



Safeguarding

Threemilestone School is committed to safeguarding and promoting the welfare of all children. We expect all our team members to share this commitment.

Threemilestone Primary School **Mathematics Policy 2016**

1. Introduction

We aim to ensure that all children at Threemilestone School have appropriate experience of a broad and balanced mathematics curriculum based on the National Curriculum 2014.

Thus, our children will become fluent in the fundamentals of mathematics, developing secure conceptual understanding and be able to apply their mathematical knowledge and skills to solve problems and develop mathematical reasoning.

We aim to encourage a positive attitude to Mathematics by:

- fostering an early fascination and continuing enthusiasm for Mathematics;
- ensuring that learning is introduced in a way that creates interest and motivation, so that the children can gain pleasure and enjoyment from Mathematics;
- helping children to see purpose and relevance in their learning
- encouraging the children to achieve a breadth of mathematical knowledge, skills and understanding which they are able to apply to real life situations;
- helping the children at all levels of attainment to have confidence in their own abilities; and
- encouraging the children to be resilient in their Mathematics, knowing that mistakes and errors can aid learning.

2. Planning

The National Curriculum 2014 provides the programmes of study to be covered and what the children need to achieve. Teachers will use a

variety of references and resources to support and produce their weekly plans, but will rely on the main school scheme-Abacus. However, planning is adapted for the individual needs of the class and for individual children. In KS2 teachers set for maths, but in year 3 children may have their maths lessons with their own class teacher. Planning between parallel classes will show parity of learning intentions. As a school, we recognise the need to ensure that children are using concrete materials to support their learning. This is more evident with younger children, but also for older children who are not yet ready for abstract learning in Mathematics.

3. Mathematical Language

Children are encouraged to 'Talk for Maths' using speaking and listening skills. They are taught and provided with opportunities to use the correct mathematical language and notation to discuss their mathematics and explain their thinking. Children must be assisted in making their thinking clear to themselves as well as others, and teachers will ensure that pupils build secure foundations by using discussion to probe and remedy their misconceptions. There is a consistent use by staff of correct mathematical language, which can be found in the Threemilestone Calculations Policy document. Children have access to the vocabulary being taught each week via the working walls in each classroom.

4. The Organisation of Mathematics

Maths is taught by the class teacher and other adults:

- to the whole class introducing new concepts and reinforcing previous work;
- in small groups of similar ability;
- to individual pupils, referring to SSPs when appropriate; and
- in cross curricular work.

From Year 1 onwards, all pupils have a daily dedicated mathematics lesson during the morning. Within the lesson there will be a good balance between whole-class work, group teaching and individual/paired work. Teachers will use their professional judgement to determine the activities, timing and organisation of each part of the lesson to suit its objectives.

EYFS dedicate specific maths time each morning where different groups are led by teachers and TAs. Independent learning time in the afternoons allows children to experiment and explore mathematical learning in a variety of contexts.

Children with specific needs:

Intervention programmes (eg. teacher/TA intervention, Springboard, Booster groups, precision teaching) are used to support children with identified needs. Children who are gifted in maths will be identified through a range of strategies which involve the teacher, pupil, parents and the high ability co-ordinator. Opportunities for extension and enrichment are built into daily maths lessons. More able children will also be able to experience a variety of other activities to further develop their skills by working with each other on challenging tasks, lunch time clubs and attending the local secondary school.

5. Equal Opportunities

We incorporate mathematics into a wide range of cross-curricular subjects and seek to take advantage of multi-cultural aspects of mathematics wherever possible. In the daily mathematics lesson we support children who may need additional help with language by:

- Repeating instructions
- Emphasising key words
- Using picture cues.

6. Pupils' Records of Their Work

Children are encouraged to use mental strategies and jottings before resorting to a formal written algorithm. However we recognise when it is both quick and convenient to carry out written calculations. Children are taught a variety of methods for recording their work and they are encouraged and helped to use the most appropriate method according to their ability and the task given.

Exercise books:

Children begin to record in their mathematics books in Year 1 and use books with squares. By the time children reach Year 5 they use books with 7 mm squares. All children are encouraged to work tidily and neatly with a particular emphasis on placing digits in the correct place. This begins in Key Stage 1.

7. Marking

Teachers recognise the importance of assessing pupil progress through marking and dialogue between teacher and pupil. However mathematics can generate a great deal of marking and so children themselves may mark exercises which involve routine practice, with support and guidance from the teacher. Where it is appropriate, children in Years 5 and 6 may check computational exercises with a calculator. This is a way to foster independence, but children know they can seek help if they are unable to locate and correct their errors.

Marking is both diagnostic and summative and the quality of teacher marking is crucial. Teachers follow the Marking Policy for the school, but where possible, teachers indicate errors together with an explanation of what went wrong. We believe this is best done through conversation with children but acknowledge that constraints of time do not always allow for this. Teachers endeavour to indicate clearly where the child went wrong, by underlining or circling calculation errors.

8. Assessment

Marking pupils' work, against the learning intentions is an integral part of every lesson and findings are noted on planning and reflected in subsequent planning. Feedback to pupils is timely, ensuring every opportunity is utilised to move learning forwards and ensure pupils make progress. Teachers use a variety of formal and informal assessment techniques. Progress is tracked each term using a standard test (Collins/Abacus) for all children from Year 1 onwards. This testing is used to confirm **teacher assessment** which forms the basis of our diagnostic, summative and formative assessment. Results are entered into assessment grids and underachieving pupils are identified and given support as appropriate. Pupil Progress meetings are held each term where the progress of children is assessed and monitored. Interventions are planned as a result of these meetings. SATs testing takes place at the end of KS1 and KS2. These results are reported to parents.

9. Parent Involvement/Homework

We encourage parents to become actively involved in their children's mathematical learning. There are at least three opportunities for parents to look at and discuss children's mathematics during the year. Parents are also encouraged to attend information meetings and to speak informally to teachers about their child's progress. The mathematics co-ordinator is also available for advice and support for parents, alongside information on the school website under the Parents section on maths. Parents support maths homework by focusing on learning multiplication and division facts (in addition to other maths work set by class teachers). They provide invaluable help with the accurate recall of these facts.

10. Monitoring And Evaluation

The Senior Leadership team and the maths co-ordinator regularly assess and evaluate mathematical teaching. From observations and feedback, standards throughout the school are monitored. As a school, we believe that personal interviews with children and children's questionnaires about maths give the best possible indication of attitudes and attainment in this subject. This is therefore a focus for the co-ordinator, although planning

and work in exercise books is scrutinised too (usually by the Headteacher and Senior Leadership team). Staff meetings are used for monitoring and evaluation of planning, assessment and changes in policy.

11. Staff development

Provision is made for the mathematical development of staff and this is primarily the responsibility of the Head teacher and the maths co-ordinator. Training and guidance for teaching and TA staff is provided by attending courses and in house training, with advice from the Head teacher and Leadership Team.

Ratified at Full Governing Body Meeting: 15 March 2016

Date of next review: March 2019