

Science at Krishna Avanti Primary School

Intent



Science teaching at Krishna Avanti Primary School Harrow aims to give all children a strong understanding of the world around them whilst acquiring specific skills and knowledge to help them 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.

The Avanti Way is core to the teaching of all subjects, including science. Our science curriculum fosters a healthy curiosity in children about our universe and promotes respect for the living and non-living things. We strive to equip our children with sufficient knowledge, concepts, skills and positive attitudes to understand that Science has changed our lives and the direction of society whilst increasing their awareness that the contribution we make is vital to the world's future prosperity. We prepare our children to be global citizens now and in their future roles within a global community.

Implementation



At our school, scientific enquiry skills are embedded in each topic the children study and these topics are revisited and developed throughout their time at school. Key skills are mapped for each year group in accordance with the NC and are progressive throughout the school. Topics, such as Plants, are taught in Early Years, Key Stage One and studied again in further detail throughout Key Stage Two.

As the children's knowledge and understanding increases, and they become more proficient in selecting, using scientific equipment, collating and interpreting results, they become increasingly confident in their growing ability to come up with conclusions based on real evidence.

Science is taught weekly and planned topic blocks by the class teachers. Our strategy is to enable all children to be catered for through adapted planning suited to their abilities. Planning involves teachers creating practical, engaging lessons with opportunities for precise questioning in class to test conceptual and disciplinary knowledge and skills, and assess children regularly to identify those children with gaps in their learning.

The Early Years Foundation Stage Curriculum supports children's understanding of Science through the planning and teaching of 'Understanding the World.' Our children are encouraged to use their natural environment around them to explore. Children enjoy spending time outdoors exploring mini-beasts and their habitats,

observing the changing seasons, plants and animals. Children regularly participate in cookery and baking sessions which allows them to experience changes in state as ingredients are mixed, heated and cooled.

Children are offered a wide range of extra-curricular activities (science club), visits, trips and visitors to complement and broaden the curriculum. These are purposeful and link with the knowledge being taught in class. Regular events, such as Science Week, trips to the Science Museum and relevant workshops, allow all pupils to come off-timetable, to provide broader provision, hands on learning experiences and the acquisition and application of knowledge and skills. These events often involve families and the wider community.

Impact



The impact of this curriculum design will lead to outstanding progress over time, across key stages, relative to a child's individual starting point and their progression of skills. This provides children with the foundations and knowledge to increase the skills needed to navigate an ever-changing world of science and technology by immersing our students with scientific enquiry skills, key scientific knowledge, and investigative skills. Our engagement with the local environment ensures that children learn through varied and first-hand experiences of the world around them. We want to empower our children, so they understand they have the capability to change the world.