****

Eccleston C.E. Primary School

*Let Our Light Shine*

Science Policy

Teaching, Learning and Personnel Committee

Reviewed: Spring 2022

Approved by Curriculum Committee: Spring 2022

Approved by Full Governing Board: Spring 2022

Signed by Chair of Governors:

Review Date: Spring 2025

**Eccleston CE Primary School**

**Science Policy**

**Introduction**

The Eccleston Science curriculum aims to promote inquisitive children who are naturally curious about their environment. Science makes a valuable contribution to their knowledge and understanding of the world and to all aspects of life.

**Intent**

At Eccleston Primary we encourage children to be inquisitive throughout their time at the school and beyond. The Science curriculum helps to foster a healthy curiosity in children about our universe and promotes respect for the living and non-living. We believe science encompasses the acquisition of knowledge, concepts, skills, vocabulary and positive attitudes. Throughout the programmes of study, the children will acquire and develop the key knowledge that has been identified within each unit and across each year group, as well as being given the chance to apply relevant scientific skills. We ensure that the Working Scientifically skills are built-on and developed throughout children’s time at the school so that they can apply their knowledge of science when using equipment, conducting experiments, building arguments and explaining concepts confidently and continue to ask questions and be curious about their surroundings.

It is also our aim to provide our children with wider opportunities in science and make links to other subjects. Therefore, teachers plan and challenge pupils based on the progressive curriculum maps, unique to our school and the needs of its pupils. We monitor our schools progress in science in line with our science policy.

**Implementation**

At Eccleston we use a variety of teaching and learning styles in Science lessons, which are adapted to meet the needs of all pupils. Teachers create a positive attitude to science learning within their classrooms and reinforce an expectation that all pupils are capable of achieving high standards in science. Our whole school approach to the teaching and learning of science involves the following;

* Following planned and arranged topic blocks prepared by the class teacher.
* Encouraging all pupils to use specific topic related vocabulary, develop scientific enquiry skills and use questioning as the basis of each lesson. This is a strategy used to enable the achievement of a greater depth of knowledge.
* Incorporating problem solving opportunities, which allow children to apply their knowledge and find out answers for themselves. Children are encouraged to ask their own questions and be given opportunities to use their scientific skills and research to discover the answers. This curiosity is celebrated within the classroom.
* Using questioning in class to test knowledge and skills and assess pupils regularly to identify those children with gaps in learning, so that all pupils keep up.
* Building upon the knowledge and skill development of previous learning. As the children’s knowledge and understanding increases, they become more proficient in selecting and using scientific equipment, collating and interpreting results and become increasingly confident in their growing ability to come to conclusions based on real evidence.
* Embedding the skills to be able to work scientifically into lessons, to ensure these skills are being developed throughout the children’s school career, with new vocabulary and challenging concepts being introduced through direct teaching. This is developed through the years, in-keeping with the topics.
* Demonstrating how to use scientific equipment, and the various Working Scientifically skills in order to embed scientific understanding. Teachers find opportunities to develop children’s understanding of their surroundings by accessing outdoor learning and workshops with experts.
* Providing a range of extra-curricular activities, visits, trips and visitors to complement and broaden the curriculum. These are purposeful and link with the knowledge being taught in class.
* Planning regular events, such as Science Week or project days, allowing all pupils to come off-timetable, to provide broader provision and the acquisition and application of knowledge and skills. These events often involve families and the wider community.

All of the children in Reception access the Early Learning Goals used as part of the Early Years Foundation Stage. In Key Stage 1 and 2, the children are taught using National Curriculum guidelines, with an emphasis on progression of skills and working scientifically.

**Impact**

Children at Eccleston Primary School enjoy and are enthusiastic about Science and this results in motivated learners with sound scientific understanding. Our engagement with the local environment ensures that children learn through varied and first hand experiences of the world around them. There is a clear progression of children’s work and teachers’ expectations in our school. Children’s work shows a range of topics and evidence of the curriculum coverage for all science topics. Children become increasingly independent in science by- selecting their own tools and materials, completing pupil lead investigations and choosing their own strategies for recording. Children also lead the questioning, consolidate and progress with their scientific knowledge and understanding, constantly develop scientific enquiry/investigative skills and gain a richer vocabulary, which will enable them to articulate their understanding of taught concepts. Formal and informal feedback from teachers aims to support pupils with positive comments and by encouraging further learning or investigation.

**Planning for Science**

Colleagues at Eccleston produce medium term plans which are then used to create weekly planning. Plans incorporate clear learning objectives, which are shared with the children. Planning also makes sure that it incorporates time for questioning and discussion, checking of children’s prior knowledge and understanding so that the teaching and learning is progressive. There is also a clear focus on children’s understanding of vocabulary and their awareness of the scientific enquiry types.

**Marking and Assessment**

Science books are marked as stated in our Marking Policy document. Children in Classes 2,3 and 4 are encouraged to evaluate their own work and that of their peers, as is appropriate. Comments or questions to extend the children’s learning may be included as part of the marking process and children are encouraged to respond to these.

Assessment for learning lies at the heart of promoting learning and in raising standards of attainment. Assessments are made in several ways at Eccleston. These include:

* Through immediate verbal responses to questioning and discussion, particularly to respond to misconceptions
* Notes made by staff
* Marking
* Moderation of books
* Discussions with children about their learning
* Foundation Stage Profiles

Assessments are used for adjusting planning, allowing teaching to be tailored for each pupil’s individual needs, regardless of ability, and the tracking of each pupil’s progress through the school, using termly tracking grids.

**Parental involvement**

Parents are encouraged to support their children’s learning in Science at home through:

* Assisting their children with Science work in their Learning Logs
* Attending parent’s evening for up-dates on their child’s progress in the Autumn and Spring terms and through end of year reports.

**Colleagues with responsibility for Science**

Science subject leader – Mrs Beverley Arrowsmith

Governor with responsibility for Science –

Headteacher – Mrs Katie Prescott