

Achieve Believe Succeed

'They shall have life, life in all its fullness' (John 10:10)

Mossley CE Primary School.

Science Policy.

Introduction.

Science is a core subject within the National Curriculum. This policy outlines the purpose, nature and management of the Science taught and learned in our school.

The implementation of this policy is the responsibility of all the teaching staff.

Vision.

We believe that through Science children will develop an understanding of the world around them, the building blocks of life and the physical processes that occur every day. Through carefully planned practical experiences, children will develop the skills of scientific enquiry and draw conclusions about the world around them. We want our children to have a clear understanding of how science affects their life on a daily basis.

Aims.

Science is a body of knowledge built up through the testing of ideas. Science is a practical way of finding reliable answers to questions we may ask about the world around us. Science in our school is about developing children's ideas and ways of working that enable them to make sense of the world in which they live through investigation, as well as using and applying process skills.

Our aims are to teach children to understand how major ideas contribute to technological change – impacting on industry, business and medicine – improving our quality of life. Children should learn to question and discuss Science-based issues that may affect their own lives, the direction of society and the future of the world.

Equal opportunities and inclusion.

All children have equal access to the full Science programme of study that satisfies the National Curriculum 2014 requirements. It is important for all children to experience a range of scientific activities in ways that are appropriate to their needs and abilities. Special provision is made in exceptional cases.

Implementation.

Science, in KS1 and KS2, will be taught using the PKC scheme of work, through which pupils will build a body of key foundational science knowledge as they work through the curriculum, asking questions and developing a sense of curiosity about the world around us.

Following the PKC Science curriculum will give children an introduction to fascinating content such as the inner workings of the human body, animals and the environments they live in, plants and their features, forces in nature, what lies beyond the visible and what lies beyond the planet we live on. Over time their knowledge will deepen moving from recognising and naming parts of the human body to understanding how our muscles work, how our blood moves around our body and how our nervous system helps us to interact with the world.

Pupils will be encouraged to use the knowledge they learn in Science and apply it to investigations that test a theory or set out to answer a question. Importantly, substantive scientific knowledge is taught first, before pupils are asked to undertake enquiry. This helps them to fully understand the elements of the enquiry first, and to make informed observations about the processes they see. Gathering information, recording data, graphing data and interpreting findings are all essential skills that pupils will apply to new contexts as they work through the curriculum. Enquiries include observing over time, pattern seeking, identifying, classifying and grouping, comparative and fair testing and researching using secondary sources. Scientific enquiries provide children with a wealth of opportunities, but first and foremost they will help to deepen understanding of the nature, processes and methods of science as a discipline and how it differs from other subjects they are studying. Pupils will gain an understanding of the purpose and uses of science both today and in the future.

Early Years Foundation Stage.

Science in Reception follows the Statutory Framework for the Early Years Foundation Stage and works towards the Early Learning Goals for Understanding the World. Development Matters is used to help with designing our curriculum alongside the Primary Knowledge Curriculum.

Health and Safety.

Children are encouraged to consider their own safety and the safety of others at all times. Teachers will provide a safe and secure environment for children to learn. Children must be made aware of the Health and Safety implications of an activity before it is begun. Children will be taught to store, move, place and use equipment safely. Children must wear appropriate clothing and safety equipment, if necessary, at all times. School is supported by CLEAPPS.

Resources.

Science equipment is stored in the centre of school, outside Year 2. Resources are to be returned when activities are complete. The Subject Leader to be informed of any missing or broken resources.

Assessment.

At the end of each unit, class teachers will use the assessment tools provided by PKC to inform their assessment of Scientific knowledge. The use of Focussed Assessment will be used to assess working scientifically skills. At the end of each unit data will be inputted onto DCPro.

In the Early Years Foundation Stage the children will be assessed using observations during adult led and child initiated activities.

Links with other curriculum areas.

Although Science is taught in a weekly 2 hour lesson, any clear links with other curriculum subjects can enhance and reinforce any knowledge that has been covered.

Presentation of work in Science books.

The way in which Science is recorded will vary across the school depending on age and ability.

Teachers should ensure that a range of appropriate methods are used. These may include:

- Written accounts including: instructions, reports and explanations;
- Diagrams, drawings and pictures;
- Annotated diagrams;
- Spreadsheets (data collection);
- Charts, graphs and tables;
- Model making;
- Unit cover sheets as an introduction of each topic;

The Role of Science Subject Leader.

- To provide a strategic lead and direction for Science in the school;
- Provide support and advice to staff in the delivery of the Science PKC scheme of work;
- Remain informed about current developments in the subject by attending CPD sessions and being involved in independent research and reading;
- Disseminate relevant information to staff;
- Deliver Staff Meeting sessions to staff, to support staff development;
- Monitor and evaluate teaching and learning of Science;
- Monitor standards in the subject, through planning and work scrutiny, statistics, quality of teaching and pupil assessments;
- Order and maintain resources to enhance effectiveness of Science teaching within the school;
- Consider with staff and work with SMT members in the evaluation and planning of actions included within the School Development Plan.
- Meet with the Head of Teaching and Learning, half-termly, to discuss progress of pupils.

Written by Lisa Teagle, Science Subject Lead.

29th January 2023.

Reviewed: 26th January 2024

Review Date: 29th January 2025