Booth Wood Maths curriculum statement

Aims

Maths plays a central role within the curriculum at Booth Wood Academy and is fundamental to our wider trust mission of creating an aspirational, knowledge-rich curriculum for our pupils. We aim to provide a high-quality mathematics education which will provide a foundation for understanding the world, to develop an appreciation of the beauty and power of mathematics, and a sense of enjoyment and curiosity about the subject.

Maths at Booth Wood Academy is underpinned by methodical, coherent, curriculum design created by Power Maths and supported by carefully crafted lessons and resources to foster deep conceptual understanding and procedural knowledge. The curriculum design enables children to build on their previous learning in each new step in their learning journey. As a result of the of the accumulation of essential knowledge and skills our pupils will leave our school as confident, resilient mathematicians, demonstrating conceptual and procedural fluency, with the ability to reason mathematically and efficiently solve problems.

We use a Teaching for Mastery approach to support learning of mathematics. Mastery in mathematics is underpinned by the following key principles: it is achievable for all; learning is deep and sustainable; learning builds on something that has already been sufficiently mastered; reasoning about concepts and making connections; developing conceptual and procedural fluency.

At the end of the Foundation Stage	**At the end of Key Stage 1**	**At the end of Key Stage 2**
Children count confidently and have a deep understanding of the numbers to 10, the relationships between them and the patterns within those numbers. Children will have developed their spatial reasoning skills across all areas of mathematics including shape, space and measures and will have positive attitudes and interests in mathematics.	Pupils have developed their confidence and fluency with whole numbers, counting and place value. Pupils work fluently with number facts to 20 and have explored all four operations. Pupils describe properties of shapes, and also compare and describe different quantities such as length, mass as well as time and money.	Pupils have extended their knowledge of the number system and place value to larger integers. Pupils make connections between fractions, decimals, percentages and ratio. Pupils use efficient written and mental methods for calculation when solving problems. Pupils also use mathematical vocabulary correctly, when articulating and explaining how they solved the problem.

Teaching approach

Within our Maths curriculum we have the following elements:

- Lessons are structured with carefully sequenced **small steps** of learning. These small steps are developed through explicit teacher modelling, worked examples, guided practice, partner work and independent practice. Practice tasks incorporate procedural variation to ensure intelligent (not mechanical) practice.
- Pupils are provided with carefully chosen concrete or pictorial **representations to support development of conceptual understanding which will lead to procedural fluency;** the aim is to move towards working in the abstract.
- Whole class teaching is in **mixed attainment classes** and in **mixed attainment learning partners**.
- We work with the assumption that all pupils can achieve a high standard in mathematics. Pupil work is **not differentiated by task.** Instead, children who require more support are provided with additional structures to enable them to access the learning (such as working with concrete resources for longer or being provided with focused pre-teaching or same day intervention) Pupils who grasp concepts quickly will be challenged to think about particular aspects more deeply and to work on more complex problems within the same curriculum content.

- There is a big focus on developing children's **mathematical vocabulary and language**. Teachers use whole class chorusing, stem sentences and repetition of key words and sentences to ensure pupils develop fluency with using mathematical vocabulary and develop precise explanations.
- Fluency has dedicated teaching time, where the focus is on developing **automaticity with number facts**, and applying number facts to mental arithmetic strategies as well as formal arithmetic procedures. The focus of fluency lessons is on efficiency, accuracy and flexibility. Pupils are encouraged to notice the numbers before beginning a calculation, and to identify patterns, relationships or structures which may lead to an efficient calculation strategy.
- Pedagogy is underpinned by Rosenshine's Principles

Oracy in Maths

- Mathematical vocabulary and language will be effectively embedded through explicit links to the teaching of oracy and the oracy framework.
- Oracy in DRET maths lessons will include embedded exploratory talk tasks; use of manipulatives to deepen understanding and to serve as a gateway to rich mathematical conversations; use of talk as a powerful tool for mathematical thinking; explicit teaching of vocabulary and modelling its use in verbal reasoning and explanations; sharing uncertain thinking and communicating misconceptions leading to deeper understanding.

Aspects of oracy which should be explicitly taught and embedded during maths lessons include:

Oracy focus in KS1 maths:

- Use of gesture to help to express understanding
- Facing who you are specking or listening to
- Speaking in a clear and organised way
- Responding with relevant questions
- Using new and appropriate vocabulary

Oracy focus in KS2 Maths:

- Choosing appropriate mathematical vocabulary and using with precision
- Building on the thoughts of others; asking questions to clarify, probe and challenge
- Inviting others to share opinions
- Actively listening and responding appropriately
- Showing confidence when speaking and being respectful to others

Achievement

We use a multi-faceted approach to assessment within maths, including:

- End of unit assessment quizzes
- Regular retrieval practice
- Assessment for learning within each lesson through skilful use of questioning and live feedback
- Mid-year and end of year assessments
- Regular low-stakes times tables tests

Cultural Capital

Enrichment is an essential part of the Maths Curriculum which provides pupils with extended time to focus and deepen their learning.

We use a multi-faceted approach to enrichment within Maths:

- Mysterious Maths (once a month)
- Immersion weeks and days (Number Day, Maths Week England)
- Extended School Day Enrichment Programme
- Inspirational visits from mathematicians/STEM ambassadors

Career Professional Development

We develop strong subject knowledge amongst all staff which is achieved through: comprehensive middle leadership development, a focus on developing all teachers' subject knowledge and Maths pedagogy and a comprehensive support program available through our DRET maths specialist.

CPD activities include:

- Bespoke support for teachers through working with maths lead
- Coaching and mentoring programmes
- Team-teach and model lessons
- Trust specialist support
- Subject knowledge development sessions
- DRET Maths community events
- NCETM Mastery Maths Hubs specialist support

Power Maths Curriculum Overview

	Autumn Term	Spring	Summer
Reception	'Numberblocks' (first half term) Unit 1 – Numbers to 5 Unit 2 – Comparing groups within 5 Unit 3 – Shape (3D & 2D shapes) Unit 4 – Change within 5 Unit 5 – Number bonds within 5 Unit 6 - Space	Unit 7 – Numbers to 10 Unit 8 – Comparing numbers within 10 Unit 9 – Addition to 10 Unit 10 – Measure (length, height & weight) Unit 11 – Number bonds to 10 Unit 12 – Subtraction Unit 13 – Exploring patterns	Unit 14 – Counting on and counting back Unit 15 – Numbers to 20 Unit 16 – Numerical patterns Unit 17 – Shape (composing & decomposing shapes) Unit 18 – Measure (volume & capacity) Unit 19 – Sorting (optional) Unit 20 – Time (optional)
Year 1	Unit 1 – Numbers to 10 Unit 2 – Part-whole within 10 Unit 3 – Addition within 10 Unit 4 – Subtraction within 10 Unit 5 – 2D and 3D shapes	Unit 6 – Numbers to 20 Unit 7 – Addition & subtraction within 20 Unit 8 – Numbers to 50 Unit 9 – Introducing length and height Unit 10 – Introducing weight and volume	Unit 11 – Multiplication & division Unit 12 – Halves and quarters Unit 13 – Position and direction Unit 14 – Numbers to 100 Unit 15 – Money Unit 16 – Time
Year 2	Unit 1 – Numbers to 100 Unit 2 – Addition & subtraction (1) Unit 3 – Addition & subtraction (2) Unit 4 – Properties of shapes	Unit 5 – Money Unit 6 – Multiplication & division (1) Unit 7 – Multiplication & division (2) Unit 8 – Length and height Unit 9 – Mass, capacity & temperature	Unit 10 – Statistics Unit 11 – Fractions Unit 12 – Position & direction Unit 13 – Time Unit 14 – Problem solving
Year 3	Unit 1 – Place value within 1000 Unit 2 – Addition & subtraction (1) Unit 3 – Addition & subtraction (2) Unit 4 – Multiplication & division (1) Unit 5 – Multiplication & division (2)	Unit 6 – Multiplication & division (3) Unit 7 – Length & perimeter Unit 8 – Fractions (1) Unit 9 – Mass Unit 10 – Capacity	Unit 11 – Fractions (2) Unit 12 – Money Unit 13 – Time Unit 14 – Angles & properties of shapes Unit 15 - Statistics

Appendices:

Appendix 1: Power Maths Whole School Curriculum map 2026 2027
Appendix 2: Calculation policy (progression maps for maths)
Appendix 3: SEND and maths - meeting the needs of all pupils
Appendix 4: Greater Depth guidance
Appendix 5: DRET MATHS Fluency
Appendix 6: Maths Oracy Benchmarks