



Curriculum Rationale

Our maths curriculum has been designed to support a mastery approach to teaching and learning whilst effectively meeting the National Curriculum aims and objectives. This curriculum aims to provide children with time to apply their skills, explore concepts thoroughly and to demonstrate a deeper understanding of mathematical concepts. This curriculum aims to support pupils and teachers in developing a greater confidence within mathematics and strives to provide children with the opportunities to become mathematicians.

A mathematician is somebody who: makes connections, shows fluency, can provide a reason for what they are doing, is creative, checks their work in a variety of ways, is resilient, explains, evaluates, models, invents, applies their learning to a range of contexts, is curious, has confidence, uses mistakes to improve, is resourceful and efficient.

At Whitemoor, we aim to provide a knowledge-rich curriculum, allowing time for pupils to develop a deeper understanding and make connections between new and prior learning. Therefore, our lessons are created with care and are constantly adapted over time (using input from staff, up-to-date research and observations of pupils) to meet the needs of our pupils and allow them to continue making progress over time. Lessons are designed to provide a variety of representations, which is vital to introduce and explore concepts effectively. All lessons will contain: recall of prior learning, a range of representations, fluency, problem solving and reasoning opportunities.

Key Documents

NCETM Calculations Guidance

NCETM Maths Guidance for KS1 and KS2

NCETM 5 Big Ideas for Mastery

NCETM Ready-to-progress criteria

White Rose Schemes of Learning





Yearly Over					arly Overv	rly Overview						
	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	Place Value (within 10)				Addition and Subtraction (within 10)			Consolidation				
Spring	Place Value (within 20) Addition and Subtemple (within 20)					nd Height	Mass and	d Volume				
Summer	Multiplication and Division		Frac	rtions	Position and direction		lue (within 10)	Money	Ti	me	Consolidation	





Week 1 – Week 5	Week 6 – Week 10	Week 11		
Place Value (within 10)	Addition and Subtraction	Shape		
NCETM Resources:	NCETM Resources:	NCETM Resources:		
Recall: Autumn Block 1 Flashback 4	Recall: Autumn Block 2 Flashback 4	Recall: Autumn Block 3 Flashback 4		
National Curriculum Objectives: Count to and across 10, forwards and backwards, beginning with 0 or 1, or from any given number Count, read and write numbers to 10 in numerals and in words Given a number, identify one more and one less and pictorial represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least	National Curriculum Objectives: Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs Represent and use number bonds and related subtraction facts within 10 Add and subtract one-digit and two-digit numbers to 10, including zero Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems	National Curriculum Objectives: Recognise and name common 2-D and 3-D shapes, including: • 2-D shapes [for example, rectangles (including squares), circles and triangles] • 3-D shapes [for example, cuboids (including cubes), pyramids and spheres].		





Autumn Small Steps					
Place Value (5 weeks)	Addition and Subtraction (5 weeks)	Shape (1 week)			
ep 1: Sort objects	Step 1: Introduce parts and wholes	Step 1: Recognise and name 3-D shapes			
ep 2: Count objects	Step 2: Part-whole model	Step 2: Sort 3-D shapes			
ep 3: Count objects from a larger group	Step 3: Write number sentences	Step 3: Recognise and name 2-D shapes			
ep 4: Represent objects	Step 4: Fact families — addition facts	Step 4: Sort 2-D shapes			
ep 5: Recognise numbers as words	Step 5: Number bonds within 10	Step 5: Patterns with 2-D and 3-D shapes			
ep 6: Count on from any number	Step 6: Systematic number bonds within 10				
rep 7: 1 more	Step 7: Number bonds to 10				
ep 8: Count backwards within 10	Step 8: Addition- add together				
ep 9: 1 less	Step 9: Addition — add more				
ep 10: Compare groups by matching	Step 10: Addition problems				
ep 11: Fewer, more, same	Step 11: Find a part				
ep 12: Less than, greater than, equal to	Step 12: Subtraction – find a part				
ep 13: Compare numbers	Step 13: Fact families — the eight facts				
ep 14: Order objects and numbers	Step 14: Subtraction — take away/cross out				
ep 15: The number line	(how many left?)				
	Step 15: Take away (how many left?)				
	Step 16: Subtraction on a number line				
	Step 17: Add or subtract 1 or 2				





Spring Term Coverage and National Curriculum Objectives (11 weeks 2 days)						
Week 1 – Week 3	Week 4 – Week 6	Week 7 – Week 8	Week 9 – Week 10	Week 11 – Week 12		
Place Value (within 20)	Addition and Subtraction	Place Value (within 50)	Length and Height	Mass and Volume		
NCETM Resources:	NCETM Resources:	NCETM Resources:	NCETM Resources:	NCETM Resources:		
Recall: Spring Block 1	Recall: Spring Block 2	Recall: Spring Block 3	Recall: Spring Block 4	Recall: Spring Block 5		
Flashback 4	Flashback 4	Flashback 4	Flashback 4	Flashback 4		
National Curriculum	National Curriculum	National Curriculum	National Curriculum	National Curriculum		
Objectives:	Objectives:	Objectives:	Objectives:	Objectives:		
·			Measure and begin to record	Measure and begin to		
Count to and across 20,	Read, write and interpret	Count to and across 50,	lengths and heights.	record mass/weight,		
forwards and backwards,	mathematical statements	forwards and backwards,		capacity and volume.		
beginning with 0 or 1, or	involving addition (+),	beginning with 0 or 1, or	Compare, describe and solve			
from any given number	subtraction (–) and equals	from any given number	practical problems for:	Compare, describe and		
	(=) signs		lengths and heights (for	solve practical problems		
Count, read and write		Count, read and write	example, long/short,	for mass/weight: [for		
numbers to 20 in numerals	Represent and use number	numbers to 50 in numerals	longer/shorter, tall/short,	example, heavy/light,		
and in words	bonds and related	and in words	double/half)	heavier than, lighter		
	subtraction facts within 20			than]; capacity and		
Given a number, identify		Given a number, identify one		volume [for example,		
one more and one less	Add and subtract one-digit	more and one less		full/empty, more than,		
	and two-digit numbers to			less than, half, half full,		
	20, including zero			quarter]		





Identify and represent		Identify and represent	
numbers using objects and	Solve one-step problems that	numbers using objects and	
pictorial representations	involve addition and	pictorial representations	
including the number line,	subtraction, using concrete	including the number line,	
and use the language of:	objects and pictorial	and use the language of:	
equal to, more than, less	representations, and missing	equal to, more than, less	
than (fewer), most, least	number problems	than (fewer), most, least	
		Count in multiples of 2s, 5s	
		and 10s	

Spring Small Steps						
Place Value within 20 (3	Addition and Subtraction	Place Value within 50 (2	Length and height (2	Mass and Volume (2		
weeks) (3 weeks)		weeks)	weeks)	weeks)		
Updated when new steps	Updated when new steps are	Updated when new steps	Updated when new steps are	Updated when new steps		
are released (November	released (November 2022)	are released (November	released (November 2022)	are released (November		
2022)		2022)		2022)		





	Summer Term Coverage and National Curriculum Objectives (13 weeks 4 days)							
Week 1 – Week 3	Week 4 – Week 5	Week 6	Week 7 – Week 8	Week 9	Week 10 – Week 11			
Multiplication and	Fractions	Position and Direction	Place Value (within	Money	Time			
Division			100)					
	NCETM Resources:	NCETM Resources:		NCETM Resources:	NCETM Resources:			
NCETM Resources:			NCETM Resources:					
	Recall: Recall: Summer	Recall: Recall: Summer		Recall: Recall: Summer	Recall: Recall: Summer			
Recall: Summer Block	Block 2 Flashback 4	Block 3 Flashback 4	Recall: Recall: Summer	Block 5 Flashback 4	Block 6 Flashback 4			
1 Flashback 4			Block 4 Flashback 4					
	National Curriculum	National Curriculum		National Curriculum	National Curriculum			
National Curriculum	Objectives:	Objectives:	National Curriculum	Objectives:	Objectives:			
Objectives:	Recognise, find and	Describe position,	Objectives:	Recognise and know	Sequence events in			
Solve one-step	name a half as one of	direction and	Count to and across	the value of different	chronological order			
problems involving	two equal parts of an	movement, including	100, forwards and	denominations of coins	using language [for			
multiplication and	object, shape or	whole, half, quarter	backwards, beginning	and notes.	example, before and			
division, by calculating	quantity	and three quarter	with 0 or 1, or from		after, next, first, today,			
the answer using		turns.	any given number		yesterday, tomorrow,			
concrete objects,	Recognise, find and				morning, afternoon			
pictorial	name a quarter as one		Count, read and write		and evening.			
representations and	of four equal parts of		numbers to 100 in					
arrays with the	an object, shape or		numerals; count in		Recognise and use			
support of the teacher.	quantity.		multiples of twos, fives		language relating to			
			and tens		dates, including days			
					of the week, weeks,			
					months and years.			





Given a number, identify one more and one less Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than	Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times. Compare, describe and solve practical problems for time [for example, quicker, slower, earlier, later]
line, and use the language of: equal to,	example, quicker,

	Summer Small Steps								
Multiplication and	Fractions (2 weeks)	Position and	Place value within	Money (1 week)	Time (2 weeks)				
Division (3 weeks)		Direction (1 week)	100 (2 weeks)						
Updated when new	Updated when new	Updated when new	Updated when new	Updated when new	Updated when new				
steps are released	steps are released	steps are released	steps are released	steps are released	steps are released				
(March 2023)	(March 2023)	(March 2023)	(March 2023)	(March 2023)	(March 2023)				