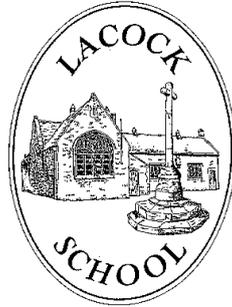


Lacock CE (VC) Primary School



Science Policy

Status	Adopted	
Date adopted by governing body:	October 2021	
Review Date:	October 2023	
Revision History:		Date

Chair of Governors: Simon Winfield

Date: October 2021

Our intent

The intent of our curriculum and vision for science at Lacock Primary School is to provide our children with opportunities which enable them to explore, discover and understand the world they live in - encouraging them to be curious, life-long science learners. We are passionate in the belief that all children have the absolute right to high quality teaching and learning with opportunities to ask questions, use and extend their scientific knowledge and vocabulary. We will enable them to seek the answers through practical experiences, exploration and investigation.

Our science curriculum aims to ensure that all children:

- develop **scientific knowledge and conceptual understanding** through the specific disciplines of biology, chemistry and physics.
- develop understanding of the **nature, processes and methods of science** through different types of science enquiries that help them to answer scientific questions about the world around them.
- are equipped with the **scientific skills** required to understand the **uses and implications** of science, today and for the future.

We plan for the Working Scientifically skills to be built-on and developed throughout the children's time at the school so that they can make connections in their learning and become thinkers and investigators. This will enable them to apply their knowledge of science when using equipment, conducting experiments, building arguments and explaining concepts confidently. We will encourage a natural and healthy curiosity about the world around us and respect for living and non-living things. We aim to plan and provide opportunities for critical evaluation of evidence, to be reflective, responsible and to ask questions. Our intent is to deliver a science curriculum which is accessible to all and that will maximise the outcomes for every child so that they develop an enthusiasm and enjoyment of scientific learning and discovery. We will encourage them to see the connection across their learning, in their different subjects and how connected we are as a world; to become global science learners. We will show them how different opinions need to be respected and valued, to see the moral and ethical issues about environmental and human issues. Through group work, carrying out experiments and research, we will provide opportunities for children to understand the power of collaborative working in the science community which has led to some amazing and life changing breakthroughs in medicine and how scientists from a range of cultures have had a significant impact globally. We endeavour to ensure that the science curriculum we provide, will give children at Lacock Primary School the confidence and motivation to continue to further their science skills into the next stage of education and beyond.

The aims of Science at Lacock School are:

- To promote a love of Science and to both see its relevance and recognise its importance in the world around them.
- To nurture children's natural curiosity – I wonder why/how/what?

- To ensure a broad and balanced curriculum.
- To ensure hands on experiences and that 'working scientifically' skills are built on and developed over the years.
- To provide opportunities for children to acquire and develop knowledge and understanding of the process, skills and language of Science
- To provide extra curricular science based events each year
- To teach and use appropriate scientific vocabulary
- To relate scientific enquiry and investigation to other areas of life and their own experiences

Implementation

We have developed a two year rolling cycle of science topics to cover key stage one, lower key stage two and upper key stage two. This is to ensure that despite our mixed age classes, all children will meet the requirements of the National Curriculum for their age group over a two year period.

Typically, at Lacock Primary School science will be weekly; one hour in KS1 and two hours in KS2. This allows time for the incremental acquisition of skills and knowledge and time to address mis-conceptions. There is a strong focus on working scientifically and providing children with opportunities to apply their knowledge. Children are encouraged to ask their own questions and be given opportunities to use their scientific skills and research to discover the answers.

Science learning at Lacock Primary School happens at the same time across the whole school. Years one and two are taught together irrespective of whether the children are in the same class. Year 3 and 4 are taught together, as are year 5 and 6. This means that some children move to a different class during our afternoon of science learning.

Our annual science week is an integral part of the school's science offer. Our science week is developed through a strong STEM focus. Science week culminates with a whole school science fair where children can showcase their own learning and investigate the science learning across the school.

We encourage STEM Ambassador visits and Science input from Science educators at local secondary schools, as well as visits from our science skilled parents ensuring that children have access to positive role models within the field of science from the immediate and wider local community. From this exposure to a range of different scientists from various backgrounds, all children feel they are scientists and capable of achieving. Children overwhelmingly enjoy science and this results in motivated learners with sound scientific understanding.

We also ensure that children make the most of our outdoor learning area and the village for hands on learning.

Children at Lacock Primary School will also visit local Science Events such as 'The Great Science Share' at a local secondary school or Science based day trips to embed science topic learning.

Impact

Assessment for learning in science is continuous throughout the planning, teaching and learning cycle. We measure and assess the impact that our science curriculum is having through: conducting learning walks, talking to pupils, observing lessons and monitoring of looking at children's books which indicates that science is being delivered meaningfully and the children are gaining a range of practical experiences which is embedded in planning, questioning and carrying out investigations. Children's learning is assessed against the age-related expectations for science. Below is an outline of the **impact** we are looking for in our pupils in the curriculum area of science:

- Children are knowledgeable about the scientific content of each unit of learning.
- Children can set up an investigation based around scientific thinking.
- Children are engaged in science lessons; asking scientific questions and being curious.
- Children's work shows a range of topics and evidence of the curriculum coverage for all science topics.
- There is clear progression of children's work and teachers' expectations in our school.
- Children are becoming increasingly independent in science, selecting their own tools and materials, completing pupil lead investigations and choosing their own methods for recording.
- Children can use scientific vocabulary to communicate their understanding.
- Children can present science learning using where appropriate maths and literacy skills.
- Children can make meaningful cross-curricular and wider world links.
- Verbal and written feedback from teachers has impact on our pupils learning, often with next step questions to move learning on.

Inclusion

Our inclusive approach and differentiation allows all children to learn regardless of race, gender, faith, culture or disability. We select and use resources that positively reflect all of the above. Teachers are aware that children bring to

school different experiences, interests and strengths that will influence the way in which they learn science. Teachers will use a variety of teaching styles and strategies to meet the needs of all children in their science learning.

Monitoring and Review

The coordination and planning of the science curriculum are the responsibility of the Science Lead who also:

- supports colleagues in their teaching, by keeping them informed about current developments in science and providing a strategic lead and direction for this subject.
- gives the head teacher and school governors feedback in which she evaluates the strengths and weaknesses in science and indicates areas for further improvement.
- Allocates time to review evidence of the children's work / progress and to observe science lessons across the school.
- shares best practice regarding science with teachers.

This policy is reviewed regularly by the Science leader and ratified every two years by the Governing Body.