



Mathematics Policy

Lidget Green Primary School

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.

(Taken from: Mathematics programmes of study: National curriculum in England)

Intent

Mathematics is a hierarchical subject that builds on previous learning as it extends knowledge, therefore the provision of good teaching and learning opportunities is vital at every stage of a pupil's progress through school. At Lidget Green Primary School, we believe that mathematical education should equip children for life beyond the bounds of school therefore, we will encourage all pupils to become independent learners through enjoyable, challenging and fulfilling experiences of mathematics and enable them to acquire a strong mathematical mindset in order to prepare them for the future.

We aim to teach children to:

- Develop a positive and enthusiastic attitude towards Mathematics.
- Use the language of Mathematics to communicate their ideas and talk about Mathematical skills and concepts.
- Use a range of mental strategies and mental recall of facts, arithmetic strategies as well as formal and informal written calculations.
- Solve problems in a range of meaningful real-life contexts including other curriculum areas.
- Work co-operatively.
- Explore, investigate acquire and apply mathematical skills, concepts and understanding.
- Understand the ways in which information is gathered by counting, measuring and how it is presented in graphs, diagrams, charts and tables.

Implementation

When planning for mathematics, all class teachers will:

1. Focus on the curriculum objectives in their year groups in order to consolidate learning, to develop the children with fluency in the fundamentals of mathematics, begin reasoning mathematically and to solve problems.
2. Be responsible for drawing up and evaluating the weekly plans for delivery of the daily Mathematics lessons. These plans will be saved onto the shared drive into the correct files by individual teachers and can be monitored by the SLT, Assessment leader and the Mathematics leader. *(Teachers should refer to the quick start guide for what a good lesson looks like)*
3. Be responsible for keeping formal and informal records. Formal records of a pupil's achievement against the Curriculum Objectives will be kept as a permanent part of that pupil's record and will follow them through school.
4. Endeavour to motivate pupils, by using the Maths working walls effectively where relevant displays will be shared and where WAGOLs of the steps to success and significant vocabulary will be visible.

Planning

Teachers will work within their year groups to plan and deliver lessons that suit the particular learning styles of the children and implement the correct methods of calculation *(see knowledge organisers)*. They will use their own judgement and formative assessment to ensure a flexible approach is adopted within the classroom. Individual, paired and group work will be used across a series of lessons.

Planning will demonstrate the various challenges available to children, together with AfL *(Assessment for Learning)* opportunities, speaking and listening and self/peer assessment and teacher assessment. Across a range of lessons children should be allowed to engage in mathematical discussion *(think pair share or team huddles)* investigations, problem solving, practical experiences and written methods, as well as allowing for time to demonstrate their understanding through gap tasks.

Children will be provided with feedback either verbally or through written marking. Often, in order to clarify understanding of a concept, children will be set gap tasks, but not for every lesson; these should be completed by the children at the next earliest opportunity after the lesson. When marking work, teachers should adhere to the school's Marking Policy.

Assessment

Assessment in Mathematics takes place on a daily basis through a variety of different methods. These assessments will be used to inform teaching in a continuous cycle of planning, teaching and assessment.

- Daily marking of the children's work will allow teachers to see if the children have understood the topic being covered (*see marking policy*).
- Teachers will annotate weekly lesson plans/Smart notebooks each day to inform the weeks teaching.
- Children are tested using the NFER test during assessment points 1, 2, and 3 (*see monitoring timetable for dates*).
- At the end of each assessment point, the class teacher will update the school's tracking system (*Target Tracker*) to record the steps of their learning journey.
- The school's tracking system and summative assessments will support teachers to identify target groups of children throughout the year to inform necessary intervention groups. Intervention groups will take place both within the Maths lesson and outside; these sessions may be delivered by the teacher or teaching assistant and may involve individual or small group work to support the learning needs of all children.
- Teachers will also draw upon their class record of attainment against key objectives and supplementary notes and knowledge about their class to produce a summative record. Accurate information will then be reported to parents and the child's next teacher.

Early Years Foundation Stage

In Nursery and Reception, the classes will be organised to promote social skills and the development of mathematical language and understanding. All adults working in the Foundation Stage will support children in developing their understanding of problem solving, reasoning and numeracy, planning a broad range of contexts in which they can explore, enjoy, learn, practise and talk about their developing understanding. They will provide opportunities for practice to develop children's confidence and competence.

Resources

Each classroom will be resourced with materials to support the delivery of Maths; such items include number lines, multiplication tables, 100 squares, 2D and 3D shapes, multilink cubes, dice and other smaller items. Larger materials are located in the Maths Cupboard located outside the main hall.

Role of the Maths Leader

- Develop own CPD and to keep up to date with current developments in mathematics.
- Ensure teachers are familiar with the Curriculum Objectives which will help them to plan lessons.
- Lead by example in the way they teach in their own classroom.
- Be responsible for the monitoring of planning, teaching and resources. Training needs will be identified through an audit of staff skills and information gathered through the school's cycle of monitoring learning and teaching.
- Analyse whole school maths data at each data point.
- Observe colleagues from time to time with a view to identifying the support they need.
- Monitor work produced by children.
- Prepare, organise and lead CPD.
- Work co-operatively with the SENDCO as needed.
- Liaise closely with the SLT and report to governors.

Homework

The daily mathematics lessons will provide opportunities for children to practice and consolidate their skills and knowledge, to develop and extend their techniques and strategies, and to prepare for their future learning. These will be extended through homework activities/tasks. These activities will be short and focused and will be referred to and valued in future lessons.

Links between mathematics and other subjects

Mathematics contributes to many subjects within the primary curriculum and opportunities will be sought to draw mathematical experience out of a wide range of activities. This will allow children to begin to use and apply mathematics in real contexts.

Impact

Impact is measured by ensuring children acquire appropriate age-related knowledge linked to the Mathematics curriculum.

All children will have:

- The ability to move fluently between representations of mathematical ideas.
- The ability to apply their mathematical knowledge to science and other subjects.
- Develop mathematical vocabulary and across the school.
- The mathematical education to equip them for life beyond the bounds of Lidget Green Primary School.
-

Manjit Panesar (Assistant Head, Mathematics Leader)

Approved by SLT

Date: 29th September 2022

Signed: Christine Moran