



Hughenden Primary Science
Curriculum: Intent,
Implementation and Impact

Date of Next Scheduled Review:

January 5th 2021

Curriculum Intent:

The teaching of Science at Hughenden Primary is designed to give children the tools and incremental skills they need to make connections and find answers to the natural world around them. Through an understanding of the scientific method and knowledge of subjects areas outlined in the National Curriculum, we aim to create an interconnected learning experience that draws upon learning from across the whole curriculum and provide a rich and varied experiences to challenge and meet the needs of our children and their futures.

At Hughenden Primary, we progressively build upon the investigative skills from EYFS up to KS2, allowing our pupils to accumulate a wealth of key foundational knowledge and concepts. We explicitly encourage and teach them to use the power of rational explanations and develop a sense of deep curiosity about the universe they live in.

Through carefully developed key skills that build up lesson on lesson, year on year, we aim to provide our children with the best opportunities develop in terms of attainment, progress and as a member of society.

To embed and inspire our children understanding we seek to enrich their learning through well-planned and targeted wider experiences. Whether through science-focused trips, external expert visitors or collaborative projects, we aim to make deep rich connections that inspire a life long love of scientific learning that is built on knowledge, investigation and reflection.

Implementation

At Hughenden, we believe that knowledge is the key to making connections; the more you know the more connections you can see. To ensure that we maintain a high level of subject knowledge in our school, we ensure that members of staff receive regular and high quality professional development from a wide range of sources.

We aim to make sure that learning is purposeful and timely by diagnostically tailored lessons to ensure firm starting points for all learners. Through out our school, we explicitly encourage all pupils to use technical and subject related vocabulary in their learning to embed knowledge and improve links across the curriculum

The Role of the Subject Leader:

At Hughenden Primary the role of the Science subject leader is to:

- Develop and create a progressive framework that focuses on the key skills that children will build on at every stage of the primary career.
- Support Teachers in developing cross-curricular links between not only Science related subjects but the wider curriculum as well. E.g. connecting English, Geography and History with Science.
- Through their own CPD, they will support and offer advice to colleagues on issues related to their subject area.
- They will monitor pupil progress in that subject area, through the use book scrutinises, summative assessment data and lesson observations.
- They will also seek to provide external links for whole school and class based learning opportunities in their subject area. Such as Quality Marks in the areas of the science curriculum.
- Science subject leader will maintain the whole school resources for this subject and actively seek new resources to help deliver excellence first teaching across all the subject areas.

Impact:

At Hughenden, we aim for the highest possible outcomes for our children, preparing them for life beyond the classroom. We have been recognised for our achievements in our science by being awarded the Primary Science Quality Mark –Silver award, and are in the process of applying for the Space Education Quality Mark – Silver Award. Within our science curriculum, we strive to create a supportive and collaborative ethos for learning by providing opportunities for children to question and investigate, discovering answers for themselves and take their learning in a direction they are interested in.

Through a clearly defined set of skills progressions, summative and formative data tracking tools, we are able to plan engaging, thought-provoking and impactful lessons that focus on progression of knowledge and skills.

We measure the impact of our curriculum through the following methods:

- Pupil voice in one-to-one book reviews
- Lesson observations with a focus on the level of learning rather than the level of teaching
- Learning walks from the science coordinator, Middle leadership Team and Senior Leadership Team
- The cross-curricular opportunities for the teaching and recording of scientific ideas
- Diagnostic, mid –topic, end of topic and end of year subject tests
- Summative and formative tracking of progress using the online tracking tools.
- Sharing of pupil work at interschool network meetings
- Governor curriculum meetings with a focus on Science progression

We aspire for our pupils to be independent rational thinkers, who apply their knowledge to make hypothesises that can be tested and reflected upon, probing and examining questions about the world they live in and their place in it.