well as full coverage of the NC.
- ASE PLAN, TAPS Tasks and Headstart formative assessments have been introduced to support the children in remembering more from the topics and previous topics and building long-term memory. They have supported teachers with their understanding and acknowledgements of progression by the pupils.
- Scientific vocabulary is specifically planned for and taught across topics. The children have access to high quality texts which they use for research, enjoyment as well as developing their Sticky Knowledge
- Every pupil will participate in enrichment activities such as: Science week, curriculum evening, playground science and science clubs.
- Teachers have been directed to free, online CPD which they can access to consistently build on their subject knowledge – Reach Out CPD.
- Science leaders attend termly meetings with other subject leaders in the area to share good practise, keep up to date with publications, explore science learning opportunities and to continually reflect on science provision in our school.
- Science leaders meet regularly with science ambassadors.
- Termly topic titles are starting to be used thus putting science as a subject at the forefront of topic based learning eg 'From Farm to Fork.' This enriches cross-curricular learning.
- To introduce our children to famous scientists past and present, this will enrich their science capital by using the opportunities to use the enquiry types.
- Children will have the opportunity to utilise the school grounds for scientific enquiry and participate in outdoor learning sessions.

Impact

- Pupils show a positive attitude to science and their learning.
- Pupils are curious and want to question the world around them.
- Pupils see science as important for their future and understand the links to other subjects.
- Pupils talk scientifically using age appropriate vocabulary – they can articulate their learning confidently.
- Pupils to become self-led learners and be motivated to be curious about the world they live in.
- Children reach their 'Age Related Expectations' at end of KS1/2.

This is monitored through:

- Book/planning monitoring
- Drop –ins by the science leader
- Pupil and Staff voice and Science Ambassadors
- Summative and formative assessment
- Analysis of data
- Moderation

Review Date

The Hampton Hargate Primary School science policy is to be reviewed annually by the Science Subject Leaders.

- Next review December 2023

Other policies to refer to:

- The Inclusion Policy
- Complaints Policy