**CAVENDISH COMMUNITY PRIMARY SCHOOL**

**SCIENCE POLICY**

**VISION**

Excellent science lessons at Cavendish Primary School create a love of science, enthuse children and make learning fun and memorable. Children are inspired to be curious, to ask scientific questions, and to be excited about the world around them.

**VALUES**

Courage – We encourage children to challenge themselves and ask questions about their learning.

Equality – We study a diverse range of real-life scientists.

Responsibility – As they move through the school, children will take responsibility to become increasingly Independent scientists.

Kindness – We often think about being kind to our planet and surroundings, fostered by an understanding of the world around us.

Positivity – We are passionate about science as a career and strive for enthusiastic learners.

Respect – We demonstrate respect to each other in science lessons, developing our teamwork skills.

**­INTENT**

* Children experience all five scientific enquiries: observation, testing, research, classifying and identifying and pattern seeking.
* Children become scientists in the classroom, enabling them to develop an understanding of the nature, processes and methods of science to help them to answer scientific questions about the world around them.
* Children develop a range of skills through the working scientifically strand of the curriculum: measuring, analysing, presenting and reasoning, and to use a range of equipment accurately and safely through hands on investigations and observations.
* Children use an increasing amount of scientific vocabulary and language of science as they progress through the school.
* Children will aspire to potential careers in science, through learning about the work of scientists and how they can make a difference to others.

**IMPLEMENTATION**

Science lessons are planned by the year group teachers using the ASE PLAN Knowledge Matrices and ASE PLAN Working Scientifically Matrices to ensure that planning builds on the teaching and learning from previous years and that it incorporates the five different enquiry types (observation, testing, research, classifying and identifying and pattern seeking) to allow children to become scientists in the classroom. The five different enquiry types are repeated and balanced across each year group. Science teaching and learning includes regular practical experiences for the children. Each year group also study a range of scientists in order to educate children about real world scientific discoveries and potential careers in science.

**EYFS**

In Early Years Foundation Stage (EYFS) children will start to gain the science knowledge that they’ll build on throughout their primary school years, such as developing their skills of observation, prediction, critical thinking and discussion. Science knowledge and skills are taught through continuous provision, adult-led and child-led activities. Children are encouraged to explore the world around them and ask questions about what they see.

**KS1**

The main focus of science teaching in Key Stage 1 is to enable pupils to experience and observe phenomena, looking more closely at the natural and humanly-constructed world around them. They should be encouraged to be curious and ask questions about what they notice. They should begin to use simple scientific language to talk about what they have found out and communicate their ideas to a range of audiences in a variety of ways. Children will begin to experience and understand the different enquiry types and begin to understand what it means to be a scientist. Investigations will be teacher-led with opportunities for children to make predictions and to begin to record their results.

**Lower KS2 - Year 3 and 4**

The main focus of Science teaching in Lower Key Stage 2 is to enable pupils to broaden their scientific view of the world around them. They should ask their own questions about what they observe and make some decisions about which types of scientific enquiry are likely to be the best ways of answering them. They should draw simple conclusions and use some scientific language, first, to talk about and, later, to write about, what they have found out.

**Upper KS2 – Year 5 and 6**

The main focus of Science teaching in Upper Key Stage 2 is to enable pupils to develop a deeper understanding of a wide range of scientific ideas. They should select the most appropriate ways to answer Science questions using different types of scientific enquiry. Pupils should draw conclusions based on their data and observations, use evidence to justify their ideas, and use their scientific knowledge and understanding to explain their findings.

**IMPACT**

Each phase, with the exception of EYFS, will have a Science book which will pass with the child to the following year group within that phase. This will allow for visibility of previous learning and for progression. It is the responsibility of the planning teacher to decide the level and nature of the recording appropriate to the lesson being taught. Science will be assessed using teacher judgement based on the taught curriculum and with reference to the ASE PLAN Knowledge and Working Scientifically Matrices to identify whether children are secure. Where children are not secure in an area of knowledge or skills, further activities will be planned to allow them the opportunity to demonstrate that they are secure.

Headstart Science assessments may also be used by each year group to inform the teacher judgements made. However, these only assess the child’s science knowledge and therefore must be supplemented with further teacher assessment of the scientific skills demonstrated by each child.