

MATHS POLICY
September 2019



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Rationale

To enable children to become confident in the use of numeracy skills and to apply their mathematical knowledge so that they can interpret and solve problems in everyday life. To foster an investigative and thoughtful approach to these mathematical experiences.

Aims

That each child should:

- learn skills in numeracy and computation and develop mental agility.
- have the confidence in mathematics to express their ideas and explain their thinking using appropriate mathematical language.
- have an appreciation of mathematical pattern with the ability to identify relationships in number and shape.
- apply their mathematical knowledge to problem solving activities.
- persist through sustained work which requires some perseverance over a period of time.
- appreciate the relevance of mathematics to everyday life.
- record and interpret their work.
- participate in weekly mental maths sessions in year two.
- see mathematics as practical, challenging and most of all FUN.

Teaching Strategies and Planning

Mathematics will be taught from the Foundation Stage to Year Two to cover the requirements for the Early Learning Goals and KS1 of the National Curriculum. Teaching should be on a whole class basis for a high proportion of the time. The daily mathematics lesson will begin with an oral and mental starter, followed by direct class teaching and then an activity. At Dovers Green, we follow the White Rose Maths Scheme for years one and two.

When working independently children could be:

- practising, applying and reinforcing a skill
- undertaking problem solving activities related to the world around them
- reasoning about a problem and explain their thinking and understanding
- participating in open ended practical activities or investigations

Work will be planned to allow for differentiation between children. This will include key questions; both open and closed, planning with particular children in mind and reference to key vocabulary. Depending on the activity children will be grouped by ability, friendship or mixed ability to work collaboratively.

The plenary session will feature either during or at the end of the lesson. At this time misconceptions can be addressed, progress identified and key facts summarised and reinforced. Links can also be made to other work and the next steps identified.

Identified children take part in the First Class at Number intervention programme. This is a thirty minute daily support programme based on a post office, where children use letters, parcels, postcards and house numbers to support their understanding of mathematical concepts.

ICT will be used when and where appropriate to support teaching, motivate children and improve learning. This could be through access to the interactive whiteboard, suitable websites, computer programs, programmable toys, DVDs or audio CDs.

'Maths on the Go' booklets for each year group are given to parents/carers and their content explained at parent/teacher consultations in the autumn term. These offer suggested activities to support the maths curriculum.

Problem Solving weeks will be planned for each term. A golden envelope will be displayed in the centre of the working wall and that week, children will learn all of the skills needed to solve the problem in the envelope. At the end of the week, the golden envelope will be opened and children will be able to apply their skills and solve the problem. This gives them a real purpose to their learning.

Equal Opportunities

The National Curriculum secures for all pupils, irrespective of social background, culture, race, gender, differences in ability and disabilities, an entitlement to a number of areas of learning to develop knowledge, understanding, skills and attitudes necessary for self-fulfilment and development as active and responsible citizens.

The four main purposes of the National Curriculum are:

- to establish an entitlement
- to establish standards
- to promote continuity and coherence
- to promote public understanding

Special Educational Needs

Provision for special needs in mathematics will be in line with the Special Needs and Disability Policy. This includes the three principles for inclusion:

- setting suitable learning challenges
- responding to pupils' diverse learning needs
- overcoming potential barriers to learning and assessment for individual and groups of pupils

Assessment and Record Keeping

Pupils should be involved in assessing their own work, recognising their strengths and areas for development.

Teachers carry out their own assessment of children's progress through everyday monitoring of mathematical activities. Assessments are updated half termly on Target Tracker, and class tracking grids are completed termly. As a result of this, teachers can ensure that all children are on track to reach their potential and concerns are discussed, if a child is not achieving as expected.

In year two teachers have by law, to standardise assessment of the children's mathematical capabilities and record a teacher assessment. It is a statutory requirement that children undertake two mathematics tests: arithmetic and reasoning, during the month of May. The results of these are used as further evidence of their achievements. At the end of the year, the children will be assessed as either 'working towards the expected level', 'working at the expected level' or 'working at a greater depth within the expected level'.

Consultations are held with parents during the autumn and spring terms and individual children's next steps for maths are discussed. At the end of each academic year there is a written record of achievement for each child which notifies parents/carers of their child's attainment in mathematics.

Early Years Foundation Stage

On entering school children have had widely different experiences and therefore teaching should include a range of techniques to ensure effective learning at this stage. Mathematical development depends on children becoming confident and competent in learning and using key skills. Young children's mathematical understanding will be developed through stories, songs, rhymes, games and imaginative play, so that children enjoy using and experimenting with numbers.

In the EYFS there are two areas of mathematical development which are assessed and teachers keep evidence for both strands throughout the year. Once appropriate evidence has been gathered, ongoing assessments are recorded on Target Tracker and a final assessment is updated by the end of June. Children will either be emerging, expected or exceeding at the end of the year. This is a statutory requirement at the end of reception year/Foundation Stage.

By the end of the EYFS, children will have had experience of a daily maths lesson using the same format as in years one and two.

Resources

Practical materials eg unifix, number fans, counting apparatus are class based. Additional resources such as balance scales, giant numbers and stories are kept centrally.

This curriculum policy should be read in conjunction with our:

- Teaching and Learning Policy
- EYFS Policy
- SEND Policy
- Health and Safety Policy
- Equal Opportunities Policy
- Assessment Policy
- Inclusion Policy

Appendix One

Requirements for all teachers during the teaching of mathematics are as follows:

- Stickers detailing the learning objective and success checkers will be shared and stuck inside the children's books. Children will self-assess their learning, by colouring the success checkers at the end of a lesson (green - still unsure of a concept, yellow - on track, pink - secure in their understanding).
- The children must be taught to write one number in one square in their maths books.
- Mathematics vocabulary must be used and displayed in each classroom, when teaching different areas of this subject.
- Working walls are constantly updated and support the current learning in class.