Lawn Primary
and Nursery School

MATHEMATICS POLICY

Teachers in Charge: Mathematics Lead

Policy History	
Autumn 2016	*First created and approved*
Spring 2019	Merged with Maths Procedure document
January 2022	Reviewed and Nursery added
Statutory Guidance: P scales: attainment targets for pupils with SEN KS1 and KS2: assessment and reporting arrangements (ARA)	
January 2025	Mastery and new lesson structure added
Supporting Policies	
Teaching & Learning	
Marking	

INTENT

It is the intent for our Mathematics curriculum to deliver lessons that enable our pupils to develop fluency, mathematical reasoning and the ability to solve increasingly sophisticated problems. Mathematics is a tool for life: we want our pupils to become confident, enthusiastic and positive mathematicians who can apply their skills to real-life situations.

IMPLEMENTATION

Children at Lawn Primary School follow The National Curriculum for Mathematics and we ensure that its aims are met:

- To become fluent in the fundamentals of mathematics
- To reason mathematically
- To solve problems

Teachers use the White Rose Scheme of Work to inform their planning and provide most teaching resources, although these are supplemented by a range of online sites, including Mathsframe and Twinkl. Flashback 4 lesson starters are used to revisit objectives to help consolidate and embed them. Work set will be appropriate to the age-related expectations, including levels of support, so that every child can achieve their mathematical potential and develop a positive and confident attitude towards mathematics.

Using and applying mathematics will form an important part of the overall provision and is ensured by involving children in problem solving and mathematical reasoning activities on a weekly basis.

Our more-able pupils should be challenged by being offered rich and sophisticated problems; they are not to be set objectives from the next year group's curriculum.

All lessons are split into Do It, Secure It and Deepen It sections and end with an APE (answer, prove, explain) question to give children a further opportunity for challenge. This lesson structure helps children become well-rounded mathematicians as they develop their skills with manipulatives, number fluency and problem-solving and reasoning all in one lesson.

We are in the process of developing our school-wide approach to Mastery for maths, under the guidance of experts from the Mobius Maths Hub. The key principles of teaching for Mastery are:

- Developing mathematical behaviours so that all pupils reason and seek to make connections.
- Teachers continually developing their specialist knowledge for teaching mathematics, working collaboratively to refine and improve their teaching.

- Coherent and detailed planning wherein sequences of lessons support sustained progression over time and each lesson builds on prior learning.
- Examples, representations and models are carefully selected to expose the structure of mathematical concepts and emphasise connections.
- It is recognised that practice is a vital part of learning, but the practice must be designed to both reinforce pupils' procedural fluency and develop their conceptual understanding.

Nursery

Within Nursery, we partake in a range of mainly practical activities to develop a strong grounding in number, essential for all children to develop the necessary building blocks to excel mathematically. We provide frequent and varied opportunities to build and apply this understanding, including:
counting songs; using registration time to encourage the children to clap the number present or represent the number with their fingers; going on shape hunts; using measuring jugs and scales; and encouraging children to represent marks through mark making activities. All of this helps develop positive attitudes and an interest in mathematics. We aim to instil a 'have a go' approach in our pupils, one in which they are happy to talk to adults and their peers about what they notice and not be afraid to make mistakes.

Early Years

To enable pupils in the Early Years to develop mathematical concepts, they will be offered a range of experiences. As well as practical activities using apparatus and equipment - essential at this age to aid pupils' understanding – lessons also involve direct teaching of the whole class with enough time given to embed processes and skills. Play and talk are essential to the learning process – the use of traditional games can provide an engaging way for enable pupils to practise and develop their counting and early calculation skills.

Key Stage 1

In each class, we follow a Mastery approach. Pupils are taught through whole-class interactive teaching. Back and forth interaction between the teacher and pupils includes questioning, short tasks, explanation, demonstration and discussion. Key vocabulary and sentence stems are explained and used in every lesson; children will be encouraged to use these in their explanations and answers. Every classroom has a working wall which displays the key vocabulary, current learning and is added to daily.

Years 1 and 2 have NumBots accounts to secure their number facts at home and once Year 2 have begun learning their times tables at school, they can additionally access Times Table Rockstars at home to build their fluency in times tables. From Christmas, children in Year 2 will complete an arithmetic test approximately every two weeks to enable them to become fluent in all number objectives.

Key Stage 2
In each class, we follow a Mastery approach. Pupils are taught through whole-class interactive teaching. Back and forth interaction between the teacher and pupils includes: questioning, short tasks, explanation, demonstration and discussion. Key vocabulary and sentence stems are explained and used in every lesson; children will be encouraged to use these in their explanations and answers. Every classroom has a working wall which shows the current learning and is built upon daily.

Each week, Years 3 and 4 will complete 4 sessions of Times Tables Rockstars to develop a quick recall of times tables and prepare them for the Year 4 Multiplication Tables Check.

Years 3 to 6 should be given an Arithmetic test approximately every two weeks to enable them to become fluent in all number objectives.

SPECIAL EDUCATIONAL NEEDS
Provision for children with SEN in relation to Mathematics is the responsibility of the class teacher. A range of strategies will be employed to support this group including differentiated work, use of supporting resources and intervention programmes.

Those who find tasks more challenging may be given additional help during assembly time, have a TA working with them, have their own targets set to aid their development or partake in pre-teach sessions wherein they are taught the fundamental facts of the following day's content so they are prepared for the lesson. All children who are identified as working off target, at any stage of the academic year, are set individual targets and given the appropriate support within the classroom to aid progression.

IMPACT

ASSESSMENT AND RECORD KEEPING
Teachers will ensure assessment and record keeping takes place to monitor children's progress.

Formative Assessments:
- Appropriate marking of children's work that provides both positive comments and next steps, where applicable.
- Observations of children at work – asking "How did you work that out?"
- Short tests, e.g. Times tables, mental maths or number bonds.

Summative Assessments:
- An EYFS profile is completed throughout Year R and includes a section on mathematics.
- Individual targets will be set to meet the needs of any children with SEN and working on a curriculum below their current year group.
- Daily aims in books ticked according to the child's understanding.

- An assessment at the end of each unit, the results of which must be recorded in year group planning folders.
- All of the above support teacher assessment which is recorded on Insight.
- SAT tests are completed in Years 2 and 6 in May.

METHODS OF CALCULATION

Varying methods of calculation are taught throughout the school. Outlined in the separate Maths Calculation Policy are the suggested methods to be taught in each year group; teachers may deviate from these methods with the advice of the Co-ordinators.