



FAIRLANDS PRIMARY SCHOOL

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POLICY STATEMENT

SCIENCE

APPROVED	September 2020
TO BE REVIEWED BY	September 2023

FAIRLANDS PRIMARY SCHOOL

SCIENCE POLICY

AIMS

Science is a body of knowledge and skills built up through experimental testing of ideas. Science is also a methodology, 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. Pupils at this school will have access to science appropriate for their age and ability that follows the guidelines of the National Curriculum:

- Teaches different types of enquiry and investigation to stimulate creative thought about the world around them.
- Encourages children to be curious and ask scientific questions beginning to appreciate the way science will affect their future on a personal, national, and global level.
- Enables children to plan and carry out scientific investigations, using equipment correctly, including new technologies.
- Develops scientific knowledge and conceptual understanding.
- Helps children to evaluate evidence and present their conclusions clearly and accurately.

PLANNING

Topic Maps give an overview of all Topics across the school. Links to Values Education, whole school events, happenings and main religious celebrations are also noted on this map.

Progression in history is planned for using **progression in skills documents** based on the 2014 national curriculum which are delivered through a thematic, topic-based approach. A **Medium Term Plan** is completed for each topic area. This ensures that learning is made relevant through interesting contexts that are meaningful to the children.

The **Short Term Plans** are then completed to give further breakdown of how curriculum opportunities will be provided on a lesson by lesson basis, linking to Curriculum Progression statements transferred from the Medium Term Plan.

LEARNING & TEACHING

The children undertake science activities as part of their topic work. Sometimes a whole day or two days are devoted to activities with a science focus. Science lessons involve a combination of whole class, group and individual teaching.

We hold an annual 'Science Week', where learning is related to a science focus across the whole school. Children have the opportunity to develop their scientific skills both at home and at school. Parents are invited in to participate in a science exhibition at the end of the week.

In all classes there are children of differing ability. We recognise this fact and provide suitable learning opportunities for all children by matching the challenge of the task to the ability of the child. We achieve this through a range of strategies:

- setting common tasks that are open-ended and can have a variety of results;
- setting tasks of increasing difficulty where not all children complete all tasks;
- providing a range of challenges through the provision of different resources;
- using classroom assistants to support the work of individual children or small groups.

Children also have the opportunity to use a variety of data, such as statistics, graphs, pictures, and photographs. They use ICT in science lessons where it enhances their learning. Scientific evidence is also evidenced using the 2Simple app. Children take part in role-play and discussions and they present reports to the rest of the class. They engage in a wide variety of problem-solving activities. Wherever possible, we involve the pupils in 'real' scientific activities, for example, researching a local environmental problem or carrying out a practical experiment and analysing the results.

Children have the opportunity to attend a Science club which runs weekly by Mad Science. Year 1 to year 6 can attend the club which delivers science in an engaging and practical way. Children are set open-ended tasks, provided stimulating challenges and homework activities are sent home too.

ASSESSMENT AND RECORDING

We assess children's work in science by making observational assessments during lessons. Teachers use the scientific assessment wheels which are displayed in books and the learning environment.

Opportunities for recording in Science books, (implemented Sept 2019), are identified when planning and children will receive ongoing teacher assessment. On completion of a piece of work, the teacher marks the work and comments as necessary, allowing the pupil time to respond to comments. Marking will follow the school policy.

The level descriptions for each attainment target are an aid to summative assessment, indicating the type and range of performance which pupils working at a particular level should demonstrate.

The subject leader keeps samples of children's work in a portfolio. These demonstrate what the expected level of achievement is in science for each age group in the school.

Teachers monitor six children and record assessments of scientific enquiry on a tracking sheet. This tracking sheet is completed throughout the year and will support teachers when making a summative assessment. Teachers also complete a scientific knowledge document at the end of each topic. Teachers use both the scientific knowledge and scientific enquiry documents to make an accurate assessment.

RESOURCES

Individual classes keep items which are relevant to the topics they are delivering. The phase leader will be responsible for budgets within their phase and teachers will approach them for any science resource needs. At the beginning of the year a staff questionnaire is sent out addressing any resources year groups require. The subject leader will advise and review the school's needs throughout the school year.

HEALTH AND SAFETY

The general teaching requirement for health and safety applies in science. Each phase has a 'Be Safe' Health and Safety Guide.

MONITORING

The monitoring of the standards of children's work and of the quality of teaching in this subject is the responsibility of the subject leader.

The work of the subject leader also involves supporting colleagues, being informed about current developments in the subject, and providing a strategic lead and direction for the subject in the school.

The subject leader meets with the head teacher termly to evaluate the strengths and weaknesses in the subject and indicates areas for further improvement.

The subject leader has regular management time in order to review evidence of the children's work and undertake lesson observations of teaching across the school. This evidence is recorded on Blue Sky where teachers are given feedback on their teaching of Science.

REVIEW

The governing body will review this policy in line with its annual cycle of review.