

Lady Margaret Primary School



Where children come FIRST

Mathematics Policy

Last reviewed: May
2022

Respecting Rights

The policy is written with consideration to our school commitment to the Rights of the Child and our achievement of being a Rights Respecting School. It complies with Article 28 of the UNCRC 'Every child has the right to an education' as well as Article 29 'Education must develop every child's personality, talents and abilities to the full.' Although direct reference to this is not continuously made, the policy has been written with full awareness of our responsibility and commitment to children's rights.

Purpose of Study

At Lady Margaret Primary School, we believe that Lady Margaret Primary School is the best start for your child. We value every pupil and the contributions they make to our school. We aim to inspire all children to develop a secure understanding of key mathematical concepts that will equip and prepare them with the key skills they need for their future.

In mathematics, this means providing children with an enriching curriculum that:

- Develops children's knowledge and understanding of key mathematical concepts.
- Provides every child with challenging opportunities to use their problem solving and reasoning skills to explain their thinking.
- Relates children's mathematical learning and skills to other areas of the curriculum.
- Links children's learning to real-life concepts so that they understand how maths is useful in our everyday lives.

Maths is integral to all aspects of life and with this in mind, we endeavour to ensure that children develop confidence in their mathematical ability by providing them with valuable learning opportunities through carefully planned lessons and out-of-school experiences.

Aims

At LMPS, we teach maths using a scheme called Power Maths which works in line with the National Curriculum. This is the only mastery programme perfectly aligned to the White Rose Maths progressions and schemes of learning, it is written specifically for UK classrooms by leading mastery experts, and is recommended by the DfE.

Planning and Progression

In all maths lessons the following will be present:

- The BIG 5: representation & structure; mathematical thinking; fluency; variation; and coherence.
- Children will be sat in mixed ability pairs ('maths buddies').
- Concrete resources are carefully selected by the teacher and available to pupils on their tables. A list of required resources are indicated on the lesson plan.
- Different resources and representations are modelled and used by the class teacher, e.g. number line, bar model, counters, bead strings etc.
- All questions are read together as a class during the teacher input.
- Children are encouraged to justify their answers using mathematical language – this is modelled by the class teacher. New vocabulary and/or sentence stems are introduced at the start of the lesson.

Number Fluency:

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- All children participate in a fast-paced number fluency session each day. Sessions are focussed mental calculation strategies and fast recall of number facts.

How is maths taught at LMPS in Nursery?

The Framework for the Early Years Foundation Stage states that children at the expected level of development will:

- Have a deep understanding of number to 10, including the composition of each number.
- Subitise (recognise quantities without counting) up to 5.
- Automatically recall (without reference to rhymes, counting or other aids) number bonds up to 5 (including subtraction facts) and some number bonds to 10, including double facts.
- Verbally count beyond 20, recognising the pattern of the counting system.
- Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity.
- Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally.

Teachers and Learning Support Assistants support children in developing their understanding of mathematics in a broad range of contexts in which they can explore, enjoy, learn, practise and talk about their developing understanding. This area of development includes seeking patterns, making connections, recognising relationships, working with numbers and counting, shapes and measures, sorting and matching. Children use their knowledge and skills in these areas to solve problems, generate new questions and make connections across other areas of learning and development.

Children in the EYFS learn by playing and exploring, being active, and through creative and critical thinking which takes place both indoors and outside. Mathematical understanding is also developed through stories, songs, games, routine, questioning, imaginative play, child initiated learning and structured teaching using Numberblocks: a BBC television series aimed at introducing children to early number. Snappy animation and loveable characters combine with engaging storylines to gently introduce concepts of number to support early mathematical understanding - <https://www.ncetm.org.uk/resources/52060>

Access for all

At LMPS, all pupils have access to the mathematics curriculum regardless of their gender, race or any disability. As we are a Rights Respecting School, we believe that every child has the right to an education (Article 28). We ensure that appropriate provisions are made to ensure that children with disabilities and/or special needs can participate and experience success in maths. Teachers have support of a Learning Support Assistant at times to work with groups of pupils or an individual pupil to provide extra support.

Assessment

At LMPS, pupil assessments take place at the end of each term. This is completed in test conditions and provides the teacher with a raw data score. The result from the assessment is used to measure the attainment and progress of the class. Pupils who are identified as

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requiring additional support, may be offered an additional booster class, which can take place at lunchtime or afterschool. Alternatively, they may be supported further through quality-first teaching and/or an intervention that takes place during the school day. Teachers also assess pupils on a daily basis and will adapt plans to suit the needs of the learner where applicable.

Role of the Leader

The core purpose of the maths Leader is to provide professional leadership and management for mathematics in order to secure high quality teaching, effective use of resources and improved standards of learning and achievement for all learners across the school.

The maths leader will achieve this through undertaking the following duties and responsibilities:

- The maths leader leads the maintenance and development of the subject. They are responsible for assuring quality and standards in the subject by:
- Taking the lead in the development, evaluation and amendment of schemes of work as and when necessary.
- Prioritises improvements for the teaching and learning of maths across the school and contributes to the school improvement plan, in consultation with the Headteacher and Governing Body.
- Ensures that the school's senior leaders and governors are kept informed about the quality of teaching and learning in maths.
- The subject leader will monitor children's progress and will monitor and evaluate maths provision in the school by conducting regular work scrutiny, learning walks and deep dives. They will use this data to inform the subject development plan, which will detail how standards in the subject are to be maintained and developed further.
- Leads by example by setting high standards in their own teaching and raises the profile of maths at Lady Margaret Primary School through best practice.
- Model lessons, as appropriate, to new staff, ECTs and peers to support continued professional development.
- Monitors progression and continuity of maths throughout the school through lesson observations and regular monitoring of outcomes of work in maths books.
- Ensures that all staff have access to year group plans and the relevant resources which accompany them.
- Provides 'expertise' to assist staff in the delivery of the curriculum: ensures teachers understand the requirements of the National Curriculum and supports them to plan lessons.
- The subject leader will ensure that all staff have access to professional development including observations of outstanding practice in the subject.
- Regularly prepares, organises, and leads insets and CPD activities to support staff in developing areas of geography where they feel less confident, facilitates joint professional development and provides coaching and feedback for teachers to improve pupil learning.
- Evaluates, on a regular basis, the policy and scheme of work to ensure they form the basis of practice of maths within the school.
- The subject leader will, on a regular basis, organise, audit and purchase whole school and class-based maths resources.

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Legacy 

Morality 

Power 

Sustainability 

- Reads widely around pedagogy relating to the learning and teaching of maths; takes responsibility for managing own professional development by participating in external training, independent private study, engaging in educational research and scholarly reading.
- Develops opportunities for parents/carers to become more involved in mathematical education; keeps parents informed about geography.
- They will ensure the high quality of maths displays around the school, present certificates of achievement during end of term assemblies and involve the school in 'celebrations' of maths, including participation in events such as showcase events.
- The subject leader will extend relationships and make contacts beyond the school.

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