

## Science Vision



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#### Vision

Our Science curriculum promotes a solid foundation of scientific understanding in children from a young age. By beginning with fundamental skills such as observation and questioning in EYFS and Key Stage 1, pupils are equipped to explore the diverse world around them through the study of plants, animals and materials.

Our curriculum extends further than the National Curriculum, expanding on the programmes of study, ensuring they are taught thoroughly and in addition to the statutory requirements (for example Year 2 children are exposed to exciting additional topics including Electricity and Space). As they continue into Key Stage 2, students delve deeper into scientific enquiry, designing experiments, controlling variables and analysing data. Our curriculum also introduces key concepts to explain the physical world, fostering a comprehensive understanding of science.

We seek to nurture critical thinking, problem-solving skills and an appreciation for Science.



# Science Subject Specific Intent



#### **Innovation**

Our consistent scheme 'PKC' allows us to embed a consistent approach to science across KS1 and KS2. PKC also gives a clear resource list to allow for engaging, practical lessons. Our Science Technician provides and sources brilliant resources for us to use. Additionally, wherever appropriate, teachers will extend children's access to the world of science through a range of online resources and virtual reality experiences; in UKS2 this is enhanced through their access to personal chromebooks. They are also able to use photo, video and spreadsheet software to record and present data.

### Being A Centre Of Excellence In All Disciplines

The PKC Scheme provides clearly identified enquiry types for each lesson. This ensures progression of skills across the curriculum and gives children the opportunity to work scientifically. In addition to this, PKC provides as concise subject knowledge, vocabulary and knowledge goals. It also includes many examples of practical activities to guide and inspire teachers to plan science lessons of the highest standard. As a school, we will continue to develop and expand our variety of science resources, allowing teachers the opportunity to plan exciting and inspiring lessons with the emphasis on learning through hands-on activities and experiences. We aim to extend children's experiences and raise the profile of science annually, with exciting events and activities during a Science Week. A whole school approach to exploring the science surrounding current world events will give children an added stimulus for the development of their own passion for learning about the world.

#### **Talent Discovery Of Pupils**

Our Computing Lead is also a STEM Primary Lead across our Trust (Science, technology, Engineering and Maths) and runs a year long club as an enrichment opportunity for children who have been identified as showing a strength in one of these subjects.

Alongside the Computing Lead, the Science Lead runs a short STEM project each year as well for children who enjoy Computing, Science and DT.



# Science Subject Specific Intent



### A Balance Between Excellence (Standards) And Enjoyment

Based on the National Curriculum, there is a clear progression of learning in biology, chemistry and physics. Science is taught discretely every week from Year 1 to Year 6. EYFS have lots of access to Understanding the World within their provision.

To promote curiosity and enjoyment in Science, the school recognises children learn best when they have opportunities to be actively involved in practical, open-ended and challenging learning experiences that encourage creativity.

#### Raising Aspirations & Life Chances

Where possible we use science to broaden horizons and make links to future life interests and the world of work. Jobs that are based on knowledge and interest in science are manyfold and we look for every opportunity to explore these links through Science topics, Careers Day, inviting in visitors and off-site activities / school trips.

#### Health & Wellbeing

Science lessons offer many opportunities to discuss and explore health and wellbeing; learning about how our bodies work, maintaining a healthy body through diet and investigating the effects of physical activity are all important aspects of our Science curriculum. It is also closely linked to our PSHE and RSE curriculum. Through learning about Science and thinking scientifically we want to empower our pupils with knowledge and skills to make healthy life choices and open up possibilities for their future.