



Science

Springfield Infant School and Nursery

Intent

At Springfield, we have designed and follow a creative curriculum. We feel that this provides the opportunity to celebrate individuality and creativity in all of our children. Science at Springfield fosters a love of learning and promotes the children's inquisitiveness. Our creative curriculum ensures that we develop our children's imaginations through exploration and curiosity within our 'hands-on' and engaging science lessons. At Springfield, we encourage our children to see themselves as future scientists, and to have ambition with no limitations. Our study of real-life scientists ensures that our children have a diverse range of positive role models to aspire to, and a purpose for their learning. Children from all cultures, genders and ethnicities are able to see themselves represented as scientists.

Our Springfield 'I CAN' values are embedded in our Science curriculum. At Springfield science has a pivotal role of enabling **inclusivity**, children feeling **nurtured** along their scientific journey, being **creative** and having the chance to challenge themselves and be **ambitious** in their science work. The skills children acquire in science are a means of supporting their learning in a range of ways, and can be transferred to other areas of the curriculum.

Right from the Early Years Foundation Stage our children will study the world in which we live, developing an understanding of nature and processes. Throughout their time here, they study seasonal changes, our environment, materials, animals, plants, and humans, enabling them to develop an understanding of the world in which they live and how all of these associates and connect with one another. Essentially, they will begin to understand how our world works. We will nurture their own wellbeing, ensuring they feel valued with an understanding of their role as responsible global citizens, protecting the environment in which they live. We will nurture our children's enquiring minds and develop their skills in asking and answering scientific questions through investigative approaches.

Implementation

At Springfield, we understand the importance of using the correct terminology and language to support our children's learning. Therefore, key vocabulary, which the children need to use and understand will be featured on knowledge organisers as well as on display in the classroom for learners to access at all times. Our planning documents, also identify the vocabulary that needs to be taught to and used by our children in order for them to succeed with their learning. Our science curriculum is progressive and challenging to all learners. We ensure that knowledge and skills are built upon from the previous year group. Our science lessons are adapted so that individual learners can make progress from their starting points and feel included, successful and see themselves as a scientist.

Our science curriculum provides children with a range of first hand engaging and stimulating experiences. Science is memorable and fosters a thirst for knowledge and a deeper understanding of the skills essential to the subject. Whilst knowledge is important we are aware that we are growing the scientists of the future, preparing our children to question, investigate and analyse a world we know nothing about. With the expectation of huge advances in technology, we anticipate that our children will be able to understand more about our world than we can possibly imagine. In order to prepare them for this our children

are encouraged to be reflective, resourceful and resilient in their scientific thinking and learning. Where possible our science learning is linked to our topics and is purposeful. Creativity is key in accordance with our creative curriculum, and cross curricular links between science and other subjects are constantly growing and developing.

Our outdoor learning environment is a huge strength within the implementation of the science curriculum and children regularly access the range of habitats within our school grounds to support and extend their skills and understanding. We pride ourselves in offering regular 'Forest School' experiences to our children, and believe this practice is invaluable to our children's first-hand experiences and knowledge of the environment in which they live.

In Reception our children are encouraged to ask questions. Teacher modelling, questioning and intervention in play and exploration enables the children to respond to their own questions, observing and discussing similarities and differences in the world around them. They are encouraged to ask 'why?' and draw on their experiences of the world around them to solve problems and reflect. The new vocabulary that the children need to learn, is around them in their learning environment and the adults in the EYFS, use this confidently with the children.

In Key Stage One children raise pertinent questions and draw conclusions based on their own observations. Children carry out simple tests using a range of different enquiries, with a strong emphasis on practical experiences to reflect and challenge their understanding. They deepen their understanding and broaden their skills building upon what they have learnt in the EYFS.

We have termly science days, which are additional to the children's weekly science learning. This is where the children have the opportunity to ask and investigate higher order thinking questions. In addition to this, they have the opportunity to research and learn about real-life scientists. We have termly visits from STEM leaders who provide our children with memorable and exciting scientific experiences.

Impact

Children at Springfield speak in a positive and animated way about their science learning. Through exciting, engaging and inspiring learning opportunities children develop knowledge and skills in the field of science. Children perceive themselves as scientists and are confident to investigate, observe and analyse the world in which they live. By the end of Year Two, they are well equipped with the skills to question, problem solve, challenge and inquire with independence.