

MATHS POLICY



ST MARY'S LEWISHAM CE PRIMARY SCHOOL

OUR VISION

To be a learning community that promotes the unique gifts, wellbeing and potential of every person. Our work is founded on the life and teaching of Jesus Christ, building on His message of equality, peace and justice, guided by His words 'As I have loved you, so you must love one another' (John 13:34).

RATIONALE

The National Curriculum 2014 states that: "Mathematics is a creative and highly inter-connected discipline that has been developed over centuries, providing the solution to some of history's most intriguing problems. It is essential to everyday life, critical to science, technology and engineering, and necessary for financial literacy and most forms of employment. A high-quality mathematics education therefore provides a foundation for understanding the world, the ability to reason mathematically, an appreciation of the beauty and power of mathematics, and a sense of enjoyment and curiosity about the subject."

We want the children to see Mathematics as being relevant to their world and applicable to everyday life as well as being something that they will need as they move on through their school life and ultimately to the world of employment. We want the children to have a sense of awe and wonder surrounding Maths.

The emphasis of the National Curriculum is to ensure that all children become fluent, that they can solve problems and reason and explain mathematically. This means that children need to be regularly exposed to opportunities involving increasingly complex problem solving which will develop communication skills, build resilience and collaboration and encourage creative, flexible and independent thinking. They will be encouraged to develop an argument and line of enquiry which they can justify using mathematical vocabulary fluently and in context.

TEACHING AND LEARNING

Problem solving is promoted through daily planning. Additionally, there is a focus every half-term on teaching a different problem solving skill. This will be supported by a range of investigations in each class, ensuring that investigation skills are taught consistently across the school, and children are able to select the strategies that they require to independently solve problems. Investigations will be planned that are 'low threshold / high ceiling' to ensure that they are easy to access and promote challenge for all learners.

Arithmetic is promoted throughout lessons and through calculation time, which is taught in addition to maths lessons for 15 minutes 3-4 times weekly. This includes a weekly times table challenge. A whole school calculation policy 'Mathematics Mastery Progression in Calculations' is used to ensure that language, models, images and the layout of calculations are consistent across the school.

The school will adopt the CPA approach: Concrete, Pictorial, Abstract. This will allow the children to experience the physical aspects of Maths before finding a way to present their findings and understandings in a visual form before relying on the abstract numbers. Planning will include regular 'hooks' to engage the children, linked to their interests. These provide an opportunity for cross-curricular learning, promote problem solving and give a context and purpose to learning.

THE ROLE OF PARENTS

It is important that parents and carers are actively involved in their children's education. In order to help keep them informed of what is happening within school we have run parent information sessions. These have shared the strategies taught in class and also changes relating to assessment/testing arrangements.

SCHEME OF WORK

The National Curriculum sets out year-by-year programmes of study for key stages 1 and 2. This ensures continuity and progression in the teaching of mathematics. The EYFS Statutory Framework 2014 sets standards for the learning and development of children in the EYFS, supported by the 'Development matters' non statutory guidance.

Years 1-6 use the White Rose Maths Hub schemes of learning as their medium term planning documents. These schemes provide teachers with exemplification for maths objectives, broken down into small steps and including fluency, reasoning and problem solving, key aims of the National Curriculum. They support a mastery approach to teaching and learning and have number at their heart.

The above schemes of learning support daily lesson/flipchart planning. Teachers are provided with a range of additional resources to support planning, such as NCETM, Nrich and I See Reasoning. EYFS planning will ensure the children learn through a mixture of child initiated and adult led activities, both inside and outside of the classroom.

MANAGEMENT, CPD AND MONITORING

The Subject Leader will organise regular events to raise the profile of maths, including participation in festivals with other schools, a whole school times table challenge and a whole school 'make 100' summer challenge. The Subject Leader leads regular staff meetings and Inset sessions. Staff have received 3 Inset days of training to support the use of Numicon to promote reasoning, CPA and mastery. There is a strategic, timetabled range of monitoring by the Link Governor, Subject Leader and ELT, which includes lesson observations, pupil voice, book looks and learning walks. Areas for further monitoring are identified and followed up.

FEEDBACK AND ASSESSMENT

Children will be provided with feedback either verbally or through written marking. Teachers should adhere to the school's Feedback and Assessment Policy. Children will take a weekly Arithmetic Fluency Review. The next steps of learning identified will generate a Personalised Learning Review, which is sent home as Home Learning.

Termly assessments will be carried out across the school using the assessment materials for each year group provided by the White Rose Maths Hub. These materials, as well as end of unit assessments, will be used alongside judgements made from class work to enable teachers in making a termly steps assessment for each child which they enter onto Scholarpack. Targets for each unit are generated and displayed in class. In addition, children have a times table or number fact target.

INCLUSION

In line with the School's Inclusion Policy each child will have an equal entitlement to all aspects of the Maths curriculum and to experience the full range of Maths activities. Lessons involving lots of visual, aural and kinesthetic elements will benefit all children including those for whom English is an additional language (EAL). Pupil Progress meetings are timetabled each term for all classes. Progress of pupils is discussed and appropriate intervention considered and put in place, with a focus on Quality First Teaching. Challenge for Higher Attaining pupils will be built into lessons and monitored.

SCHOOL AND CLASSROOM ENVIRONMENT

Resources are available in class for self-selection. A whole class number line will be displayed in each classroom, hundred squares and multiplication grids will also be displayed. There will be a Maths display board in each class. Each classroom will have a vocabulary target displayed, containing key vocabulary for the current unit. This will be referred to throughout lessons with the aim that children can use maths vocabulary fluently and in context.