<u>Science</u> "The important thing is not to stop questioning. "



Science threads: Investigation and enquiry, connections and innovation

Science Curriculum Rationale at Dorchester Primary

Science is a means of discovering and understanding the world around us. It consists of a body of knowledge which attempts to explain phenomena and experiences. It also involves a number of skills and processes by which this knowledge is achieved and applied. Science is also concerned with the development of attitudes concerning scientific activity. Science forms an integral part of our everyday life. It is therefore important for all children to be scientifically literate.

At Dorchester Primary School, we believe that good teaching of Science offers pupils the opportunity to access a wealth of knowledge and information which contributes to a secure understanding of how and why things work like they do. Science explains the mechanics and reasoning behind the daily function of complex systems, including the human body. Through secure teaching, pupils will use this knowledge to aid their understanding of new concepts, make well-informed decisions and pursue new interests. Science provides visible proof of many facts pupils read about in books or see on the television; this helps to increase their understanding and helps pupils retain that information. Our curriculum progressively builds vocabulary and concepts over time (see Science Progression Document). Children explore and find answers to ambitious enquiry questions, which are developed year upon year through **3 main threads: Investigation and enquiry, connections and innovation.** These questions promote enquiry, research, discussion and debate as well as develop children's knowledge and understanding across topics. We strive to keep our themes, topics and enquiry questions evolving and relevant to the children and current discoveries. Science lessons are built around the **DPS pillars** and teachers plan opportunities for children to build upon their skills and knowledge in both areas.

Children will:

- Have the opportunity to write in Science in a variety of genres
- Use high quality resources to support their learning
- Present their learning to a high standard in Science books
- Find best ways for themselves to learn and remember answers to enquiry questions
- Participate in partnered talk during every lesson
- Undertake investigations and experiments regularly
- Learn and use key scientific vocabulary correctly
- Work collaboratively with others and communicate effectively

Teachers will:

- Build lessons around the DPS Pillars and the Science threads.
- Recap answers to previous enquiry questions at the start of every Science lesson
- Follow the schools' progression document.
- Create enquiry questions that are open-ended and promote high quality discussions and debate.
- Share enquiry questions and key vocabulary in advance with families.
- Promote enjoyment and progress through planning exciting, challenging and engaging learning opportunities for all.
- Plan for half termly assessments through regular low stakes quizzing, reference to the learning questions and the KWLW grids as well as clearly planned formative assessment opportunities throughout each lesson.
- Produce clear, up to date Knowledge Organisers which are shared with the children and referred to constantly.
- Ensure high quality resources, experiments and texts are used to support the teaching of Science.