



KRISHNA AVANTI

Excellence · Virtue · Devotion

‘I will give teachings to all and live by what I teach.’
Lord Chaitanya

Science Policy

Approved: December 2019

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INTRODUCTION

“The most beautiful thing we can experience is the mysterious. It is the source of all true art and science.”

Albert Einstein

Science is the study of the nature and behaviour of natural things and the knowledge that we obtain about them. ... A science is a particular branch of science such as physics, chemistry, or biology. Science at Krishna Avanti Primary School is about developing pupil's ideas and ways of working that enable them to make sense of the world in which they live through problem-solving activities, investigation and using and applying skills. Through Science we want our pupils to continue to deepen their respect, care and appreciation for the natural world and all its phenomena. We want pupils to learn to appreciate the way in which Science will affect the future on a personal, national, and global level. We will also ensure that pupils realise the positive contribution of both men and women to science and the contribution from those of other cultures.

AIMS

At Krishna Avanti Primary School we want pupils to develop a sense of excitement and curiosity about natural phenomena. Through methods of enquiry and investigation, we want to stimulate their curiosity in finding out why things happen in the way they do and encourage them to ask scientific questions. They should be encouraged to understand how key knowledge and concepts can be used to explain what is occurring, predict how things will behave, and analyse causes.

We aim to:

- to develop enjoyment and interest in science and an appreciation of its contribution to all aspects of everyday life
- to build on curiosity and sense of awe of the natural world
- to use a planned range of investigations and practical activities to give pupils a greater understanding of the concepts and knowledge of Science
- to develop further the language and vocabulary of science
- to develop practical skills and the ability to make accurate and appropriate measurements
- to develop the use of Computing
- to make use of the natural learning environment, such as the school grounds, environmental areas and the locality
- to further promote healthy lifestyles.

LEARNING AND TEACHING

Throughout the year, learners focus on various aspects of science to explore, question, predict, record, observe, present and evaluate ideas. These areas will be covered using a range of practical and written activities to develop the skills helping to learn the facts. All children will be encouraged to share their ideas and understanding in a positive environment where misconceptions and areas not yet learnt are embraced and positively challenged to enable that deep learning.

Science in Foundation Two

Pupils in the Foundation Stage investigate science as part of Knowledge and Understanding of the World. Scientific learning occurs through access to a range of developmentally appropriate practical activities based on first hand exploratory experiences. Scientific learning is embedded through enthusiastic and meaningful interaction with adults, who provide opportunities to explore the world around them.

Science in Key Stage One and Key Stage Two

The school uses Cornerstones to engage children in their learning through cross-curricular topics, ensuring full coverage of all subjects in the Early Years Foundation Stage and the National Curriculum.

Cornerstones provides engaging lesson ideas and a clear progression of objectives taught across the whole school. 'Engage' days are used at the beginning of each topic to hook learners onto their learning and create a desire to further explore all aspects of the curriculum. Love to Investigate is used to further develop key concepts and scientific understanding.

MONITORING AND EVALUATION

This is carried out by the Science Lead, across all Key Stages and includes:

- Regular observation and support.
- Recommendations and signposting to external sources of support.
- Monitoring of pupil work and performance by talking to children.
- Observation of Learning during lessons
- Moderation of work, oral, written or otherwise recorded.
- Staff meetings and INSET to discuss consistency across the school, standards and expectations.

PUPIL ASSESSMENT

Assessment of pupil work and progress is ongoing by the class teacher and includes observation of pupils working, appropriate questioning and evaluation of any recorded work produced. This not only informs future planning but provides information for a pupil's records, parent discussions and annual reports. The school has started to use Target Tracker to aid the monitoring of progression.

EQUAL OPPORTUNITIES

All pupils regardless of age, gender, ability or cultural background have equal access to the science curriculum. The needs of the higher achievers and the less able are recognised and met through Quality First Teaching in the first instance. Where additional support is needed, children may be catered for with Teaching Assistants and/or frameworks.

Some strategies include:

- differentiated questioning
- differentiated tasks set
- appropriate grouping during the delivery of lessons