



Science Statement

We are a Right Respecting School and this statement supports the following articles from the UN Convention on the Rights of a Child

Article 13: (Freedom of expression): Every child has the right to share information in any way they choose, including by talking, drawing or writing as long as it does not harm others.

Article 28: (Right to education): Every child has the right to a primary education, which should be free. They should be encouraged to reach the highest level of education of which they are capable.

Article 29: (Goals of education) Education must develop every child's personality, talents and abilities to the full. It must encourage the child's respect for human rights, as well as respect for their parents, their own and other cultures, and the environment.

Article 31: (Leisure, play and culture): Children have the right to relax and play, and to join in a wide range of cultural, artistic and other recreational activities.

Intent

At Lawdale Junior School, our aim is to give all children a strong understanding of the world around them, whilst acquiring specific skills and knowledge to help them to think and work scientifically. Our curriculum gives children an understanding of scientific processes and provides the foundations for understanding the world through the specific disciplines of science. Children are taught to think about the uses and implications of science, today and for the future. We follow the objectives of the national curriculum and have planned our units so that there is coherent progress across the year groups. Children's knowledge is built upon throughout the school.

Science is taught on a weekly basis and, where applicable, cross-curricular links are made explicit to help children understand that science encompasses every aspect of our daily lives. Our curriculum is planned to be inclusive therefore lessons are planned to be accessible to all. All children will be provided with a broad and balanced science curriculum which reflects the equality and diversity policies and practice in school. We ensure that the skills required to work and think scientifically are developed progressively throughout children's time at the school; they can apply their knowledge of science when using equipment, conducting experiments, building arguments and explaining concepts.

Key scientific terminology is explicitly taught and children are encouraged to use this vocabulary and explain their thoughts clearly both orally and in written work. We want children to continually ask questions and be curious about their surroundings. We aim to develop the children's science capital in a variety of ways including visitors and school trips.

Implementation

Through our teaching, we aim to enable pupils to develop a keen interest in science and develop a sense of excitement and curiosity about the world around them. Children are encouraged to ask questions and be curious about their surroundings. A love of science is nurtured through a varied and exciting science curriculum. Throughout the programmes of study, the children acquire and develop the key knowledge that has been identified within each unit and across each year group. Our teaching is informed by the national curriculum and the Rising Stars Scheme of Learning and builds progressively throughout.

Key skills are mapped for each year group which are in accordance with the expectations of the national curriculum. The curriculum is designed to ensure that children are able to acquire key scientific knowledge; apply this through practical experiences and develop the skills required to allow them to use equipment confidently, conduct experiments with aptitude, explain scientific concepts confidently and debate the most appropriate way to tackle problems and to test out ideas. Teachers create a positive attitude to science learning within their classrooms and reinforce an expectation that all pupils are capable of achieving high standards in science. Children are introduced to each science unit with vocabulary grids to assess children's past learning and these are used as a gauge to measure learning throughout the topic with children adding their acquired knowledge as they learn more over the course of a unit. Plans are adapted to ensure that learning is suitable for every learner.

'Where's the Science?' displays are present in each classroom to influence the children to ask engaging questions, explore science in the world around them and to promote scientific discussion and curiosity. Extra-curricular opportunities ensure that the children's knowledge is put into context and enriched. Events such as Lawdale's science week enables pupils to apply their science skills, share their ideas and explore concepts in more depth.

We build upon the knowledge and skill development of prior learning using our whole school progression map as a guide. Teachers use precise questioning in class to test conceptual knowledge and skills, and assess pupils regularly to identify those children with gaps in learning, so that all pupils have access to lessons. Tasks are selected and designed to provide appropriate challenge to all learners, in line with the school's commitment to inclusion. The working scientifically expectations from the national curriculum are embedded into lessons to ensure that skills are systematically developed throughout the children's school journey and new vocabulary and challenging concepts are introduced through direct teaching.

Impact

The successful approach to the teaching of science at Lawdale Junior School will result in a fun, engaging, high quality science education. We recognise that this provides children with the foundations for understanding the world, which they can take with them once they complete their primary education. All children will make progress and, by the end of key stage two, all children will have developed scientific enquiry skills in the five key areas.