

Intent, Implementation, Impact

Science

Intent:

We believe that Science teaches us how to be critical thinkers who create and test theories and aim to:

- Seek to equip our children with key scientific enquiry skills and knowledge that will
 prepare them for the next stage in their learning and provide them with the
 necessary foundations to be successful in adult life.
- Build a science curriculum which develops learning and results in the acquisition of knowledge and skills so that all pupils know more, remember more.
- Enable every pupil to view themselves as scientists.
- Use high-quality questioning to develop critical thinkers.
- Deliver all the requirements of the national curriculum in relation to science.
- Ensure all lessons include opportunities to develop scientific vocabulary.
- Make pupils aware of and apply the transferable skills required when linked to other subjects, as well as other aspects of their life.
- Enable children to become enquiry-based learners collaborating through researching, investigating and evaluating experiences.
- encourage respect for living organisms and for the physical environment.

Implementation:

As part of the planning process, teachers plan the following:

- We implement our approach through high quality teaching delivering appropriately challenging work for all individuals.
- Every class from EYFS to Y6 follows the Switched On Science scheme of learning which is a broad and balanced science curriculum based on the National Curriculum. Lessons are personalised to address the individual needs and requirements for a class but coverage is maintained.
- Lessons provide hook the children's interest, enabling them to develop a sense of excitement and curiosity about natural phenomena; encouraging them to ask

- questions about the world around them and work scientifically to further their conceptual understanding and scientific knowledge.
- We provide opportunities for the critical evaluation of evidence and rational explanation of scientific phenomena as well as opportunity to apply their mathematical knowledge to their understanding of science, including collecting, presenting and analysing data.
- We provide children with opportunities to communicate science using different approaches, such as writing, drama, poetry, discussion, modelling and linking to computing; Children will work collaboratively and practically to investigate and experiment.
- Children from EYFS through to Year 6 are taught key vocabulary which will support in the acquisition of scientific knowledge and understanding.

Impact:

- Children will make at least good progress in science from their last point of statutory assessment and from their starting point in Reception.
- Children will use their scientific knowledge and skills, in all curriculum areas, to enable them to know more, remember more and understand more.
- Children will retain knowledge that is pertinent to applying science with a real life context.
- Children will be able to articulate their understanding of scientific concepts and be able to reason scientifically using rich language linked to science.
- Children will demonstrate a high love of mathematical skills through their work, organising, recording and interpreting results.
- All children view themselves as scientists and use and apply these skills across the curriculum.
- Monitoring will indicate high expectations and reflect what pupils have learned to a good standard.
- Science is given a high profile in school with displays that give both information to support learning and celebrate children's work.
- Pupils will leave KS2 with a strong knowledge of scientific concepts.
- Knowledge and skills will have developed progressively to not only enable children to meet the requirements of the National Curriculum but to prepare them to become competent scientists.
- Children will be able to question ideas and reflect on knowledge.