MATHS POLICY

BUTTSBURY
PRIMARY SCHOOL
AN ACADEMY SCHOOL

Approved by:	Headteacher
Last reviewed on:	Spring 2026
Next review due by:	Spring 2029

1. Aims and objectives

To provide a broad and balanced mathematics curriculum, that enables children to gain a mastery understanding of mathematics, where children apply their mathematical skills and curriculum content across a wide range of contexts.

Mathematics teaches us how to make sense of the world around us through developing a child's ability to calculate, to reason and to solve problems. It enables children to understand and appreciate relationships and patterns in both number and space in their everyday lives.

2. Curriculum Intent

At Buttsbury Primary School the intent of our Maths curriculum is to ensure that all children are fluent in the fundamentals of Mathematics. From this they will be able to reason mathematically and apply their knowledge to solving problems. Our curriculum allows children to better make sense of the world around them, relating the patterns between mathematics and everyday life.

3. Curriculum Implementation

We have a broad and balanced Maths curriculum at Buttsbury Primary School, where children are given the opportunity to master their learning by 'applying what they have learnt to a new situation'.

Units of learning are blocked, well sequenced and build on previous learning. Lessons ensure that progress is achieved through small steps, allowing children to develop their subject knowledge, consolidate skills and apply this to their new learning. We encourage children to ask questions, investigate and have a 'trial and improvement' approach.

Strands in Maths include: Number and Place Value, Addition and Subtraction, Multiplication and Division, Fractions (including decimals and percentages), Ratio and Proportion, Measurement, Geometry, Algebra and Statistics.

At Buttsbury Primary School, Maths lessons may include:

- Concrete Pictorial Abstract Approach (CPA)
- Collaborative learning
- Investigations and word problems.
- Opportunities to practise key skills and apply their knowledge to problems.
- Reasoning opportunities
- Double Teaches and Mini-plenaries

4. Curriculum Impact

Our curriculum encourages all children, regardless of ability, to think deeply and apply their skills to new, and increasingly complex situations. Children are able to select appropriate methods to solve problems and can explain their choices to others. As a result of this, children have the ability to demonstrate resilience when the task is challenging. They are not only able to apply their knowledge in other areas of the curriculum but also understand the relevance and importance of their learning in relation to real world concepts.

5. Teaching and learning style

- Daily lesson that has a high proportion of whole class and group-direct teaching.
- In EYFS and KS1, children are taught in their class setting, whereas in KS2, children are taught in math sets within their year group.
- In Years 6 and 3 an extra teacher is timetabled to create a fifth set.
- The school teaches arithmetic and reasoning concepts using concrete, pictorial and abstract methods, that deepen understanding. Children can independently use a range of techniques to calculate and reason problems.
- A wide range of resources are available for the children to access, such as number lines, number squares, base 10, place value counters, digit cards and concrete apparatus to support their work.
- Children and teachers use ICT in mathematics lessons, where it will enhance their learning to assist with modelling ideas and methods.
- In all math lessons, we recognise that there are children of varying mathematical abilities and starting points, so tasks and sequences of learning are adapted and scaffolded to meet the needs of the children.
- We use teaching assistants and other adults to support and/or extend children to ensure that work is matched to the needs of individuals.

6. Mathematics curriculum planning

Mathematics is a core subject in the 2014 National Curriculum and a specific area in EYFS. We use this as the basis for implementing the statutory requirements of the programme of study for mathematics.

Our sequence of learning is underpinned by White Rose Maths but adaptations are made in response to assessment for learning.

It is the class teacher (for each class or set) who completes the weekly plans for the teaching of mathematics. These weekly plans list the specific learning objectives for each lesson and give details of how the lessons are to be taught. The class teacher keeps these individual plans saved on the central network.

Lesson Sequence:

KS1

- 'Daily 4' (Year 2 Arithmetic recap)
- 'Flashback 4' (embed prior knowledge)
- Starter/teacher input
- Independent tasks
- Double Teach
- Plenary

KS2

- '5 in 5'
- Daily 10 (Monday-Thursday)
- TTRS Year 4 (twice a week instead of Daily 10)
- Flashback 4 (Monday-Thursday)
- Arithmetic focus (Friday)
- Starter/teacher input
- Independent tasks
- Double Teach
- Now Try This (NTT) (Monday-Wednesday)

KS1 teach Mastering Number each day to embed key facts and develop fluency of number.

Early Years Foundation Stage (EYFS)

Developing a strong grounding in number is essential so that all children develop the necessary building blocks to excel mathematically. Children should be able to count confidently, develop a deep understanding of the numbers to 10, the relationships between them and the patterns within those numbers. By providing frequent and varied opportunities to build and apply this understanding - such as using manipulatives, including small pebbles and tens frames for organising counting - children will develop a secure base of knowledge and vocabulary from which mastery of mathematics is built. In addition, it is important that the curriculum includes rich opportunities for children to develop their spatial reasoning skills across all areas of mathematics including shape, space and measures. It is important that children develop positive attitudes and interests in mathematics, look for patterns and relationships, spot connections, 'have a go', talk to adults and peers about what they notice and not be afraid to make mistakes.

7. Cross curricular links

English
Mathematics contributes significantly to the teaching of English in our school by actively promoting the skills of reading, writing, speaking and listening. For example, we encourage children to read and interpret problems to identify the mathematics involved. There is also opportunity for children to justify and explain their reasoning, both verbally and written, throughout the lesson, in the plenary and in their 'Now Try This' (NTT).

Science
During science lessons, children can use and apply their data handling skills when creating tables and graphs of scientific measurements. Whole class discussion of data also highlights the importance of clear recording of information. Children are also able to use a wide range of measuring devices in a real-life context. Children are required to read the scales on Newton meters, measuring cylinders, weighing scales and a variety of other instruments.

Computing
Children use and apply mathematics in a variety of ways when solving problems using technology. Younger children use technology to communicate results with appropriate mathematical symbols. Older children use it to produce graphs and tables when explaining their results or when creating repeating patterns, such as tessellations. When working on programming, children use standard and non-standard measures for distance and angle. They use simulations to identify patterns and relationships.

8. The teaching of mathematics to children with SEND

It is part of the school curriculum policy to provide a broad and balanced education to all children. We provide learning opportunities that are matched to the needs of children with additional learning needs. Quality first teaching, adaptations, scaffolding and the use of manipulatives will enhance the learning of children with SEND. Their learning in mathematics takes into account the targets set for individual children in their SEND paperwork.

9. Pupils who are academically more able

Children who are working well above the overall level of their class or group will be engaging with a range of experiences designed to broaden or deepen their learning, while working on the same learning objectives as their peers. A select number of the most able mathematicians are chosen to participate in enrichment lessons and at times, some children will be offered the opportunity to attend Masterclasses that are held at local schools.

10. KS2 Sets

In KS2, children are set according to ability. These ability groups are flexible and are reviewed half-termly.

11. Assessment and recording

Assessment for Learning (AfL) is used to help teachers to adjust daily plans and pupil support. The use of marking and AFL support short-term assessments.

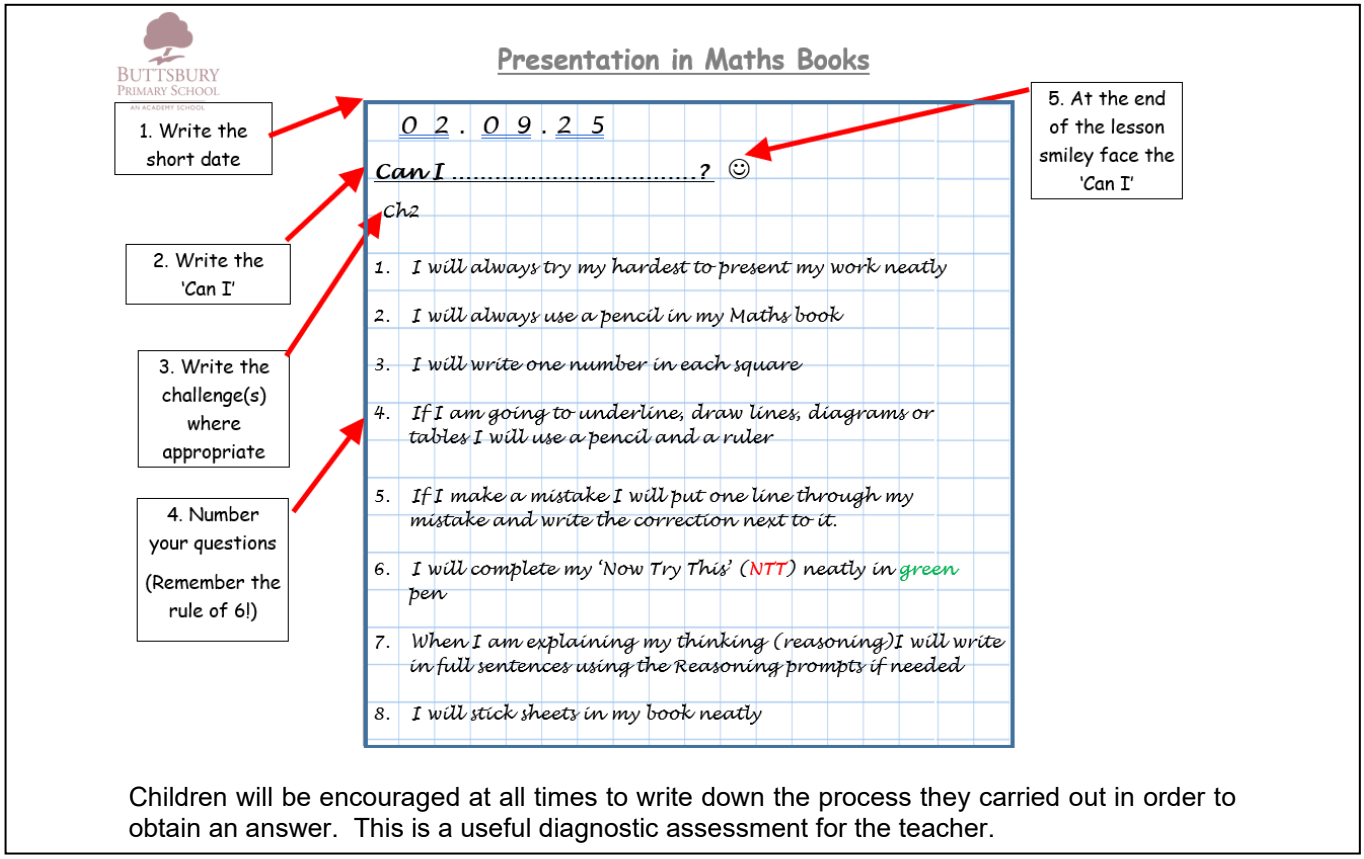
End of unit assessments are used to assess children's retention of knowledge and skills within a unit of learning. These assessments help to inform teacher assessments.

In KS2, maths tests covering the breadth of the curriculum are undertaken twice a year and this data is shared with parents.

Children's progress is measured against descriptions in the Early Learning Goals and the National Curriculum.

12. Marking

The formal aspects of presentation in exercise books is outlined in the front of each child's book (KS2):



Children will be encouraged at all times to write down the process they carried out in order to obtain an answer. This is a useful diagnostic assessment for the teacher.

Marking will follow the school's policy. Further details can be found in the Marking Policy.

13. Homework

Children are set regular homework (Reception/KS1 – fortnightly, KS2 – weekly). Details of the expectations in terms of time allocation can be found in the Homework Policy.

- Homework is used to consolidate learning within class
- Practical games are used to reinforce learning in Reception
- Counting and/or Multiplication facts focus in KS1
- Multiplication facts focus via TTRS in KS2
- Arithmetic starter (six questions) based on learning that week in KS2
- Tasks C1/2 or C2/3 are used In KS2 to offer a range of fluency, varied fluency, reasoning and application tasks

14. Mastery in Maths

Effective mastery in Mathematics encourages all pupils, regardless of ability, to think deeply and apply their skills to new, and increasingly complex situations.

Precise questioning during lessons ensures that pupils develop fluent reasoning skills and provide opportunities to think critically about the underpinning mathematical concepts. They are also able to justify through reasoning.

Pupils who are demonstrating mastery in Mathematics are able to select appropriate methods to solve problems efficiently and can explain their choices to others. Children can then represent their calculations in a variety of ways, using pictorials, physical manipulatives and abstract methods to further deepen their knowledge of concepts. They are able to identify and explain mistakes using mathematical vocabulary. Additionally, pupils are able to prove and explain their reasoning both verbally and in full written sentences.

Investigations and word problems during lessons ensure that pupils can develop problem-solving skills and logical thinking. They are able to apply their skills and knowledge that they have learnt within different contexts.

As a result of this, pupils have the ability to demonstrate resilience when the task is demanding and apply their knowledge in other areas of the curriculum.

15. Reporting

Reporting to parents will adhere to the following guidelines:

- Set out what the children have been taught and what they have learned
- Be written with the reader in mind
- Summarise the pupil's performance since the last report
- Highlight positive achievement and progress made
- Identify areas for development and suggest positive future action