

THE INTENT, IMPLEMENTATION AND IMPACT OF OUR MATHEMATICS CURRICULUM

Our vision is that all our children will be confident, independent and resilient mathematicians who relish the challenge of maths and appreciate the wider application of their mathematical skills.

INTENT

At Wildmoor Heath, we aim to deliver a curriculum that meets the needs of our children through our unique curriculum drivers, which are: Opportunities, Communication, Community, Creativity, Environment and Well-Being.

We aim for all our children to be confident, happy and resilient mathematicians who relish the challenge of maths. We want to create independent and reflective learners whose skills not only support them in maths but also helps across the whole curriculum and in later life.

In addition to this, our aims align with that of the national curriculum, which are to develop learners who are: fluent in the fundamentals of maths; able to reason mathematically and able to apply their maths to a range of problem-solving scenarios.

IMPLEMENTATION

At Wildmoor Heath, children participate in daily maths lessons, covering a broad range of mathematical concepts including, number, calculation, geometry, statistics, and measures.

To support the teaching of mathematics, the school follows a widely used scheme by White Rose Maths Hub – a scheme that developed by leading maths researchers and practitioners from across the world. Using this scheme, teachers break down key concepts in to small manageable steps. The Mathematic yearly overviews are below.

Year 1

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	Number Place value (within 10)					Number Addition and subtraction (within 10)					Geometry Shape	Consolidation
Spring	Number Place value (within 20)		Number Addition and subtraction (within 20)			Number Place value (within 50)		Measurement Length and height		Measurement Mass and volume		
Summer	Number Multiplication and division		Number Fractions		Geometry Position and direction	Number Place value (within 100)		Measurement Money	Measurement Time		Consolidation	

Year 2

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	Number Place value				Number Addition and subtraction				Geometry Shape			
Spring	Measurement Money	Number Multiplication and division						Measurement Length and height	Measurement Mass, capacity and temperature			
Summer	Number Fractions			Measurement Time			Statistics		Geometry Position and direction	Consolidation		

Year 3

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	Number Place value			Number Addition and subtraction				Number Multiplication and division A				
Spring	Number Multiplication and division B			Measurement Length and perimeter			Number Fractions A		Measurement Mass and capacity			
Summer	Number Fractions B	Measurement Money		Measurement Time			Geometry Shape	Statistics		Consolidation		

Year 4

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	Number Place value				Number Addition and subtraction			Measurement Area	Number Multiplication and division A			Consolidation
Spring	Number Multiplication and division B			Measurement Length and perimeter		Number Fractions			Number Decimals A			
Summer	Number Decimals B		Measurement Money		Measurement Time		Consolidation	Geometry Shape		Statistics	Geometry Position and direction	

Year 5

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	Number Place value			Number Addition and subtraction		Number Multiplication and division A			Number Fractions A			
Spring	Number Multiplication and division B			Number Fractions B		Number Decimals and percentages			Measurement Perimeter and area		Statistics	
Summer	Geometry Shape			Geometry Position and direction		Number Decimals			Number Negative numbers	Measurement Converting units		Measurement Volume

Year 6

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	Number Place value		Number Addition, subtraction, multiplication and division					Number Fractions A		Number Fractions B		Measurement Converting units
Spring	Ratio		Algebra		Number Decimals		Number Fractions, decimals and percentages		Measurement Area, perimeter and volume		Statistics	
Summer	Geometry Shape			Geometry Position and direction	Themed projects, consolidation and problem solving							

To support children when learning new concepts and skills we use a CPA (concrete, pictorial, abstract) approach.

- Concrete—learners should have the opportunity to use concrete objects and manipulatives to help them understand what they are doing.
- Pictorial—alongside the concrete, learners should use pictorial representations; we use these representations to help visualise, reason and solve problems.
- Abstract—both concrete and pictorial representations should support learners' understanding of written methods.

We work hard to ensure that the learning moves from the working memory into the long-term memory. Regular rehearsal of skills plays a central role to this so, at the beginning of each lesson, teachers plan a recall session including four questions based on previous learning.

Using effective assessment, teachers plan sessions that are appropriately differentiated and inclusive so that all children are supported and challenged at their own level. Children who require support have smaller group support in lessons and where appropriate participate in follow-up interventions. Children are challenged with a range of reasoning and problem-solving scenarios designed to deepen their understanding of concepts.

Maths Number Facts Mastery Sessions

As well as daily mathematics lessons, the children also complete a daily 10 to 15 minute mastery session. In these sessions, children rehearse key facts, such as number bonds and times tables, so that they can be readily applied in all areas of maths. A range of strategies from singing songs to rote rehearsal are used to secure automaticity of these facts.

As part of home learning, children rehearse multiplication facts 4-5 times a week as part of their weekly homework. All children have access to Times Table Rockstars, an online program which gives children the opportunity to rehearse multiplication and division facts at home. Each week, the children complete a Times Table test using TTRS where the number of correct answers and the speed in which they are answered are recorded.

IMPACT

Learners at Wildmoor Heath make good progress in maths and are well prepared with a range of strategies and skills for their transition to secondary school. Termly assessments highlight learning that the children have retained over time and informs staff on what to teach next. Our children are able recall age appropriate number facts quickly and this supports them in other areas of learning. We judge the impact of our mathematics curriculum based on our results at the end Year 2 (KS1) and Year 6 (KS2).

We also judge our Impact based on children's attitudes; our learners have a positive attitude towards maths and enjoy the challenges the subject provides. They can also apply their skills to real life concepts and, importantly, explain their methodology to others.