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**Benthal Primary School**

**Science Policy**

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| Approved by: | Chair Of Governors |
| Approval date: | 3rd December 2019 |
| Review date: | Autumn 2021 |

**Science Policy**

1. **Aims**

Science at Benthal is about developing children’s ideas and ways of working to enable them to make sense of the world in which they live, through investigation and application of skills.

*Through teaching Science we aim to:*

* Prepare our children for life in an increasingly scientific and technological world.
* Foster an awareness and concern for our environment.
* Help our children acquire a growing understanding of scientific ideas and concepts of their world.

*Through teaching Science we promote positive attitudes which:*

* Encourage open-mindedness, self-assessment, perseverance and responsibility.
* Build our children’s natural curiosity and self-confidence to enable them to work independently.
* Develop our children’s social skills to work cooperatively with others.
* Provide our children with an enjoyable experience of science, so that they develop a deep and lasting interest and may be motivated to study science further.

*Through teaching Science we develop skills which:*

* Give our children knowledge and an understanding of scientific processes.
* Help our children to acquire scientific approaches to problem solving.
* Develop the skills of ‘Working Scientifically’ - observing, measuring, predicting, hypothesising, experimenting, communicating, interpreting, explaining and evaluating.
* Develop the use of scientific language and recording techniques, including the use of IT.
* Enable our children to become effective communicators of scientific ideas, facts and data.
1. **Curriculum**

We use the online program ‘Collins Snap Science’ to deliver the requirements of the National Curriculum to teach the relevant topics and Working Scientifically through a variety of contexts.

Children in the foundation stage – the nursery and reception classes - are taught the science elements of the foundation stage document through the Development Matters learning which is called ‘Understanding the World.’

1. **How Science is structured through the school**

KS1and KS2 teachers teach science for a minimum of two hours each week.

In KS1 and EYFS, a minimum of one third of overall Science lessons will include practical scientific enquiry.

In KS2, a minimum of 50% of overall Science lessons will include practical scientific enquiry.

Planning for science is a process in which all teachers are involved. We adapt and extend the curriculum to match the unique circumstances of our school. We also use our close proximity to parks and museums to promote and enhance our pupils’ scientific experiences.

1. **Our approach to Science**

Science teaching in the school reflects our Benthal Values of ‘Learners, Achievers, Friends.’ We use topic work through our Benthal Creative Curriculum (BCC) to promote cross-curricular links between science and other subject areas and use gardening and other outdoor activities were children learn about conditions for plant growth, seasonal changes, habitats and reduce, re-use and recycle. (See appendix)

We encourage children to ask and answer their own questions as far as practicable.

Children complete at least one fair test each half term, taking increasing responsibility for their planning, carrying them out and recording/interpreting the results.

Teachers may plan open ended tasks to include Science within homework provided in pupils Home learning Journals. Homework is used to support school and class activities and relates to the school’s overall homework policy.

1. **Equal opportunities and SEND in Science**

Science is taught within the guidelines of the school’s SEN and Equal Opportunity policies.

We adapt our teaching to cater to the needs of SEN children and, in particular, those who have specific requirements.

We have high expectations for all our pupils and ensure that teaching and support is inclusive and does not limit pupils’ attainment and progress. As well as provision for more able and disadvantaged pupils who are working at greater depth, we also ensure that provision for Science does not promote any cultural, social, linguistic or gender bias.

1. **Assessment and Recording in Science**

Formative assessment in Science is done through a title page which is placed in pupils’ books at the start of each topic. These title pages have objectives in the form of ‘I can…’ statements that link to the skills for ‘Working Scientifically’ and also indicates the learning outcomes that pupils should achieve for the topic. Children are given the opportunity at the beginning of the topic to record what they may already know about the topic and at the end of the topic to evaluate their learning journey. Pupil activities record achievement and celebrate success.

We mark each piece of work according to the school’s marking policy. Through AFL strategies children are involved in the process of self-improvement, recognising their achievements and acknowledging how their work could be further improved.

Pupils are also assessed in how well they can carry out investigations and conduct their own scientific enquiries. Summative assessment is done each half term where pupils carry out a Fair Test in relation to the topic and also complete an end of topic assessment from ‘Rising Stars’ assessment program. Teachers use these results to track the progress of the class and individual pupils and identify learning gaps to inform future teaching.

1. **The Role of the Science Lead, Management and Training**

The Science Lead takes the lead in policy development and its impact on practice.

The Lead monitors and reviews the teaching of science through regular formal and informal observations of teachers. They monitor the quality of planning in science and coverage of curriculum through regular planning checks. They monitor the quality and quantity of work in the books through regular book looks.

The Lead provides guidance and feedback on teaching, planning and marking work in books and learning outcomes in each year group.

The Subject Lead provides regular verbal and written (where required) reports to the SLT on the progress in Science across the school and is responsible for reporting to governors about the subject.

In addition, the Subject Leader attends training provided by the Borough and HSTA and also leads staff training and CPD, orders and manages resources and, crucially, champions the subject across the school, raising its profile and ensuring that initiatives are shared with all staff and modelled to the highest of standards.