



Edleston Primary School

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# Science Policy

## **Intent**

Science teaching at Edleston Primary aims to give all children a strong understanding of the world around them whilst acquiring specific skills and knowledge to help them to think scientifically, to gain an understanding of scientific processes and also an understanding of the uses and implications of science, today and for the future. We aim to expose children pupils to first hand experiences to enhance learning and for them to have a love and curiosity for exploring the world around them.

At Edleston Primary, scientific enquiry skills will be embedded in each topic the children study and these topics are revisited and developed throughout their time at school, allowing children to build upon their prior knowledge and increase their enthusiasm for the topics whilst embedding this procedural knowledge into the long-term memory and get them ready for the next stage of learning.

We want to encourage the use of a range of skills including observations, planning and investigations, as well as inspiring them to question the world around them and become independent learners in exploring possible answers for finding out answers to questions in a scientific manner.

## **Implementation**

Each class carries out one hour of science per week, taught in blocks half termly and, where possible, will link to themed learning lessons and class texts. Our skills ladders have been thought out to ensure progression across all year groups. The curriculum is designed to build on previous learning and embeds the 'sticky' learning approach.

Our local area and school outdoor environment are used to give children first hand experiences and visits/workshops from experts also enhance the learning process. As part of our themed/cultural learning, children are also encouraged to explore the lives of well-known scientists.

Specialist vocabulary for topics is taught and built up, and effective questioning to communicate ideas is encouraged. Concepts taught should be reinforced by focusing on the key features of scientific enquiry, so that pupils learn to use a variety of approaches to answer relevant scientific questions.

Tasks are scaffolded to meet the needs of all learners but SEND pupils do not receive a reduced curriculum. Amongst learning scientific knowledge, children are provided with opportunities to pose and explore scientific questions, discuss concepts and carry out practical, hands on experiments. Annotated photographs may be used as evidence for what the children have understood. Children are assessed at the end of each term on all scientific topics for their year group to identify gaps and record progression.

In the foundation stage, science falls under the 'understanding of the world' area of learning where the children will explore similarities and differences of places, objects, materials and living things. They will cover topics such as 'Caring for the environment and living things', 'sound' and observations of plants and animals.

## Impact

We believe that at Edleston children will develop an enjoyment and curiosity for scientific concepts and the world around them, based on first hand experiences provided in the classroom and through use of the local area. They will have the experiences and confidence to pose and answer scientific questions, knowing how to explore these and work scientifically to find answers. Evidence from discussion, books, annotated photographs and termly assessments should show good progress, a breadth of knowledge and the 'sticky' learning required in order to consolidate learning and prepare them for the next stage.

## Monitoring

Teachers assess science termly. This is done through a combination of knowledge based assessments, work in books and classroom observations. Teachers make a judgement as to whether pupils are emerging, expected or exceeding. This is reported to the science co-ordinator at the end of each term, along with a brief summary of areas of strengths and development.

Governors monitor coverage of National Curriculum subjects and compliance with other statutory requirements through:

- School visits,
- meetings with the school parliament,
- sharing children's work
- feedback from staff.

Learning is monitored by the Leadership team and subject leaders across a variety of methods including:

- work scrutinies,
- learning walks,
- pupil interviews,
- analysing data.

## Inclusion

Teachers set high expectations for all pupils. They will use appropriate assessment to set ambitious targets and plan challenging work for all groups, including:

- More able pupils
- Pupils with low prior attainment
- Pupils from disadvantaged backgrounds
- Pupils with SEN
- Pupils with English as an additional language (EAL)

Teachers will plan lessons so that pupils with SEN and/or disabilities can study every National Curriculum subject, wherever possible, and ensure that there are no barriers to every pupil achieving. Teachers will also take account of the needs of pupils whose first language is not English. Lessons will be planned so that teaching opportunities help pupils to develop their English, and to support pupils to take part in all subjects; deepening and broadening their knowledge and understanding of concepts.

Further information can be found in our statement of equality information and objectives, and in our SEN policy and information report.