MICKLEOVER PRIMARY SCHOOL

Name of Policy: Science

Date of Policy: January 2025

Member of Staff responsible: Mrs Emma Cochrane

Review date: January 2028

Signature: _____ **Chair of Governors**

Date Approved: _____

At Mickleover Primary School

We are:

Motivated to learn

Proud of our achievements

Successful and skilled for life

SCIENCE POLICY

Intent

The intent of our science curriculum is to deliver the science national curriculum in a way that develops the children's sense of curiosity and understanding about the world around them. They will learn, through a wide range of science enquiries, the skills of working scientifically. These investigative skills will be embedded in each topic and be taught alongside knowledge and understanding of biology, chemistry and physics. Each science skill is revisited and built on as the children move through school. In addition to this, children build on and develop prior knowledge, understanding and vocabulary by revisiting topics.

AIMS

The aims of science are to enable the children to:

- develop scientific knowledge and understanding;
- develop their curiosity about what they observe, experience and explore;
- ask and answer scientific questions;
- plan and carry out scientific investigations;
- be able to select and use appropriate equipment safely and correctly;
- develop the skills of investigation, including: observing, measuring, predicting, experimenting, communicating, interpreting, explaining and evaluating;
- develop reading, writing, maths and ICT skills within a scientific concept;
- be able to use scientific language when communicating their ideas orally and in written recording;
- be aware of the continuing advances in science and their impact.

TEACHING AND LEARNING IMPLEMENTATION

Statutory Requirements

The statutory requirements for the teaching and learning of science are laid out in, The National Curriculum in England Framework Document for Teaching, September 2014 and the Statutory Framework for the Early Years Foundation Stage.

Foundation stage

In the Early Years Foundation Stage, 'Understanding of the World' is taught within cross-curricular topics which cover the Early Learning Goals. It is an integral part of the topic work covered throughout the year. (See Early Years Policy)

Key Stage One

In key stage one, science is taught through discreet science topics. The topics cover the science objectives from the 2014 National Curriculum year group science programmes of study and from the key stage one working scientifically document.

Key Stage Two

In key stage two, science is taught in weekly discreet science lessons of two hours per week. Each science topic covers an area from the year group programme of study within the 2014 National Curriculum. Science enquiries are embedded in each topic which build the children's investigative skills. Links will frequently be made between science and other curriculum areas, particularly reading and writing. Such activities may include, reading skills lessons which teach

new science vocabulary or knowledge and writing tasks such as a science information text or a report on an investigation.

RESOURCES

Science resources are kept in the green storage container. Boxes are labelled according to topics. It is the responsibility of all staff to keep the central store tidy and organised. Books specific to each year group are stored within that department. Stopwatches and torches are stored in the cupboard in Dolphins classroom and they are accessible to all members of staff.

COMPUTING LINKS

ICT is used in a variety of ways to support teaching and learning. The school has data loggers, pulse meters, microscopes and stop watches stored centrally. Each classroom has its own digital camera and computers. The ICT suite gives opportunities for whole class use of the internet for research, presentation or to use specific science software.

HEALTH AND SAFETY

All staff are fully aware of safety issues in science and will ensure that children are equally aware of these during their science activities. The children should also be encouraged to consider safety for themselves, others and the environment. Teachers are encouraged to check with the CLEAPPS website for up to date advice about hazards and safety in science lessons. http://primary.cleapss.org.uk/

EQUAL OPPORTUNITIES

Mickleover Primary School is committed to providing a teaching environment which values, respects and challenges all children regardless of ability, race, gender, religion, social background, culture or disability.

MORE ABLE

All children deserve an equal opportunity to receive the best education it is possible to give them. More able children will be highlighted as part of our assessment and pupil tracking. For those with special abilities and interests, provisions need to be made so they can achieve their potential. Within science lessons, this may include challenging open-ended questioning and research. Enrichment opportunities may include theme days, school visits, extra-curricular activities, links with local secondary schools and links with local businesses such as Rolls Royce and Toyota.

SPECIAL EDUCATIONAL NEEDS

Pupils are supported in a number of ways depending on their difficulties. This may include use of a Teaching Assistant, appropriately differentiated tasks or access to specialised equipment. Pre-teaching vocabulary plus scaffolds for written work and investigations will be used where appropriate. Specific areas of weakness may be targeted through a SEND provision plan.

IMPACT – ASSESSMENT AND MONITORING

Assessment

Assessment is ongoing and continuous and is used to inform teachers' planning. A range of formative and summative assessment activities are planned to match the lesson objectives. In key stage 2, these include written topic assessments. Our school science assessment grids are

used to record outcomes for each unit of learning. They are completed each half-term and passed on to the next teacher at the end of the year. A summative assessment for each child is recorded, in the summer term, on the school's online assessment tracker.

MONITORING AND REVIEW

The coordinator will ensure that there is continuity and progression in science by monitoring the planning and assessment grids, scrutiny of children's work and lesson observations. Alongside these activities, pupil voice is used to monitor learning, pupil engagement and use of vocabulary. At every stage through school, children will feel confident in their science knowledge and enquiry skills, will be excited about science and will show that they are actively curious to learn more. As part of Mickleover Primary School's monitoring cycle, science is given time whereby the coordinator carries out the above and reports back to Senior Management Team and staff on their findings.

THE ROLE OF THE SUBJECT LEADER

The coordinator should:

- keep up to date with new initiatives and developments
- encourage and support staff in their teaching of science
- communicate with the governors to ensure they are kept informed on the progress of science within the school
- organise INSET and deliver staff meetings as appropriate
- ensure that resources are maintained and updated as necessary
- ensure continuity and progression throughout the school
- manage the budget effectively

THE ROLE OF THE HEADTEACHER

- To support the Science Coordinator in the development of science curriculum
- To allocate sufficient finances to provide resources
- To be familiar with developments in the teaching of science, so as to maintain an overview