

"Enabling life in all its fullness"

"I came that you may have life, life in all its fullness" (John10:10)

Our **Core Christian values** for our school are: *Perseverance, Creativity, Trust and Friendship*.

Science Policy

Policy Date: June 2023

Date of next review: June 2025

Our intent:

The most important thing about Science is being curious

We observe, we question, we hypothesise and investigate

And we gain knowledge of the workings of the world around us

But the most important thing about Science is being curious

We recognise that children have a natural curiosity for everything which happens in the world around them. We intend to nurture this curiosity and inspire a love for this area of learning in a purposeful, stimulating environment which promotes challenge, independence and high achievement. From the very start of their school journey we hope to build on and deepen all our children's scientific knowledge, skills and conceptual understanding so that they are prepared for the next stage in their school life.

Our implementation:

Our school delivers the National Curriculum objectives through the White Rose Science scheme of learning. As well as full coverage of the National Curriculum for Science, the scheme also covers scientific questions around sustainability and the planet and helps children develop an empathy for the local and wider environment.

We not only ensure our children learn substantive and disciplinary knowledge but are also inspired to follow their interests in Science by learning about real life scientists both past and present. Additionally, we aim to enthuse the children through the sharing of high quality non - fiction and fiction texts which are linked to topics and themes studied in Science. Each year group has a set of five significant words linked to each topic that they will learn and revisit throughout their learning in Science. This is called 'Focus 5' vocabulary.

More detail can be found in the the Science area of the Shine curriculum on our website http://www.akps.org.uk/about/akps-shine-curriculum/

Our **Early years pupils** begin to experience science by working towards the Early Learning Goal: The Natural World. Their journey towards achieving this is supported through playing and exploring, active learning, and creating and thinking critically.

We also use online resources: https://www.tigtagjunior.com and Activities - Explorify which enhance our experience by, for example, enabling us to see footage of things we cannot see in school. The appropriate use of other relevant ICT resources is promoted.

The use of the **AK star challenge** ensures tasks are completed which are appropriate to ability and prior learning but also ensure progression and encourage challenge.

Resources are purchased and deployed effectively to meet the requirements of the Foundation Stage Curriculum and National Curriculum. Resources are stored centrally and in classrooms. The subject leader is responsible for ordering resources. Responsibility for recognising resource needs lies with both the subject leader and teaching staff. We subscribe to the Learning Resources Hub to loan resources and books to help ensure we have all that we need for our topics.

Assessment and Impact

We have a range of ways to find out what the children know. In Early Years children are assessed using the Development Matters descriptors for Understanding the World (The Natural World). Teachers use their knowledge gained about each child through observations, assessments and interactions to make their own judgements termly. Regular assessment occurs which informs planning and next steps. A profile assessment is completed at the end of the year to support a successful transition into KS1 and inform parents.

From Year 1 onwards we know the children are making progress in Science because we regularly revisit prior learning including the Focus 5 vocabulary. We observe and question children during whole class group and independent activities to check their understanding of concepts and skills. Questioning is used to further deepen their understanding and thinking skills. The White Rose scheme of learning provides assessment opportunities for each block of learning.

Monitoring in science includes regular book looks, lesson observations and/or learning walks, providing opportunities for pupil voice and analysing data. We do this in order to ensure correct curriculum coverage, share good practise, encourage a high quality of teaching and learning as well as ascertaining children's attitudes to learning science. This information is then used to inform further curriculum developments and provision is adapted accordingly.