



Achieving Success Together

Curriculum Overview:

Mathematics



School Vision:

Our Teachers... are creative, engaging and adventurous, offering an excellent curriculum that challenges and inspires to ensure every child is **ACHIEVING**.

Maths plays a crucial role in all our everyday lives beyond school. Our maths curriculum aims to equip pupils to become confident, competent mathematicians who can achieve highly not only in the maths curriculum but also applying mathematical skills in other subjects. They develop a range of arithmetic and reasoning skills which are both continuously revisited and also built upon to ensure fluency in solving calculations and problems.

Our Children... learn resilience and are happy, confident and independent learners who thrive on celebrating their **SUCCESS**.

Maths at Browick equips children to calculate and solve problems in a range of situations including practical activities and therefore thrive in the modern world. They embed mathematical skills through a spiral curriculum that builds knowledge, independence and success in small steps of learning. Oracy is woven throughout, enabling pupils to narrate their problem-solving and reasoning strategies and build mathematical thinking. Children are encouraged to apply their skills confidently beyond the classroom, strengthening their mathematical understanding and creativity in areas such as sport and science.

Our School...is a safe and nurturing environment, where everyone works **TOGETHER** to role model our core values of respect, trust and honesty.

Throughout their time at Browick, teachers create an environment where mathematical errors are accepted as a vital part of learning. Children learn to listen to and respect each other's methods and ideas and understand that there are diverse ways to solve a problem. Children are taught to work respectfully in small groups with peers of differing confidence and skill levels. Teachers develop strategies to enable children to work independently to give an honest picture of their attainment and progress. Children show their thought processes through workings-out and are taught to ask for help where they need it.

Intent:

Browick Road Primary and Nursery School recognises that maths is both a key skill within school, and a life skill to be utilised through everyday experiences. A high-quality maths education provides a firm foundation for understanding how maths is used in everyday life and activities, developing pupils' ability to reason mathematically.

Through the teaching of maths, we aim to develop:

- A positive attitude towards maths and an awareness of the relevance of maths in the real world.
- A process of enquiry and experiment.
- An ability to solve problems and think logically in order to work systematically and accurately.
- An ability to work both independently and in cooperation with others.
- Competence and confidence in pupils' maths knowledge, concepts and skills.
- An appreciation of the creative aspects of maths and an awareness of its aesthetic appeal.

Implementation:

Overview			
Year group	Autumn Blocks	Spring Blocks	Summer Blocks
<u>Reception</u>	Number: Match & Sort Compare amounts to 5 Represent numbers to 5 Composition of 1,2,3 One more & less Measure, Shape and Spatial Thinking: Positional language Compare size, mass & capacity Explore pattern Circles & Triangles Shapes with 4 sides Time	Number: Introduce zero Compare Numbers to 10 Composition of 4, 5, 6, 7, 8, 9 & 10 Make pairs Combine 2 groups Bonds to 10 Measure, Shape and Spatial Thinking: Compare mass/capacity Length & Height Time 3d shape; Pattern	Number: Build numbers beyond 10 Count patterns beyond 10 Add more; Take away Doubling, Sharing and Grouping Even and Odd Patterns and Relationships Spatial Reasoning: Match, Rotate, Manipulate Visualise and Build Mapping
<u>Year 1</u>	Number: Place Value (within 10) Number: Addition & Subtraction (within 10) Geometry (Shape) Number: Place Value (within 20)	Number: Addition & Subtraction (within 20) Number: Place Value (within 50) Measurement: Length & Height Measurement: Weight & Volume	Number: Multiplication & Division Number: Fractions Geometry: Position & Direction Number: Place Value (within 100) Measurement: Money Measurement: Time
<u>Year 2</u>	Number: Place Value Number: Addition & Subtraction Measurement: Money Number: Multiplication & Division	Number: Multiplication & Division Statistics Geometry: Properties of Shape Number: Fractions	Measurement: Length & Height Geometry: Position & Direction Measurement: Time Measurement: Mass, Capacity & Temperature
<u>Year 3</u>	Number: Place Value Number: Addition & Subtraction Number: Multiplication & Division	Number: Multiplication & Division Measurement: Money Statistics Measurement: Length & Perimeter Number: Fractions	Number: Fractions Measurement: Time Geometry: Properties of Shape Measurement: Mass & Capacity
<u>Year 4</u>	Number: Place Value Number: Addition & Subtraction Measurement: Length & Perimeter Number: Multiplication & Division	Number: Multiplication & Division Measurement: Area Number: Fractions Number: Decimals	Number: Decimals Measurement: Money Measurement: Time Statistics Geometry: Properties of Shape; Position & Direction
<u>Year 5</u>	Number: Place Value Number: Addition & Subtraction; Multiplication & Division Measurement: Perimeter & Area	Number: Multiplication & Division Number: Fractions Number: Decimals & Percentages	Number: Decimals Geometry: Properties of Shape Position & Direction Measurement: Converting Units; Volume
<u>Year 6</u>	Number: Place Value Number: Addition, Subtraction, Multiplication & Division Number: Fractions Geometry: Position & Direction	Number: Decimals Number: Percentages Number: Algebra Measurement: Converting Units Measurement: Perimeter, Area & Volume Number: Ratio	Statistics Geometry: Properties of Shape

Impact

To ensure our children at Browick Road Primary and Nursery School are becoming confident and competent mathematicians we monitor the development of their knowledge, skills and understanding through a range of activities.

Retrieval practice— Throughout the year pupils continually revisit previous content through retrieval-based activities such as 'Fluent in Five' or 'Flashback' to ensure learning is committed to memory. This includes regular counting practice during lessons to develop key skills in number, laying the foundations of times table knowledge from the Early Years. This informs teacher planning and targeting support in class.

Pupil book study – the maths leader regularly undertakes book studies alongside small groups of pupils to monitor the effectiveness of teaching and learning. Through questioning and group discussions, the maths leader can check and ensure information and knowledge is acquired and understood with increased confidence. Feedback from these studies help to inform future planning.

Maths leader monitoring – As well as pupil voice the maths leader carries out lesson drop-ins and monitoring of books and plans. This ensures consistency of approach and progression of maths skills over time.

Ongoing teacher assessment – Teachers use formative assessment to monitor pupils' knowledge and understanding and the impact of our curriculum. This includes end of block assessments and termly PIXL papers from year 1 upwards. Ongoing teacher assessments help to inform planning for subsequent lessons, identifying pupils who may need additional support and those who may need challenging to extend their learning appropriately.

End of Key stage assessments - The effectiveness of the children's ability in arithmetic and reasoning is measured in end of Key Stage assessments and the Multiplication Table Check in Year 4 and reported to the DfE.

Enrichment:

- Maths Cafés
- Puzzle Workshops
- Sumdog and Times Tables Rockstars Competitions