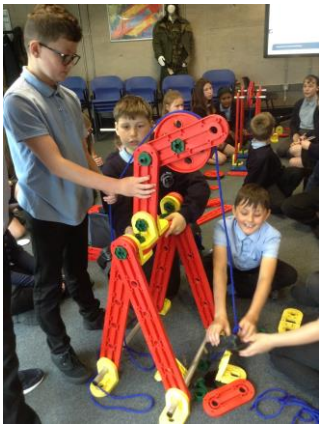

Science Policy

Vision

All children have access to an ambitious science curriculum that is both challenging and enjoyable and raises pupil's aspirations. We widen their horizons through a context rich curriculum, that gives purpose to their learning, through high expectations for every child to succeed.

Our school values are interweaved with science to ensure all learning stimulates and excites pupils' curiosity about the world around them. Pupils are provided with a variety of scientific opportunities, enabling them to develop the ability to pose questions, investigate these using correct techniques, accurately record their findings using appropriate scientific language and analyse their results. Pupils work in science through collaboration as well as independently learning to build on previous knowledge. This means that pupils can reason and use their knowledge to work scientifically.

Aims

Our three principle aims – from the National Curriculum in England for pupils in science are:

- to have good **scientific knowledge and conceptual understanding** of biology, chemistry, and physics.
- to develop understanding of the **nature, processes, and methods of science** through different types of science enquiries to help them 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.

Teaching of Science

The core of our Science Curriculum is the National Curriculum for England. The curriculum has been specifically sequenced in a logical progression to ensure that new knowledge and skills build on what has been taught before: Early Years to Year 6. Pupils are encouraged to be curious and ask questions about what they notice. Pupils are supported to develop their understanding of scientific ideas by using different types of scientific enquiry to answer their own questions, including observing changes over time, noticing patterns, grouping, and classifying things, carrying out simple comparative tests, and finding things out using secondary sources of information. Pupils use scientific language to talk about what they have found out and communicate their ideas to a range of audiences in a variety of ways. Pupils progress in science through first-hand practical experiences, along with the use of appropriate secondary sources, such as books, photographs and videos. 'Working scientifically' is always taught through and clearly related to the teaching of substantive science content in the Science curriculum.

Scientific vocabulary is progressively planned from EYFS to Y6. Children use and apply scientific vocabulary throughout their learning.

Assessment

Formative assessment takes place within every lesson. In KS1 & KS2, pupils complete a 'Rising Stars' diagnostic assessment at the beginning of every area of learning. This allows teachers to establish pupil's starting points and prior knowledge. From Year 2 onwards, pupils complete a vocabulary concept map to identify known vocabulary and their understanding of it. They return to this at the end of their learning to show progress made. At the end of the area of learning, all pupils complete the 'Rising Stars' assessment. This will support teachers in making their judgement; also, to address any gaps in learning or common misconceptions.

Monitoring and review

We monitor teaching and learning in the same way as we do all the other subjects that we teach in the school. The Governors' Curriculum and Standards Committee has the responsibility of monitoring the success of the teaching of science.

Date of policy creation:	April 2024
Date of policy review:	
Governing body signature:	