MATHS POLICY
September 2023

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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:

- have the confidence in mathematics to express their ideas and explain their thinking using appropriate mathematical language (reasoning)
- develop fluency in the recall of numbers facts and knowledge
- 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.
- 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 Year Statutory Framework and KS1 of the National Curriculum. Mathematics lessons will always begin with a mental and oral starter, followed by direct class teaching and then a guided or independent activity. Activities will initially be taught in small groups until the children are ready in Year One to move onto whole class teaching. At Dovers Green, we follow:

Ladybirds: NCTEM Mastering Number for all aspects of Number, and White Rose Maths for all aspects for Shape, Space and Measure.
Year One: White Rose Maths Scheme for all areas of maths. The NCETM Mastering Number programme is also used in Year One to secure knowledge, skills and understanding of Number.
Year Two: White Rose Maths Scheme for all areas of maths.

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

Lessons will be planned to challenge every child at the appropriate level. This will include scaffolding strategies, 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 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.

In Year Two, identified children take part in the First Class @ 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.

We have invested in an online home learning programme called 'Numbots', which supports the children with addition and subtraction skills, using multiple representations. We also use an 'app' called 'One Minute Maths' which has been developed by White Rose Maths, to support development of the children's fluency in number. Both apps can be used in school and at home.

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 termly on Target Tracker. As a result of this, teachers can ensure that all children are on track to meet age related expectations and concerns are discussed, if a child is not achieving as expected. Gaps in learning are identified using the gap analysis tool on Target Tracker.

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 and a developing a secure number sense. 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. Assessments are recorded termly on Target Tracker, where children are judged to be 'at' or 'below' age related expectations and a final assessment is updated by the end of June. Children will either be emerging or expected at the end of the year. This is a statutory requirement at the end of the Foundation Stage.

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 in Key Stage One during the teaching of mathematics are as follows:

- Stickers detailing the learning objective will be stuck into the children's books. Teachers will assess their understanding by using colour: 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.