Moss Side Primary School Policy

Science



"The important thing about science is not so much to obtain new facts as to discover new ways to think about them."

William Lawrence Bragg

Our intent

Developing a positive attitude towards science promoting enthusiasm, open-mindedness, curiosity, creativity and co-operation

This policy reflects the school's values and philosophy in relation to the teaching and learning of science.

It sets out a framework within which teaching and non-teaching staff can operate.

The policy should be read in conjunction with the scheme of work for science.

Science is a core subject within the National Curriculum.

Our aims

- . Teaching in an interesting and motivating manner.
- . To ensure progression in the development of concepts, skills and scientific knowledge that will be useful to the children as future citizens.
- . Encourage co-operation in using the environment wisely, in consideration of current issues, and to work for it's improvement.
- . To gain caring consideration, through understanding all living things.
- . Enquire, explore and observe so that they can ask questions about themselves and their environment.
- . A respect for the views of others, their property and work.

These aims are consistent with our school philosophy and take account of the LEA Curriculum Policy and National Curriculum.

The subject comprises programmes of study and level descriptions. These are divided into key stages and organised into levels of increasing challenge.

Enrichment Activities

Enrichment for science at Moss Side includes:

- Projects in special weeks, such as STEM week.
- Eco committee
- Current news links

Assessment and Evidence

Our pupils will work at the levels appropriate to their ability. It is expected that most children will achieve the 'expected standard' for their year group. Children's skills will be assessed and developed by the class teacher during lessons and through discussions. This assessment is used to inform differentiated outcomes, support and challenge required by the children. Key Learning documents for each year group should be used to inform teacher judgement. In KS2 there are more formal written assessments, which will be given intermittently throughout the year. Teachers may decide to display work in their classrooms or during Parents' evenings to celebrate and exhibit the work of all children.

Inclusion

When teaching science we aim to deliver an inclusive curriculum for all pupils by:-

Setting suitable learning challenges;

Responding to pupils diverse learning needs;

Overcoming potential barriers to learning and assessment for individuals and groups of pupils.

In order to achieve these aims the teaching of science is organised in the following way

KS1 (some mixed year groups)

The class teacher or the science teacher delivers science. The scheme of work gives each year a topic a term or half term to be covered. The class teacher and the science support teacher decides which areas of the topic they are going to cover. In KS1 Year1/2 and Year 2 classes are taught science by the science teacher. The Reception class are taught by their class teacher according to the new 2021 science curriculum. In the mixed Foundation/Year1 class, pupils will work through science topics covering the Year 1 scheme of work incorporating the Foundation Stage Framework where necessary and are taught by the TA. In the mixed Year 1/Year 2 class, pupils will work through a combination of the Year 1 and Year 2 schemes of work using science

lessons, topics and their school trip. The year 1 work will be covered through different activities than those undertaken in the Foundation/Year 1 class.

The Year 3 science teacher is aware of this when introducing the KS2 curriculum.

KS2

The class teacher or science co-ordinator teaches science on a weekly basis, sometimes alongside the class topic but more often discreetly.

We place strong emphasis on experimental investigational work wherever possible, which the children will approach and work through at their own level.

Children in all classes will experience practical, investigative work which will encourage and promote the development of the important scientific skills and attitudes of observation, raising questions and forming testable hypotheses, sorting and classifying, pattern seeking, investigating and devising experiments, measuring, recording their findings as accurately as possible in appropriate ways for their age and ability, draw conclusions of answers from their work and evaluate the evidence gathered and to communicate through the development of appropriate language skills which are a positive outcome of the scientific investigation where group work and co-operative collaborative learning are encouraged.

Resources

Many resources are used in the teaching of science. These include teaching staff, school buildings, the outside environment, parents, governors, higher education, professional and scientific bodies, department for education, equipment supplies, publishers, printed materials, equipment, places to visit, visitors, animals, audio-visual aids, computers, games etc.

Most resources are stored in KS2. Teachers are asked to report to the science co-ordinator when appropriate resources can not be found or need replenishing.

Our science planning refers back to the National Curriculum 2014 or EYFS 2021 (Knowledge and Understanding of the World) and where appropriate extra schemes of work are used.

Health and Safety

Potentially science has a number of hazards but as long as teachers are alert to the problems and follow the County Guidelines these should be kept to a minimum. Every reasonable care should be taken to teach children the correct use of the following equipment at an appropriate stage. We expect children to act according to our instructions.

Role of the Co-ordinator

The duties and responsibilities of the science co-ordinator are as follows:-

- a) To read, understand and interpret the National Curriculum orders in science in order to help the staff also understand what is required.
- b) To annually review and keep up to date the science policy and scheme of work in science.
- c) To keep under review and make suggestions for the updating and regeneration of all the science equipment in the school.
- d) To research the range of science schemes appropriate to the needs of pupils in the school.
- e) To devise and support a scheme of assessment (including testing) in science.
- f) To attend courses of a routine nature and also key developmental courses on behalf of the staff. To lead discussions with staff on return to school.
- g) To look at teaching plans in science of all the teaching staff and make constructive comments on them.
- h) To visit classrooms to review the teaching and monitor the time allocation, teaching strategy and teaching quality.
- i) To be aware of developments needed in the school to improve the attainments of the pupils in science.

The impact will be assessed by

- The teacher assessment collated by subject leaders, both formal and informal.
- Pupil conferencing to discuss understanding, retention of knowledge etc

This policy needs to be read alongside the following whole school policies:

- Risk Assessment File
- Marking
- Health and Safety
- Positive Behaviour
- Safeguarding