

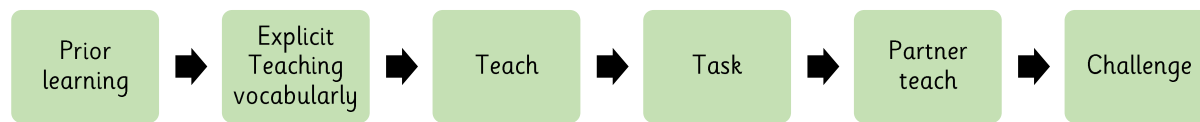


Science at the Curzon

Intent

At Curzon C of E Primary School, our children are scientists. Our **intent** is to give every child a broad and balanced Science curriculum which enables them to confidently explore and discover what is around them, so that they develop a deeper understanding of the world in which we live in. We want our children to engage completely and love their Science lessons. We want them to be ambitious and grow up wanting to be astronauts, forensic scientists, chemists and biologists. We want our children to remember their science lessons in our school, to cherish these memories and embrace the scientific opportunities they are presented with! To achieve this, it involves exciting, practical hands-on experiences that encourage curiosity and questioning. Our aim is that these stimulating and challenging experiences help every child secure and extend their scientific knowledge and vocabulary, as well as promoting a love and thirst for learning. At our school, we have a curriculum which has been carefully designed and developed with the need of every child at the centre of what we do. We want to equip our children with not only this curriculum, but to prepare them for the opportunities, responsibilities and experiences of later life.

Implementation



At Curzon C of E Primary School, our curriculum aims to equip children with the foundations for understanding the world through a scientific lens. Pupils will be taught units of work that cover and go beyond the requirements of the National Curriculum in the specific disciplines of biology, chemistry and physics. Pupils will encounter people who have made significant contributions to the field of science over time, understanding that science has been a quest for understanding for many years, and will continue to be so in the future. Pupils will build a body of key foundational science knowledge as they work through the curriculum, asking questions and developing a sense of curiosity about the world around us.

Pupils will be encouraged to use the knowledge they learn in Science and apply it to investigations that test a theory or set out to answer a question. Importantly, substantive scientific knowledge is taught first, before pupils are asked to undertake enquiry. This helps them to fully understand the elements of the enquiry first, and to make informed observations about the processes they see. Gathering information, recording data, graphing data and interpreting findings are all essential skills that pupils will apply to new contexts as they work through the curriculum. Enquiries include observing over time, pattern seeking, identifying, classifying and grouping, comparative and fair testing and researching using secondary sources. Scientific enquiries provide children with a wealth of opportunities, but first and foremost they will help to deepen understanding of the nature, processes and methods of science as a discipline and how it differs from other subjects they are studying. Pupils will gain an understanding of the purpose and uses of science both today and in the future. Throughout the science curriculum, children are taught that scientific discoveries have been made since time began around the world. The children learn about the work of scientists such as Lewis Howard Latimer, who invented the carbon filament that allowed Edison's lightbulb to light up the world. In Year 5 children learn about Jabir ibn Hayyan who is thought to have invented a crucial tool for the distillation process: the alembic. In Year 1 children learn about their senses and reflect upon the challenges faced by Helen Keller who achieved a university degree despite being blind and deaf from her early childhood. Importantly in Science, over time, children learn about scientists and their search for the

truth. They learn that the people who have contributed to science, from Ancient Baghdad to Ancient Rome and beyond, are diverse and many voices make up the story of science. Our science curriculum builds knowledge incrementally. Pupils have multiple opportunities to secure and build on their knowledge and understanding as subject content is revisited at points throughout the curriculum. This helps children to master the knowledge and concepts whilst building up an extended specialist vocabulary. This incremental approach helps teachers to identify knowledge gaps and look back at previous content if they need to close gaps in knowledge or understanding. Our curriculum enables children to understand the important role that science plays in the sustainability of life on earth. We want children following this curriculum to be equipped to go forth into their secondary education with curiosity, passion and a desire for discovery.



Impact

The successful approach to the teaching of Science at Curzon C of E Primary School results in a fun, engaging, high quality science education that provides children with the foundations for understanding the world that they can take with them once they complete their primary education. So much of science lends itself to outdoor learning, and so we provide children with opportunities to experience this. Pupil voice is used to further develop the Science curriculum, through questioning of pupils' views and attitudes towards Science, to assess the children's enjoyment of science, and to motivate our learners. Teachers undertake formative and summative assessments of each unit of learning within our curriculum. Our science curriculum builds knowledge incrementally. Pupils have multiple opportunities to secure and build on their knowledge and understanding as subject content is revisited at points throughout the curriculum. This helps children to master the knowledge and concepts whilst building up an extended specialist vocabulary. This incremental approach helps teachers to identify knowledge gaps and look back at previous content if they need to close gaps in knowledge or understanding. Our curriculum enables children to understand the important role that science plays in the sustainability of life on earth. We want children following this curriculum to be equipped to go forth into their secondary education with curiosity, passion and a desire for discovery.

What is 'sprouting'?	A When bulb starts to grow above ground	
	B When a seed changes to a seedling	
	C When a seed is germinated	
	D When a bulb is planted	
When a seed germinates, what does it change to?	A Tree	
	B Seedling	
	C Plant	
	D Bulb	
Where do bulbs begin to grow?	A On a bush	
	B In a tree	
	C Underground	
	D In the sea	
What does a plant need to grow well?	A Light and a cold temperature	
	B Water, light and the right temperature	
	C Water and seeds	
	D A warm temperature	
What are crops?	A Crops are plants grow by farmers for people to eat	
	B Crops are plants grown in supermarkets	
	C Crops are all plants that grow	
	D Crops are seeds that haven't grown yet	