

Science



IN A NUTSHELL



Science Intention

Our Science curriculum fosters a healthy curiosity in children about our understanding of the physical, chemical and biological aspects of the world. We ensure that the Working Scientifically skills are built-on and developed throughout children's time at the school so that they can apply their knowledge of science when using equipment, conducting experiments, building arguments and explaining concepts confidently. Our school endeavours to ensure that every child is given the opportunity to enjoy and make progress in science.

Science Implementation

How science is taught at King's Stanley Primary School:

- Knowledge Organisers are planned and written for each topic unit.
- The previous knowledge and learning is identified by using mind maps or quizzes and an awareness of what has been taught earlier down in the school
- A hook or 'wow' activity is planned to engage the children. This is often linked to another subject area like art or design technology.
- Different areas of scientific enquiry are planned carefully to enable full coverage in each year group and across each Key Stage.
- The key scientific skills of observation, prediction, investigation, interpretation, questioning, hypothesising, measuring, analysing and concluding are identified in each unit to be taught.
- The subject specific vocabulary is identified which builds upon what has already been taught.
- Displays are in the classrooms highlighting the key vocabulary to be taught and the learning step questions that will be studied.
- Practical activities and investigations are provided whenever possible so that the children learn through first hand experiences.
- Children are encouraged to communicate their findings in a variety of ways, both orally, in written form and graphically using ICT, graphs and diagrams.

- Children have the opportunity to develop their science capital through extra curricular activities such as, after school science club, visitors or trips and special science learning days.
- Our outdoor learning and Countryside Skills lessons complement the science curriculum and provide a real context for the children to apply their knowledge and skills.
- The children are encouraged to develop the skills of co-operation and perseverance through working with others.
- The children develop an awareness of the importance of science in everyday life including its relevance to personal health and safety.
- Topic units are revisited during the time in school and build upon what has already been learned enabling the knowledge to be embedded into the long term memory.

Assessment

We ensure that when assessing our pupils, evidence is drawn from a wide range of sources to inform the process including:

- Interaction with pupils during discussions and related questioning
- Practical activities such as practical enquiries, the gathering, presentation and communication of fieldwork data and writing in different genres.
- The outcomes of each enquiry serve to inform the teacher's developing picture of the knowledge and understanding of each pupil and to plan future learning accordingly.
- Mind maps and quizzes at the start and end of a unit.

IMPACT

Science teaching at King's Stanley Primary School aims to give all children a strong understanding of the world around them whilst acquiring specific skills and knowledge to help them to think scientifically, to gain an understanding of scientific processes and also an understanding of the uses and implications of Science, today and for the future.