



MARYLAND PRIMARY SCHOOL

**Mathematics
POLICY**

Updated January 2020



Maryland Primary School

Mathematics Policy

Aims and objectives

Our key objective is for all pupils to develop a positive attitude to mathematics and learn to use it with confidence, understanding and pleasure. The following aims of mathematics are which drive the teaching, learning and development at Maryland:

- To promote enjoyment and enthusiasm for learning through practical activity, exploration and discussion.
- To ensure that all pupils become fluent in the fundamentals of mathematics (eg. mental arithmetic).
- To develop mathematical reasoning using the correct vocabulary.
- To instil confidence and perseverance in pupils when solving relevant real-life problems.
- To ensure pupils are competent when using formal written methods to calculate using the four operations.
- To ensure pupils understand the link between maths and the world around them.

Maths curriculum

We follow the National Curriculum for maths teaching. Within the revised National Curriculum, the areas of mathematics are divided into the following strands:

- Number
- Measurement
- Geometry
- Statistics

Curriculum organisation and planning

Classroom timetables are produced termly for teachers by the Assistant Head. Pupils in each class receive 5x1hour lessons and 2-3 morning mental maths sessions, lasting 10-15 minutes. Targeted underachieving pupils may receive more maths in the form of intervention groups.

A medium term plan for each academic year is devised by the maths co-ordinator to direct teachers as to when each concept from the National Curriculum should be taught and how long to spend on it. Teachers are responsible for planning each lesson and they use the White Rose Maths unit outlines and formative assessment to plan how topics are delivered. The school has a 'mastery' approach to maths teaching and has worked with a mastery specialist to plan the curriculum.

Fluency

Fluency is essential for pupils to develop a solid understanding of maths. Each year group has a set of non-negotiable arithmetic targets to meet. One of these targets will be revisited at the beginning of each maths lesson in a starter activity to reinforce and rehearse the concept. Pupils have a Times Table Rockstars account to practise times tables in school and at home. They also have Mathletics accounts to practise maths skills at home. All pupils receive a 'Maths 5 a Day' book for 5 minutes of daily mental maths practise that is used for home learning.

Calculation policy

Teachers plan and teach according to the school's calculation policy. This uses a concrete, pictorial, abstract approach to the teaching of written methods. This document ensures that there is progression and consistency across the entire school in regards to the strategies/formal methods used when solving calculations involving the four operations.

Reasoning

Reasoning opportunities are embedded within lessons. Sometimes lessons will be planned to teaching problem solving skills more discretely. Pupils are taught how to use the Singapore bar model to tackle problems and are encouraged to use this when suitable.

Differentiation

The following forms of differentiation ensures that all pupils learn effectively:

- Children are set across each year group according to ability, these groupings can change throughout the year based on teacher assessment
- The lessons delivered are differentiated through: resourcing, T.A/1:1 support, stepped activities and groupings within sets.
- 'Gold work' extension activities are planned for pupils who require extra challenge

Resources

Each class has a set of concrete manipulatives, which children are able to use to support their learning. Examples of these include Numicon, place value counters and Dienes blocks. The teacher plans which resources are most suitable to be used in each lesson, based on the calculation policy and the needs of the children.

Home learning

Pupils are set a Mathletics task weekly to consolidate their understanding of topics taught in class. All pupils are encouraged to access other activities on the website as well to practise further.

Marking and feedback

There is an emphasis on immediate feedback in lessons, with peer and self-assessment. The teacher reviews work regularly to establish next steps for pupils. See the marking and feedback policy for further information.

Assessment

Formative assessment is an on-going process and teachers use Otrack to record how well pupils have achieved against objectives outlined in the National Curriculum. Children complete standardised tests 3 times per year. Teachers use these tests, alongside their knowledge of how children perform in class to make summative judgements that are recorded on Otrack. For further information, see the assessment policy.

Reporting

Parents receive a progress report in January and April to update them on current attainment and targets to work on. Parents also receive a more detailed report in July about end of year attainment and progress.

Parents

Support from parents is paramount to ensure pupils make the required progress. Parents are periodically informed of the school's aims in the form of annual maths evenings, parent workshops, through the newsletter produced each month and the school website.

The Role of the Co-ordinator

- . The co-ordinator, alongside the senior leadership team, have responsibility for curriculum planning and monitoring of planning, teaching and assessment.
- . The co-ordinator is responsible for the maths budget and subject development plan. Equipment/resources will be ordered and organised.
- . The co-ordinator will be available to give advice on resources, curriculum content and delivery of lessons as necessary.
- . Curriculum updates e.g. information from DfES or courses attended will be disseminated when available.
- . INSET will be organised for staff in line with the school SDP.
- . Staff will be advised of appropriate training courses that they may wish to attend
- . Year 2 and Year 6 staff will be given guidance on how to prepare children for the end of Key Stage tests.
- . The co-ordinator will report to governors in oral or written form.

Review

This policy will be reviewed in line with the school SDP.

Reviewed by: Nicole Morbin