Science Curriculum Statement

Intent

At Kensington Avenue Primary School, Science is viewed as having a vital role in developing well-rounded pupils. Science stimulates and excites pupils' curiosity about natural phenomena, while allowing them to understand how major scientific ideas contribute to technological change. We aim to give all pupils a strong understanding of the impact of Science in their everyday and future lives by asking them to think scientifically, gaining an understanding of the scientific processes and the implications in the real world, which is contextualised in an engaging curriculum.

Aim

The National Curriculum for Science aims to ensure that as scientists, pupils:

- develop scientific knowledge and conceptual understanding through the specific disciplines of biology, chemistry and physics
- develop an 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 knowledge required to understand the uses and implications of Science today and for the future.

As well these, Kensington Avenue Primary School aims to:

- develop pupils' enjoyment, excitement and interest in Science through enriching activities
- build on pupil's curiosity of the natural world
- use a planned range of investigations and practical activities to give pupils a greater understanding of the concepts and knowledge of Science
- develop pupils' basic practical skills and their ability to make accurate and appropriate measurement
- introduce pupils to scientific language and vocabulary
- extend the learning environment for our pupils via our environmental areas.

Implementation

At Kensington Avenue Primary School, we view Science as an integral part of the core curriculum.

At Kensington Avenue Primary School, to design, teach and assess Science we use Cornerstones which we chose as it provides high quality resources and a thorough and progressive scheme of work which sets out the skills and knowledge pupils require to fulfil the National Curriculum aims and beyond.

We believe that the benefits of thinking as scientists for young children are enormous as it involves a lot of talking and listening whilst developing patience, perseverance, problem

solving skills and investigation. Children will learn about their world through their own exploration and observations; they will predict, think and talk about scientific ideas. Our whole school approach to the teaching and learning of Science involves the following:

- To achieve a greater depth of knowledge, Science will be embedded within each learning journey where links can be established between curriculum areas. Where this is not practical, discreet learning will take place.
- Through our planning, pupils are encouraged to work independently and collaboratively to devise intriguing questions and carry out scientific enquiries to answer them. This paves the way for introducing challenging concepts, and new vocabulary developed through the years, keeping with the science strands.
- Creative, practical lessons with investigative work are at the core of our teaching to inspire pupils to develop their curiosity and understanding of the scientific world. Using precise questioning in class to test conceptual knowledge and skills, children are regularly assessed to identify gaps in learning.
- Working scientifically allows children to think about what could happen in a given situation, teaching them to form their own opinions. By learning that not everything works the first time, children become resilient and are eager to 'try again' while constantly asking questions and searching for answers through various sources.
- Our dedicated staff will continue to find opportunities to develop children's understanding by accessing outdoor learning and memorable experiences, e.g. workshops with experts and museum visits.
- Our school-based edible garden will be an exciting learning resource where topics can be explored through our senses and linked to our 'Healthy Lifestyle' attitude.
- Establishing a close relationship with our partner secondary school will widen the hands-on experience of using scientific equipment within a laboratory setting in the areas of Biology, Chemistry and Physics.
- Children will reflect on prior knowledge and link ideas together, enabling them to become enquiry-based learners.

Impact

At Kensington Avenue Primary School, Science is approached in a way that challenges our pupils to make the 'complex' simple whilst leaving them with the opportunity to sit and wonder. Science at our school is fun, exciting and challenging, encouraging pupils to learn and apply relevant scientific vocabulary as they develop the skills acquired from Early Years to Year 6.

- Children will achieve age-related expectations at the end of their cohort year.
- Children will retain knowledge relevant to Science in a real-life context.