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There are four main purposes to this policy:
• To establish an entitlement for all pupils;
• To establish expectations for teachers of this subject;
• To promote continuity and coherence across the school;
• To state the school’s approaches to this subject in order to promote public, particularly parents’ and carers’, understanding of the curriculum.

Introduction
Mathematics teaches children how to make sense of the world around them through developing their ability to use number, calculate, reason and solve problems. It helps children to understand relationships and patterns in both number and space in their everyday lives.

Any Mathematics curriculum should be bold, provide breadth and balance and be relevant and differentiated to suit the needs of all children in our school. It should be flexible, motivating all pupils, thus encouraging success at all levels.

This policy outlines the teaching, organisation and management of the Mathematics taught and learnt at Burdett-Coutts and Townshend Foundation School.

The school’s policy for Mathematics is based on the National Curriculum 2014. The policy has been drawn up as a result of staff discussion and has the full agreement of the Governing Body. The implementation of this policy is the responsibility of all the teaching staff.
Aims
The aims of our Mathematics teaching at Burdett-Coutts are aligned with the aims of the National Curriculum: it is to develop pupils’ **fluency, reasoning** and **problem solving** – both in the Mathematics lessons and across the curriculum. We recognise that pupils need to learn basic number facts and acquire **fluency in procedures**, alongside **developing conceptual understanding** if they are to be able to solve increasingly complex problems in life and later in the workplace.

Leadership of Mathematics
The role of the Mathematics Subject Leader is to:

• Teach demonstration lessons.
• Ensure teachers are familiar with the national curriculum, scheme of work and help them to plan lessons.
• Lead by example in the way they teach.
• Prepare, organise and lead professional development meetings.
• Work co-operatively with the SENCO.
• Observe colleagues from time to time with a view to identifying the support they need.
• Attend training provided.
• Inform parents.
• Discuss regularly with the headteacher and the Mathematics governor the progress of implementing the national curriculum in the school. Analyse and monitor data on pupil progress.
• Monitor teaching & learning through lesson observations, monitoring of planning and book scrutiny.
Teaching and learning - The Mastery approach

A mastery approach to the teaching of Mathematics has been adopted, so we have high expectations of all our pupils. We endeavour to make the Mathematics curriculum accessible to all pupils; moving them through the programme of study at broadly the same pace. All children need a deep understanding of the Mathematics they are learning in order that future learning is built upon firm foundations. As we pursue this mastery approach we are moving away from separate intervention groups, instead introducing same day ‘catch up’ sessions and additional practice to prevent children falling behind.

Part of this approach includes utilising the ‘growth mindset’ we are familiar with at Burdett-Coutts. Our children are encouraged to believe they are all capable of learning and doing Mathematics, given sufficient time, good teaching, appropriate resources and effort.

We believe that the key to success with all learners is quality first teaching. Lessons are structured around the concrete-pictorial-abstract approach providing opportunities throughout for using mathematical vocabulary, developing mathematical thinking and using multiple representations. There should be opportunities to record in every lesson (in different ways).

For at least three days per week, the main teaching activity should be whole-class based with everyone covering the same content. Children are generally taught in classes, not setting groups, in line with the mastery approach. Guided groups and catch up sessions are led by qualified teachers, whilst teaching assistants may circulate during the main part of the lesson, or take the lead on some whole class activities.

Lessons are structured with assessment opportunities throughout; these may be referred to as mini-plenaries. This provides opportunities to evaluate what has been learnt, review success criteria and address misconceptions. It should also provide opportunity for peer/self-assessment so children understand what they attained and where to go next. There are no specific time limits for the different parts of a lesson or a pre-determined format.

The school will adhere to the Mathematics programme of study, revised in 2016.
Special Educational Needs

Teachers aim to include all pupils fully in their daily Mathematics lessons. All children benefit from the emphasis on oral and mental work and participating in watching and listening to other children demonstrating and explaining their methods. However, a pupil whose difficulties are severe or complex may need to be supported with an individual programme in the main part of the lesson. In addition, interventions are put in place outside of the main Mathematics lesson.

Computing

Computing is used in many ways to support teaching and motivate children’s learning. Computing involves the computer, calculators and audio-visual aids. They will however only be used in a daily Mathematics lesson when it is the most efficient and effective way of meeting the lesson objectives.

An Interactive Whiteboard is available to each class. iPads are also available to enhance teaching. These provide opportunities for teachers to model strategies and for children to participate in interactive learning.

Classroom Environment Expectations

The classroom environment should be mathematically rich and support current learning.

Mathematics working walls should be interactive, clearly visible and provide the children with key vocabulary, number lines and charts, 100 squares, number facts, prompts and challenges appropriate to the age/stage and linked to current learning.

Learning mats, Mathematics dictionaries, iPad apps, and a range of concrete materials should be available for every child.
More Able Children

Children who regularly grasp concepts rapidly and have been assessed as having mastered objectives from their year group may be identified by their class teacher as ‘more able’ pupils. Planning for these pupils will focus on enrichment prior to acceleration and the development of mathematical thinking rather than covering content more quickly. The Mathematics leader should be available to advise on the type of challenging and stimulating problems and probing questions that will be best suited for deepening a child’s learning.

To provide support in our teaching of Mathematics throughout the school, Burdett-Coutts have adopted the ‘Inspire Maths’ scheme of work, used to teach Mathematics in Singapore. This approach provides a highly scaffolded learning framework with problem solving at its heart. It is built on a focused, coherent and cumulative spiral curriculum that continuously builds and consolidates knowledge to reach deep understanding. The programme encourages extensive practice to develop fluency and mastery.

Assessment

Short-term (daily/weekly)

- Teacher assessment, individual child base assessment comprising of verbal feedback and diagnostic marking in books and ‘next steps’ in planning which should be adapted based on assessment.
- Teachers assess pupils continuously on a less formal basis; these assessments inform the teacher of the pupil’s current achievements, and guide the teacher in planning the pupil’s future learning.
- Self/peer assessment

Medium-term (half termly)

- Rising Stars assessments completed after the teaching unit to identify long term embedded knowledge.
- Past Mathematics SATs papers
- Inspire Maths Unit tests.
Long-term (termly-yearly)

- Mathematics Subject Leader and SLT to review policy and track levels of working on different pupil groups.
- Co-ordinator to direct year group focus according to whole school need.

Role of Parents and Carers
The role of parents is very important. The school seeks to support the education partnership between home and school. Parents may become involved in the following ways:

- being supportive
- encourage children with basic counting skills (FS) and timetables
- attending the Mathematics workshops for parents which are led by the Mathematics subject leader and provide clarity about the methods used.

Staff development and training opportunities
All staff should have opportunities to learn from each other e.g. all teachers have the opportunity to observe two lessons in this school and one lesson of a leading Mathematics teacher.

Training that keeps teachers and learning support assistants up to date with teaching practices.

The Mathematics leader will attend all centrally organised Numeracy and Mathematics training.

Monitoring
This policy will be monitored annually by the SLT and the Mathematics Subject Leader.

The Standards and Achievement committee will review this policy every two years.

This policy was ratified by the Standards & Achievement Committee on