Lady Margaret Primary School

Science Policy 2018

Approved by:	Teaching and Learning Committee	**Date:**	8th November 2018
Last reviewed on:			
Next review due by:	September 2019		
Signed by:			

This policy supports the **Rights Respecting principles** adopted by Lady Margaret Primary School and is particular relevant to the following articles:

Article 28

Every child has the right to an education. Primary education must be free. Secondary education must be available for every child. Discipline in schools must respect children's dignity. Richer countries must help poorer countries achieve this.

Article 29

Education must develop every child's personality, talents and abilities to the full. It must encourage the child's respect for human rights as well as respect for their parents, their own and other cultures, and the environment.

General Information about the subject (linked to NC)

A high-quality science education provides the foundations for understanding the world through the specific disciplines of biology, chemistry and physics. Science has changed our lives and is vital to the world's future prosperity, and all pupils should be taught essential aspects of the knowledge, methods, processes and uses of science. Through building up a body of key foundational knowledge and concepts, pupils should be encouraged to recognise the power of rational explanation and develop a sense of excitement and curiosity about natural phenomena. They should be encouraged to understand how science can be used to explain what is occurring, predict how things will behave, and analyse causes.

Aims

Alongside the fundamental aims of the national curriculum, Lady Margaret Primary School aims to:

- Ensure that children develop a secure understanding of knowledge and concepts taught, so that they are able to progress onto the next stage.
- Build on their use of technical terminology so that it can be applied accurately and precisely.
- Embed 'working scientifically' within the areas of chemistry, biology and physics so that they use a variety of scientific enquiry to answer relevant and specific questions.
- Enable the children to maximise and develop their confidence, engagement and motivation within the study of science.
- Develop a sense of growing awareness to the science that is around them today and that of the future.
- Provide children with extra opportunities through a variety of science based clubs.

- Provide the children with practical experiments and investigations within lessons to further enthuse and develop their understanding of science.

Cross Curricular

Children will have opportunities to develop their scientific skills through cross curricular activities linked with maths, writing, reading, computing and topic lessons.

Particularly in reading, children will have the opportunity to enhance their development of enquiry skills through comprehension and research activities; this will help to develop reading skills. Whole class reading sessions will also include scientific texts, to enhance a fluid curriculum. Children will be able to develop transferrable skills to scan, record, collect, interpret and evaluate a range of information, which will widen their scientific expertise in a cross curricular and creative manner.

There will also be a vast amount of writing opportunities including investigative writing, recording of results, biography of a scientist, predictions and creating scientific pieces of work. Our aim is to create high quality writing that corresponds with the standards within English.

Rights Respecting

Lady Margaret Primary School is a Level 1 Rights Respecting school. Children and adults work together to recognise and act upon the rights of the child within our school, our local community and the wider world. We believe that all children have the right to an education, to have fun and enjoy school. Therefore we give children the right to choose and vote on what experiments they would like to partake in during the summer term. We ensure that planning and teaching is practical, creative, hands on, stimulating and we encourage children to use rights respecting language throughout all lessons.

Outcomes for pupils (More able/SEN)

- We aim to provide for all children, so that they achieve as highly as they can in science according to their individual abilities. We track children's assessments termly and use half termly assessments to inform teaching, planning and learning.
- To challenge more able learners, tasks are differentiated in order to suit their needs. Likewise, this is also the case for our under achieving pupils.
- Pupils with SEN are provided with the same equal opportunities, however additional support will be put in place if required.
- Through the edible garden we aim to develop a growing awareness amongst the children of the outside world including, plants, minibeasts and seasons.
- We aim for all children who leave Lady Margaret to have had the opportunity to experience extra science opportunities through a range of clubs, workshops, events and exciting experiences.

Resources

Resources will be kept in the Science room, everything has been labelled precisely. Staff will be responsible for the tidiness and selection of resources as and when needed. Resources will be ordered if they are needed for particular experiments or investigations. Science books and reading materials can be found in the library for staff to borrow.

Monitoring, evaluation and review

Children will be assessed at the beginning and end of each topic. At the end of each topic, the teacher will make a summative judgement about the attainment of each child. Throughout this process the teacher will be recording how each child has performed in lessons that are specific to an assessment, to identify whether they are working towards, or have achieved the topic objective. Coloured stickers will be used to evidence their progression.

The quality of teaching and learning will be monitored regularly by the SLT, science leader of learning, within year groups and phases through lesson observations, work scrutinies, learning walks and pupil voice. The monitoring is robust and in line with the school development priorities and the assessment calendar.