



LATCHMERE
ACADEMY TRUST

Science Policy

Status	Curriculum
Review Cycle	Annual
Date written/ last review	September 2022
Date of next review	September 2023

Aim

We aim to equip pupils with both the skills and knowledge to think logically and creatively. This will allow pupils to solve problems both in science, across the curriculum and in their everyday lives.

Breakdown of Objectives

We aim to:

- develop a positive attitude towards science
- identify and challenge pupils' misconceptions
- develop children's ability to apply their skills and knowledge in a variety of practical, real life situations and for further education
- develop enquiring minds and stimulate pupils' innate curiosity
- embed the use of ICT within science
- promote the use of accurate scientific vocabulary
- ensure a smooth transition between the key stages
- encourage the confidence to question constructively their scientific understanding and the theories of others
- foster cross-curricular links to allow scientific knowledge to be developed in other areas of study
- ensure access for all children to science both inside and outside the school.
- to develop an awareness of safety issues arising within this environment

The use of Computing within science

Pupils are given the opportunity to apply and develop their Computing capability through the use of ICT equipment, which enable them to:

- collect information from a variety of sources (through data loggers, the internet, digital microscopes).
- present work in a variety of ways such as using Microsoft Word and Excel

PPG, equal access and outcome

We cater for the different needs of children (PPG, FSM and SEN) by appropriate differentiation in resources, materials and expectations, which are clearly identified, in our plans.

We aim to give every child the opportunity to experience success in learning and to achieve as high a standard as possible. The clear identification of focused objectives for teaching and learning; the thoughtful use of appropriate resources to ensure that all pupils are able to experience and learn about science.

Children for whom English is an additional language are given every opportunity to experience science, engage with practical work and learn the appropriate language. They have opportunities to record their ideas and experiences and develop their skills of investigation and enquiry.

Planning

The National Curriculum and whole school curriculum map (which reflects the POS and working scientifically statements) forms the basis of the planning with year groups, making adaptations in conjunction with our creative curriculum. This is to ensure the national requirements are met whilst continuously challenging pupils with new knowledge and skills.

The curriculum areas are recorded and plotted across the school to provide complete coverage of the whole science curriculum. The termly planning grids provided within the school are used to produce medium-term/short term plans, where the learning objectives are clearly identified and the sequence of lessons for each topic is clearly set out. The lesson plans identify the main teaching activities, resources, differentiation and assessment opportunities and provide a record of cross-curricular links (in particular opportunities for the use of English and Computing).

Assessment and Record Keeping

In line with the new assessment system Insight, end of topic testing will be used to identify whether pupils have grasped and retained the key information and subject knowledge from their science lessons. Working scientifically statements will be assessed on pupil's ability to use the key skills required in each year group or phase. We are encouraging pupils to formulate and carry out their own experiments in KS2 while pupils in KS1 will take part in class or teacher led investigations to assess these skills. Teachers will update Insight at the end of each topic and make judgements about if pupils are below, just below or on track at the end of each academic year.

Formal assessment takes place at the end of KS1 (Year 2) and KS2 (Year 6) which are based on teacher assessments throughout their time at school. These are based upon children subject knowledge and their ability to work scientifically in line with the National Curriculum.

Monitoring and Evaluation

The science subject leaders monitor planning to ensure continuity and progression within and between year groups.

The science subject leaders also undertake lesson observations in-line with the school's programme of monitoring.

The new assessment records will be closely monitored across the school by the science coordinators and the SMT.

Pupils' books and teacher's marking are monitored to ensure progression throughout the school.

Regular meeting at Science Leaders' meetings with other schools ensures we are up-to-date with ongoing initiatives.

Regular moderation meetings are carried out with other schools (especially year 2 and 6). This ensures rigour and consistency with assessment of work.

Insight data will also be monitored once per term by the subject leader and science team to ensure teaching and learning in science is as effective as possible.

As part of the Trust, Latchmere School has successfully achieved the Primary Science Quality Mark GILT award, in recognition quality science teaching and learning. The PSQM scheme enables schools to work together to share good practice and is supported by professional development led by local experts. It encourages teacher autonomy and innovation while at the same time offering a clear framework for development in science subject leadership, teaching and learning.

The role of the Science Subject Leaders

The role of the science subject leaders are:

- to formulate the science policy and curriculum
- to identify areas for development within the Science Curriculum
- to provide in-house training in the light of the local and national developments
- to advise and support teachers in their planning and delivery of science
- to assess, monitor and evaluate the science curriculum by classroom observation and review of assessment data
- to ensure that there are sufficient science resources
- maintain an overview of the planning to ensure that all subject areas are covered

Resources

We ensure that practical resources necessary to implement the plans are made available by regular communication with year groups, and these resources are housed in the science area. These are continually updated annually.

On the network there is a wide selection of ICT resources, including PowerPoint presentations, video clips, microscope activities and year group plans for teachers to implement in the lessons.

Conclusion

We aim through our teaching of science to give all children a secure foundation in the subject and to continue to raise standards through continuous self-review and team work.

Note: The general teaching requirement for health and safety applies in this subject.