

Blackwater Long Term Plan Maths Nursery



The first few years of a child's life are especially important for mathematics development. Research shows that early mathematical knowledge predicts later reading ability and general education and social progress. Conversely, children who start behind in mathematics tend to stay behind throughout their whole educational journey.

There are six key areas of early mathematics learning, which collectively provide a platform for everything children will encounter as they progress through their maths learning at Blackwater Primary School, and beyond. The maths curriculum for nursery is organised into key concepts (not individual objectives), which underpin early mathematics learning for our three and four year olds. Each half term has a key focus with key concepts being revisited and embedded through group sessions and continuous provision..

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Termly Focus	Cardinality and counting	Comparison	Composition	Pattern	Shape and space	Measures
Number sense	Counting, number rhymes and songs and maths through stories are revisited daily.					
Early Mathematics	<p>There are six main areas that underpin children's early mathematical learning:</p> <ul style="list-style-type: none"> • Cardinality and counting: understanding the cardinal value of a number refers to the quantity or 'how manyness' of objects it represents. • Comparison: understanding that comparing numbers involves knowing which numbers are worth more or less than each other. • Composition: understanding that one number can be made up of two or more smaller numbers. • Pattern: looking for and finding patterns helps children notice and understand mathematical relationships. • Shape and Space: understanding what happens when shapes move or combine with other shapes, is key in developing wider mathematical thinking. • Measures: comparing different aspects such as length, weight and volume. 					
Small steps progression	Progression across these key areas of mathematics are detailed in the progression in 'Development Matters' 2020 NCETM provides guidance on the 6 key areas of early mathematics.					
Continuous Provision	Maths activities in continuous provision will link to focus of maths learning for the week.					
Assessment	End of term summative assessments.					

	<i>Observations during group learning and CP on Tapestry</i>						
<i>Links to EYFS</i>	<i>The nursery maths programme lays the foundations essential to progress in learning in mathematics in EYFS and beyond. This is achieved by children having a broad and varied experience of activities to develop the 6 key areas of mathematical understanding detailed above.</i>						
	<p><i>By the end of the nursery year the children will be able to:</i></p> <p><i>Counting, cardinality</i></p> <ul style="list-style-type: none"> <i>consistently recite the correct sequence of numbers</i> <i>collect nine from a large pile, e.g. nine pencils from a pot?</i> <i>subitise (instantly recognise) a group that contains up to four, then five, in a range of ways, e.g. fingers, dice, random arrangement</i> <i>select a numeral to represent a quantity in a range of fonts, e.g. 4, 4?</i> <i>correct a puppet who thinks the amount has changed when their collection has been rearranged?</i> <p><i>Comparison</i></p> <ul style="list-style-type: none"> <i>state which group of objects has more? Can they do this with a large or small visual difference?</i> <i>compare two numbers and say which is the larger?</i> <i>Compare objects in terms of size, weight and capacity</i> <p><i>Composition</i></p> <ul style="list-style-type: none"> <i>Subitise up to 3 objects</i> <i>Subitise smaller groups within a larger group of object</i> 				<p><i>Pattern</i></p> <ul style="list-style-type: none"> <i>Identify patterns around them</i> <i>Use informal language e.g. spotty, stripy etc continue, copy and create an AB pattern?</i> <i>identify the pattern rule (unit of repeat) in an AB pattern?</i> <i>Notice an error in a pattern.</i> <p><i>Shape</i></p> <ul style="list-style-type: none"> <i>select and rotate shapes to fit into a given space?</i> <i>use positional vocabulary, including relative terms, to describe where things are in small-world play?</i> <i>show intentionality in selecting shapes for a purpose, such as cylinders to roll?</i> <i>make a range of constructions, including enclosures, and talk about the decisions they have made?</i> <i>see shapes in different orientations and recognise that they are still that shape?</i> <i>recognise a range of triangles and say how they know what they are?</i> <p><i>Measure</i></p> <ul style="list-style-type: none"> <i>ifind something that is longer, shorter, heavier, lighter (etc.) than a reference item?</i> <i>find an appropriate container for a specific item?</i> <i>describe the location of something using positional language?</i> <i>accurately use the relative terms 'yesterday' and 'tomorrow'?</i> <i>order a short sequence of events?</i> 		
<i>Half term</i>	<i>Week 1</i>	<i>Week 2</i>	<i>Week 3</i>	<i>Week 4</i>	<i>Week 5</i>	<i>Week 6</i>	<i>Week 2</i>

				Counting	Cardinality		
Daily number rhymes and songs	Counting, cardinality, comparing						
Autumn 1	Take part in counting rhymes and songs.	Say the numbers in sequence 1,2,3,4,5	Compare amounts Saying more or less	Develop counting like behaviour saying sounds, pointing – saying some number words.	Subitising – recognising up to three objects without counting.	Recite numbers past 5.	Develop counting: say one number for one item. Saying numbers in sequence.
Fluency Starters	Count up to 5 Singing number rhymes and songs.						
Number Sense	Daily number sense through daily routine and continuous provision						
Autumn 2	Cardinality – last number counted is the total in the set.	Show fingers up to 5.	Link numeral to quantity. 1,2	Link numeral to quantity 3,4	Solve real world problems up to 4	Compare using More than less than Fewer than	Comparing relating to size, weight and capacity
Fluency Starters	Count up to 5 Count backwards 5-0 Singing number rhymes and songs. Show me up to 5 fingers (looking). Show me up to 5 fingers (bunny ears)						
Number Sense	Daily number sense through daily routine and continuous provision						
Spring 1	Subitise up to 3	Conservation: The number of objects does not change because they are moved around.	Subitise smaller groups within a larger group.	Link numeral to quantity 5	Solve every day problems within 5	Compare using more than less than fewer than	Comparing relating to size, weight and capacity
Fluency Starters	Count forwards and backwards up to 10 Singing number rhymes and songs Show me up to 5 fingers(looking). Show me up to 5 fingers (bunny ears)						
Number Sense	Daily number sense through nursery routine and continuous provision						
Spring 2	Counting sequence 0-5 Missing numbers Spot the mistakes	Repeating AB patterns Copy and Continue	Repeating AB patterns Create – spot mistakes Link to music patterns	Repeating AB linked to 2D shape	Sequence events in a story: First then after before	Use vocabulary of time to describe events In daily life.	Link AB, ABB, AAB patterns to counting Link to numeral

Fluency Starters	<p>Count forwards and backwards up to 10 Singing number rhymes and songs Show me up to 5 fingers(looking). Show me up to 6,7 fingers (bunny ears) Link to 5 and some more</p>						
Number Sense	<p>Daily number sense with rekenrek</p>						
Summer 1	Select shapes for building eg flat surfaces	Combine shapes to make bigger ones – link to positional language	Explore 2D shapes. In different orientations – and explain how they know what they are.	Link shape identification to counting and cardinality.	Use positional language in play Use Rosie's walk story	Explore positional language using beebot./PE	Use shapes comparing size, weight and capacity
Fluency Starters	<p>Count forwards and backwards up to 10 Singing number rhymes and songs Show me up to 5 fingers(looking). Show me up to 6,7 fingers (bunny ears) Link to 5 and some more</p>						
Number Sense	<p>Daily number sense with routine and continuous provision.</p>						
Summer 2	Assessment Compare size Using vocab length, height Longer shorter taller shorter	Assessment Compare size in terms of weight Heavier than lighter than same weight as	Data Submission	Compare capacity/volume Full overflowing half full empty	Sequence events First, Next, After that when exploring obstacle courses and positional language.	Link quantities numeral EYFS prep Number blocks	Link quantities numeral EYFS prep Number blocks
Fluency Starters	<p>Count forwards and backwards up to 10 Singing number rhymes and songs Show me up to 5 fingers(looking). Show me up to 6,7 ,8,9,10 fingers (bunny ears) Link to 5 and some more</p>						
Number Sense	<p>Daily number sense through routine and continuous provision</p>						

Blackwater Long Term Plan Maths EYFS



	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
EYFS	Place Value Addition Subtraction	Place Value Addition Subtraction	Place Value Addition Subtraction	Place Value Addition Subtraction	Place Value Multiplication Division	Place Value Shape Measure
Number sense	Number sense Cardinality and counting, Comparison, Composition, Pattern.					
ELG	<p>ELG Number Children at the expected level of development will:</p> <ul style="list-style-type: none"> Have a deep understanding of number to 10, including the composition of each number. Subitise (recognise quantities without counting) up to 5. Automatically recall (without reference to number rhymes, counting etc) number bonds to 5 including some subtraction, number bonds to 10 and double facts. <p>ELG Numerical patterns:</p> <ul style="list-style-type: none"> Verbally count beyond 20 recognising the patterns of the counting system. Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity. Explore and repeat patterns with numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally. 					
Early Mathematics	<p>There are six main areas that underpin children's mathematical learning in EYFS through number sense sessions, direct teaching and continuous provision. These establish the foundations for progression in all subsequent maths learning.</p> <ul style="list-style-type: none"> Cardinality and counting: understanding the cardinal value of a number refers to the quantity or 'how manyness' of objects it represents. Comparison: understanding that comparing numbers involves knowing which numbers are worth more or less than each other. Composition: understanding that one number can be made up of two or more smaller numbers. Pattern: looking for and finding patterns helps children notice and understand mathematical relationships. Shape and Space: understanding what happens when shapes move or combine with other shapes, is key in developing wider mathematical thinking. Measures: comparing different aspects such as length, weight and volume. 					
Small steps progression	<p>Progression across these key areas of mathematics are detailed in the progression documents attached. https://www.ncetm.org.uk/in-the-classroom/early-years/</p>					
Continuous Provision	<p>Maths activities in continuous provision will link to the number of the week or maths focus.</p>					
Assessment	<p>Baseline assessment in September End of term summative assessments. Observations during group learning and CP</p>					
Links to KSI	<p>The EYFS maths programme lays the foundations essential to progress in learning in mathematics in KSI and beyond. This is achieved by children:</p>					

	<ul style="list-style-type: none"> • Building a secure understanding of number and number facts. • Engaging in fluency, reasoning and problem solving activities. • Using concrete, pictorial and abstract representations and models of number and consistent with those used in KS1 (See calculation policy) • Learning maths vocabulary consistent with that used in KS1. (See calculation policy) • Participating in whole school 99 Club. 						
Half term	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7
Autumn 1	Baseline Assessments	Baseline Assessments	Baseline Assessments	Number focus: 0 1	Number focus: 2 Week 1	Number focus: 2 Week 2	Number focus: 3 Week 1
Fluency Starters	Count forwards and backwards up to 10 Count forwards and backwards from any number						
Number Sense	Mastering Number						
Autumn 2	Number focus: 3 Week 1	Number focus: 3 Week 2	Number focus: 4 Week 1	Number focus: 4 Week 2	Number bonds to 5 Subtraction facts to 5 Week 1	Bonds to 5 Subtraction facts Week 2	Assessment Week Bonds to 5 What makes 1,2,3,4,5
Fluency Starters	Count forwards and backwards up to 20 Count forwards and backwards from any number						
Number Sense	Daily number sense with rekenrek						
Spring 1	Number focus: 6 Week 1	Number focus: 6 Week 2	Number focus: 7 Week 1	Number focus: 7 Week 2	Number focus: 8 Week 1	Number focus: 8	Assessment Week Bonds to 8 What makes 5,6,7,8
Fluency Starters	Count forwards and backwards up to 30 then 40 Count forwards and backwards from any number up to 30 then 40						
Number Sense	Mastering Number						
Spring 2	Number focus: 9 Week 1	Number focus: 9 Week 2	Number focus: 10 Week 1	Number focus: 10 Week 2	Number bonds to 10 Week 1	Number bonds to 10 Week 2	Assessment Week Bonds to 10 Subtraction Facts 10
Fluency Starters	Count forwards and backwards up to 50 then 70 Count forwards and backwards from any number up to 50 then 70						
Number Sense	Mastering Number						

Summer 1	Comparing Numbers Week 1	Ordering Numbers Week 1	Odds and evens	Double Numbers Exploring links odd and even	Sharing between 2 Halving into two equal groups.	Sharing numbers up to 10.	Comparing linking to weight, length, capacity.
Fluency Starters	Count forwards and backwards up to 50 then 70 Count forwards and backwards from any number up to 50 then. 70						
Number Sense	Mastering Number						
Summer 1	Assessment and revision Week 1	Assessment and revision w=Week 2	Data Submission Teen numbers – ready for KS1 place value	Select, rotate and manipulate shapes.	Compose and decompose shapes.	Continue, copy, create repeating patterns. Week 1	Exploring measure: Time
Fluency Starters	Count forwards and backwards up to 100 Count forwards and backwards from any number up to 100 KS1 prep: teen numbers – ten frames, dienes, part part whole model.						
Number Sense	Mastering Number						

Maths Overview 2023 - 2024



Long Term Plan Year 1 / 2

(Fluency topics in red visited on weekly rolling programme)

Term	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	<i>P/Value</i>	<i>Addition</i>	<i>Subtraction</i>	<i>Multiply</i>	<i>Division</i>	<i>Fractions</i>	<i>Time</i>	<i>P/Value</i>	<i>Addition</i>	<i>Subtraction</i>	<i>Multiply</i>	<i>Division</i>
	Assessment NCETM Guidelines		Place Value Yr 1: Numbers to 10 Yr 2: Numbers to 100				Number: Addition and Subtraction Yr 1: Numbers to 20 (including money) Yr 2: Numbers to 100 (including money)					Number: Yr 1 PV Yr 2: Multiplication
Spring	<i>Fractions</i>	<i>Time</i>	<i>P/Value</i>	<i>Addition</i>	<i>Subn</i>	<i>Multiply</i>	<i>Division</i>	<i>Fractions</i>	<i>Time</i>	<i>P/Value</i>	<i>Addition</i>	<i>Subn</i>
	Number: Yr 1 PV 50 Yr 2: Multiplication		Number: Yr 1/2 Division		Fractions Yr 1: :Fractions Yr 2: Fractions and number consolidation		Measure Length/ Height	Shape Yr 1: Shape and number consolidation Yr 2: Shape and number consolidation			Statistics Yr 1: PV to 100/stats Yr 2: Statistics	
Summer	<i>Multiply</i>	<i>Division</i>	<i>Fractions</i>	<i>Time</i>	<i>P/Value</i>	<i>Addition</i>	<i>Subn</i>	<i>Multiply</i>	<i>Division</i>	<i>Fractions</i>	<i>Time</i>	<i>P/Value</i>
	Shape Posn Mvmt	Time Year 1 PV Year 2 Statistics		Measurement Weight Volume Temperature			Four Operations/Fractions through measure.			Money Week Finance Ed. Consolidation		Asst Transition

Weeks 8-10 Reception and Year 1 join for fluency activities.



Maths Overview (2023 - 2024)

Long term Plan

Year 3/4

(Fluency topics in red visited on weekly rolling programme)

Term	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	<i>P/Value</i>	<i>Addition</i>	<i>Subtraction</i>	<i>Multiply</i>	<i>Division</i>	<i>Fractions</i>	<i>Time</i>	<i>P/Value</i>	<i>Addition</i>	<i>Subtraction</i>	<i>Multiply</i>	<i>Division</i>
	Assessment NCETM Guidelines		Place Value			Number: Addition and Subtraction				Number: multiplication and division		
Spring	<i>Fractions</i>	<i>Time</i>	<i>P/Value</i>	<i>Addition</i>	<i>Subn</i>	<i>Multiply</i>	<i>Division</i>	<i>Fractions</i>	<i>Time</i>	<i>P/Value</i>	<i>Addition</i>	<i>Subn</i>
	Number: Multiplication And division		Measurement: Length, Perimeter and Area		Number: Fractions				Yr 3: Mass and Capacity Yr 4: Number- Decimals			Consolidn
Summer	<i>Multiply</i>	<i>Division</i>	<i>Fractions</i>	<i>Time</i>	<i>P/Value</i>	<i>Addition</i>	<i>Subn</i>	<i>Multiply</i>	<i>Division</i>	<i>Fractions</i>	<i>Time</i>	<i>P/Value</i>
	Number: Decimals (Including money)			Measurement Time		Statistics		Mass, Capacity/	Money Week/Finance Education Properties of Shape Position and movement			Asst Transition

Maths Overview (2023- 2024)

Year 5 / 6



(Fluency topics in red visited on weekly rolling programme)

Term	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	P/Value	Addition	Subtraction	Multiply	Division	Fractions	Time	P/Value	Addition	Subtraction	Multiply	Division
	Assessment NCETM Guidelines		Number: Place Value		Number: Four Operations					Number Fractions		
Spring	Fractions	Time	P/Value	Addition	Subn	Multiply	Division	Fractions	Time	P/Value	Addition	Subn
	Number: Yr 5 Number Fractions Yr 6: Ration		Number: Decimals and Percentages			Number Year 5: decimals Year 6: algebra		Measure Conv. Units	Measure Perimeter, Area And Volume		Statistics	
Summer	Multiply	Division	Fractions	Time	P/Value	Addition	Subn	Multiply	Division	Fractions	Time	P/Value
	Geometry Properties of shape		Geometry Position Direction	Year 6 SATS Year 5 Four Operations		Money Week/Finance Education Consolidation/Investigation Year 5: Year 6:						Asst Transition