Maths Progression Document

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April 2026

KWPS
KIRKHAM & WESHAM
,PRIMARY SCHOOL

Maths Progression Document

Curriculum Intent

Mathematics at KWPS is taught using White Rose Maths schemes of learning, aligned to the National Curriculum. Learning is sequenced into blocks and small steps to develop fluency, reasoning and problem solving. Teachers adapt lessons to meet the needs of all pupils. At Kirkham & Wesham Primary School, we aim to develop confident, resilient mathematicians who:

- enjoy maths
- can reason mathematically
- apply their knowledge to solve problems
- are well prepared for the next stage of their education

Our aims are to:

✓ Develop secure number sense and fluency
✓ Build deep conceptual understanding
✓ Encourage reasoning and mathematical talk
✓ Enable pupils to solve problems with confidence
✓ Prepare pupils for the demands of secondary mathematics and everyday life

Our curriculum is designed to be ambitious, inclusive and coherent, with clear progression from EYFS to Year 6. It ensures that all pupils develop a deep, connected understanding of mathematical concepts over time.

The Implementation of our Maths Curriculum

We follow **White Rose Maths**, which:

- aligns with the England National Curriculum
- sequences learning carefully from simple to complex
- teaches multiplication and division together
- emphasises fluency, reasoning and problem-solving

Each unit builds on prior learning and prepares pupils for future concepts.

Inclusion and Accessibility

The curriculum is designed to be accessible to all pupils. We are committed to ensuring that every child, regardless of need or background, can fully participate and succeed.

We meet our duties under the Equality Act 2010 and the Special Educational Needs and Disability Regulations 2014 by:

- Adapting teaching to meet individual needs
- Providing appropriate scaffolding and support
- Using a range of strategies to ensure full access to learning
- Maintaining high expectations for all pupils

Teaching is adapted through scaffolding, use of manipulatives and targeted support, while ensuring appropriate challenge for all pupils.

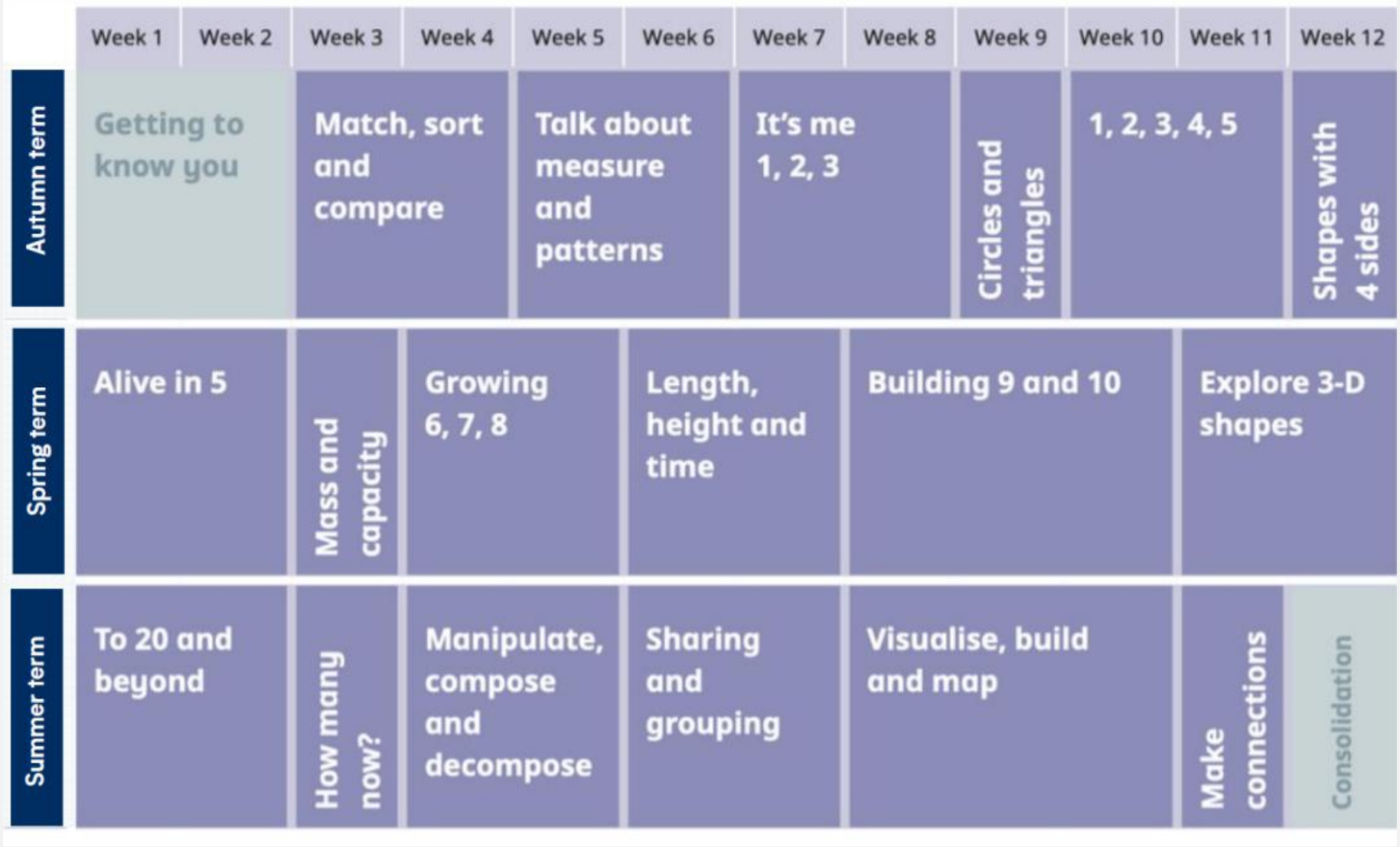
Long Term White Rose Maths Overview

At Kirkham & Wesham Primary School, we have developed a mastery approach to mathematics from the Early Years through to Year 6. Our curriculum is based on the National Curriculum and is carefully sequenced using White Rose Maths to ensure clear progression in knowledge and skills. We follow the principles of Mastery Maths, as supported by the NCETM (National Centre for Excellence in the Teaching of Mathematics), ensuring that all pupils develop a deep and secure understanding of mathematical concepts. To support fluency in multiplication and division, we use NumberSense, which helps pupils build confidence and automaticity with key number facts. We are committed to the belief that all pupils can achieve in mathematics. Through a focus on fluency, reasoning and problem-solving, pupils develop the skills and confidence needed to apply their learning in a range of contexts. Assessment is used formatively to identify misconceptions and inform next steps in teaching.

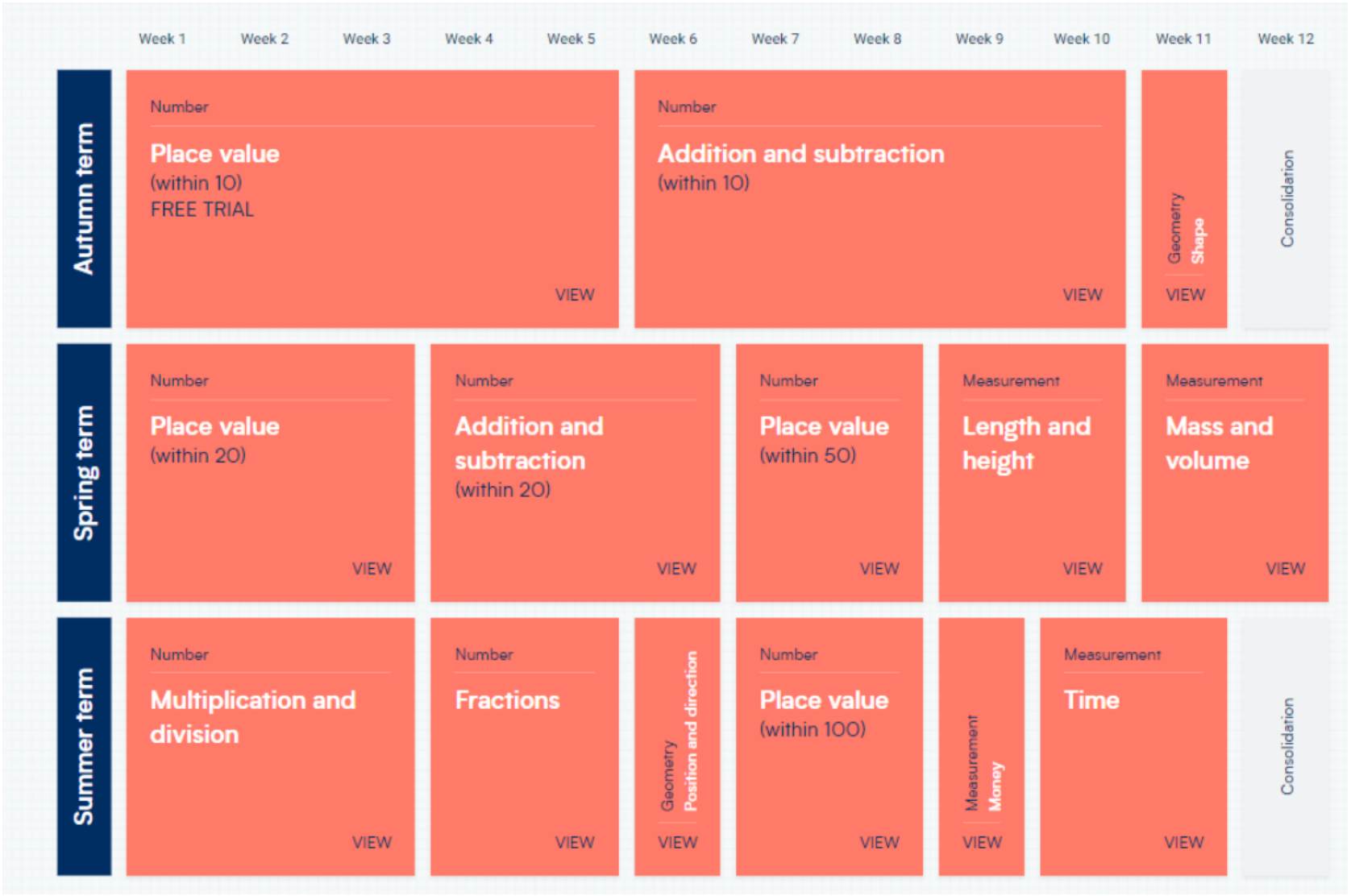
Further information can be found in our Mathematics Intent, Implementation and Impact document.

EYFS

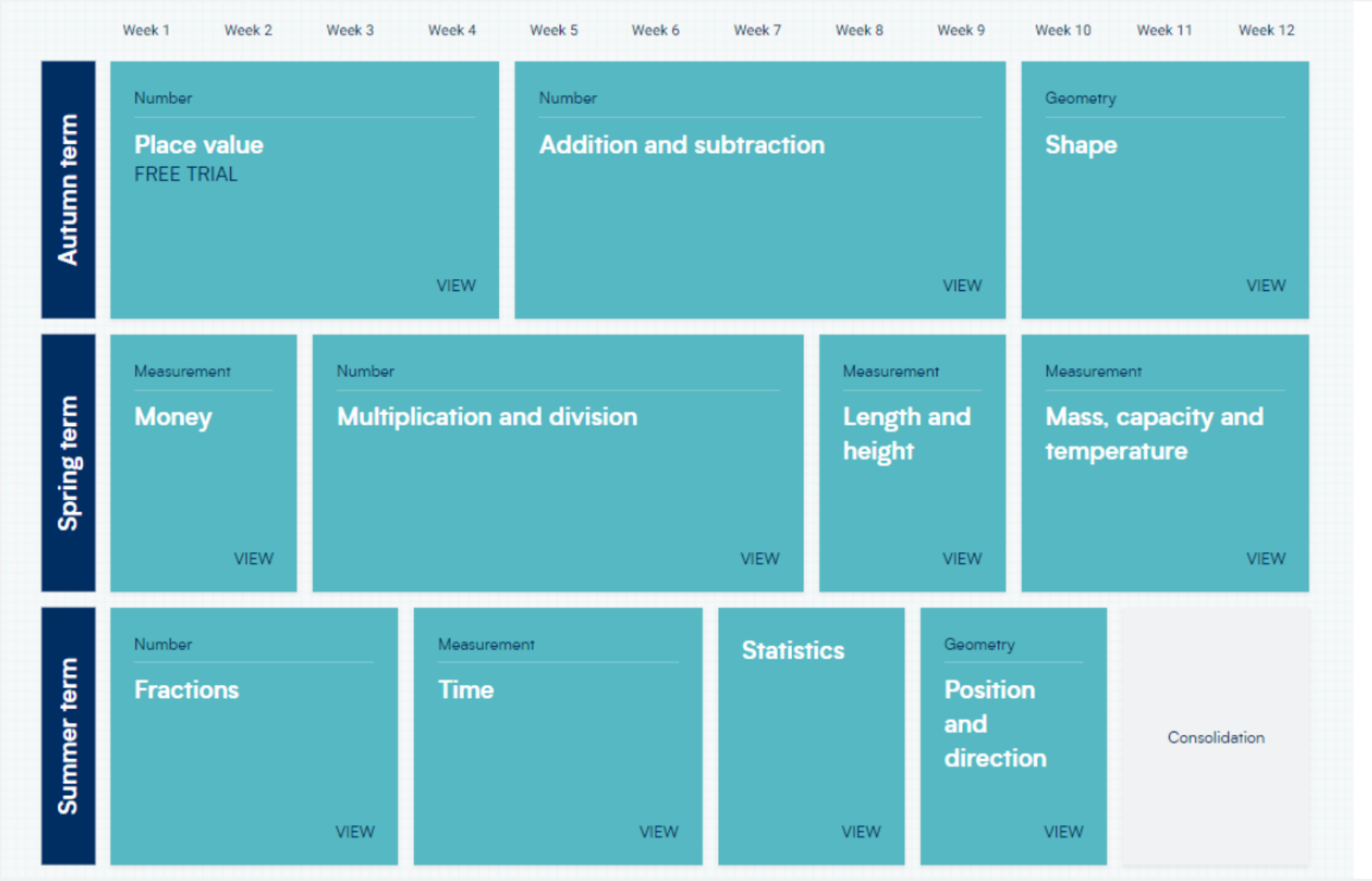
The yearly overview provides suggested timings for each block of learning which is adapted depending on the length of terms or any progression of each unit of work which may need to be altered according to the needs of the children.



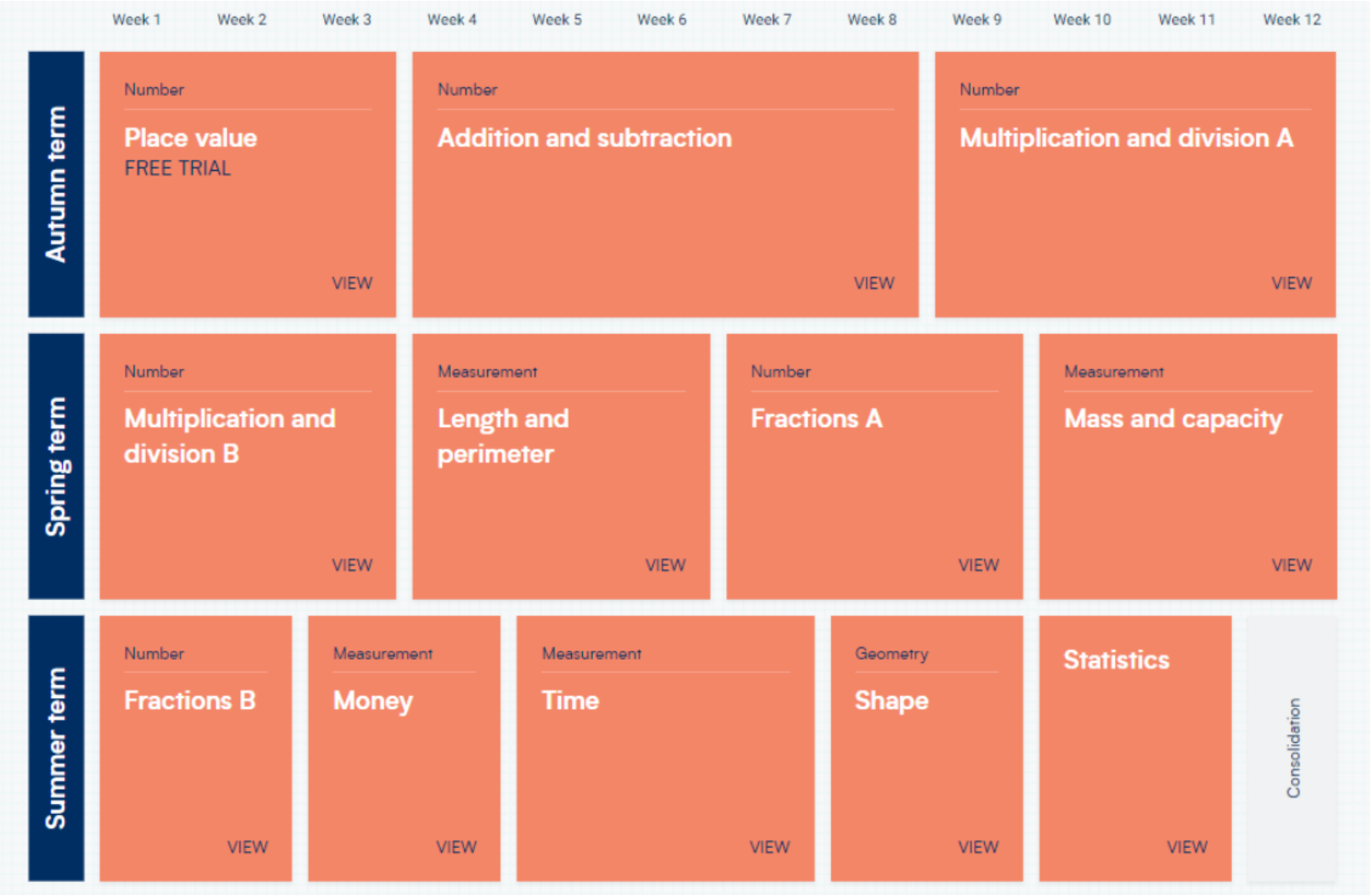
Year 1


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 term
Number
Place value
(within 10)
FREE TRIAL
VIEW
Number
Addition and subtraction
(within 10)
VIEW
Geometry
Shape
VIEW
Consolidation
Spring term
Number
Place value
(within 20)
VIEW
Number
Addition and subtraction
(within 20)
VIEW
Number
Place value
(within 50)
VIEW
Measurement
Length and height
VIEW
Measurement
Mass and volume
VIEW
Summer term
Number
Multiplication and division
VIEW
Number
Fractions
VIEW
Geometry
Position and direction
VIEW
Number
Place value
(within 100)
VIEW
Measurement
Money
VIEW
Measurement
Time
VIEW
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 term
Number
Place value
FREE TRIAL
VIEW
Number
Addition and subtraction
VIEW
Geometry
Shape
VIEW
Spring term
Measurement
Money
VIEW
Number
Multiplication and division
VIEW
Measurement
Length and height
VIEW
Measurement
Mass, capacity and temperature
VIEW
Summer term
Number
Fractions
VIEW
Measurement
Time
VIEW
Statistics
VIEW
Geometry
Position and direction
VIEW
Consolidation

Year 3


Week 1
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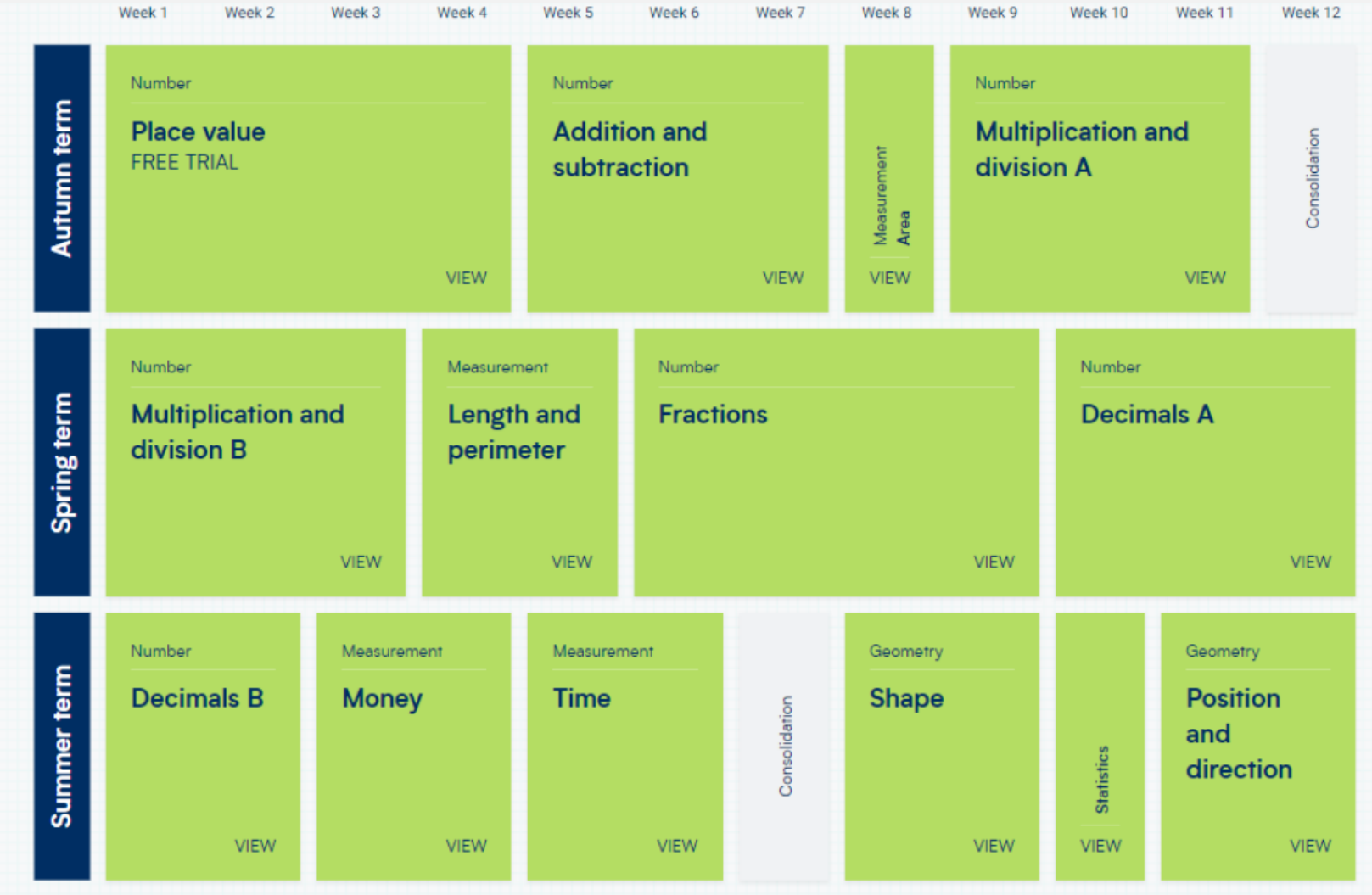
Week 7
Week 8
Week 9
Week 10
Week 11
Week 12
Autumn term
Number
Place value
FREE TRIAL
VIEW
Number
Addition and subtraction
VIEW
Number
Multiplication and division A
VIEW
Spring term
Number
Multiplication and division B
VIEW
Measurement
Length and perimeter
VIEW
Number
Fractions A
VIEW
Measurement
Mass and capacity
VIEW
Summer term
Number
Fractions B
VIEW
Measurement
Money
VIEW
Measurement
Time
VIEW
Geometry
Shape
VIEW
Statistics
VIEW
Consolidation

Year 4


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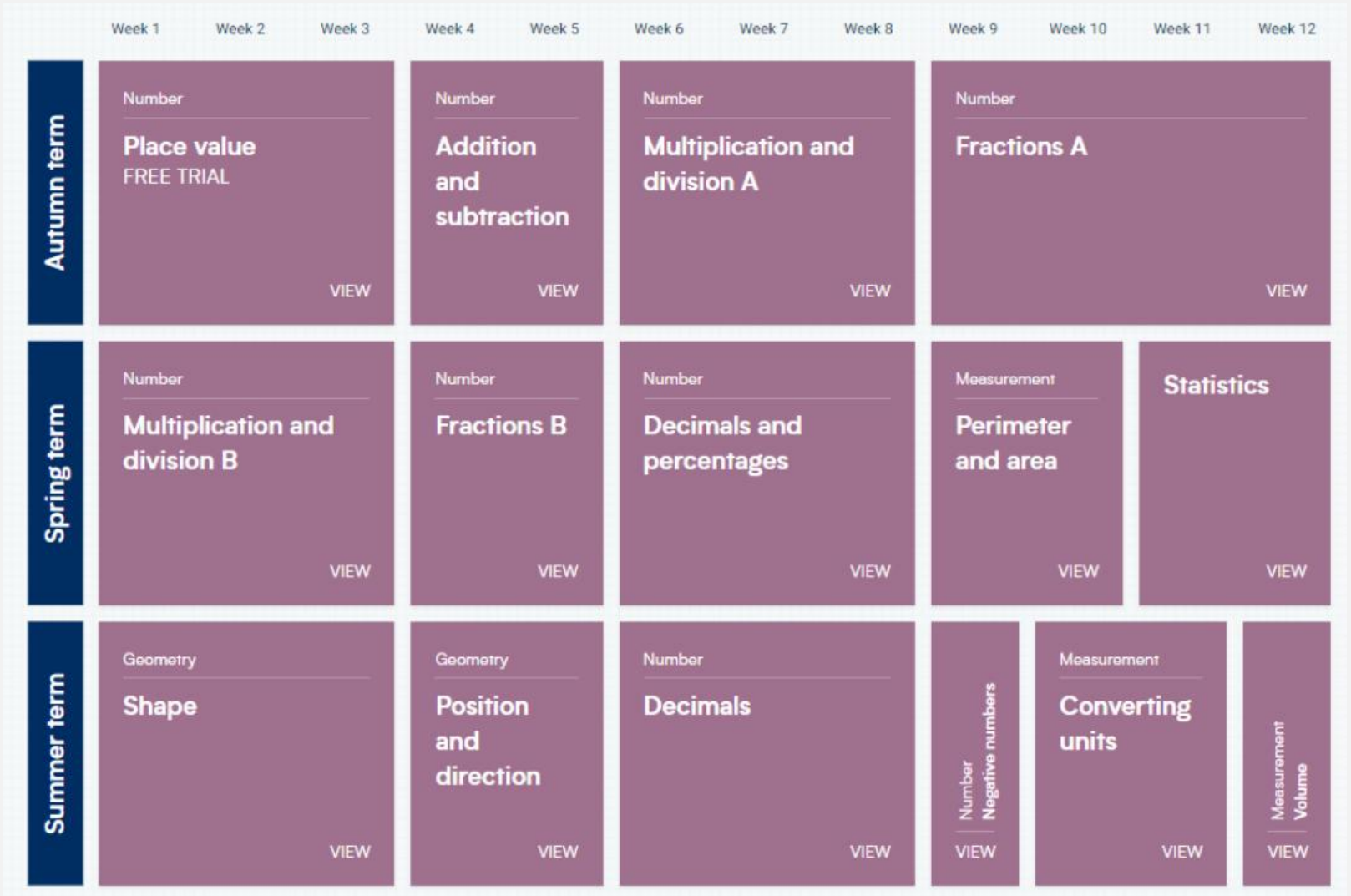
Week 6
Week 7
Week 8
Week 9
Week 10
Week 11
Week 12
Autumn term
Number
Place value
FREE TRIAL
VIEW
Number
Addition and subtraction
VIEW
Measurement
Area
VIEW
Number
Multiplication and division A
VIEW
Consolidation
Spring term
Number
Multiplication and division B
VIEW
Measurement
Length and perimeter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

Year 5


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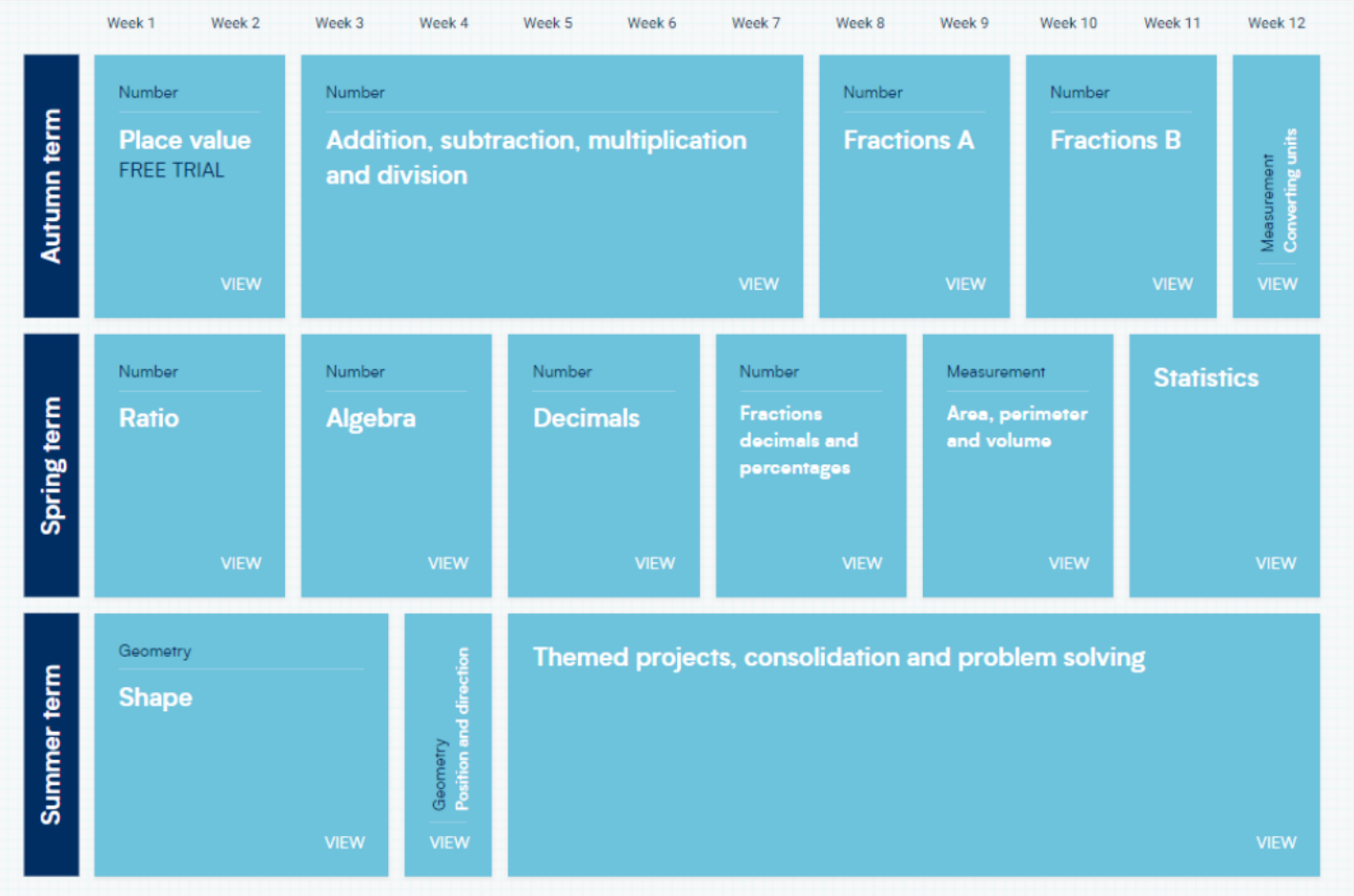
Week 4
Week 5
Week 6
Week 7
Week 8
Week 9
Week 10
Week 11
Week 12
Autumn term
Number
Place value
FREE TRIAL
VIEW
Number
Addition and subtraction
VIEW
Number
Multiplication and division A
VIEW
Number
Fractions A
VIEW
Spring term
Number
Multiplication and division B
VIEW
Number
Fractions B
VIEW
Number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

Year 6



Please note that due to KS2 SATS, some units may be adapted to meet cohort needs and statutory requirements

What lessons look like at KWPS

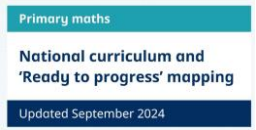
Teaching follows a concrete–pictorial–abstract (CPA) approach to develop conceptual understanding. Pupils use manipulatives such as counters, base ten and place value charts before moving to pictorial and abstract representations. Mathematical talk is prioritised, with pupils encouraged to explain, justify and reason using precise vocabulary. Teachers use questioning and adaptive teaching to address misconceptions and provide appropriate challenge for all learners.

Progression of Knowledge

Strand	EYFS	KS1	LKS2	UKS2
Number & Place Value	Count, recognise and represent numbers	Partition, compare and order numbers	Apply place value to larger numbers and different representations	Reason with large numbers, generalise patterns and solve problems
Addition & Subtraction	Combine and take away using objects	Recall number bonds and use formal methods	Apply formal written methods with increasing accuracy	Solve complex multi-step problems and justify methods
Multiplication & Division	Share and group practically	Use repeated addition and basic times tables	Apply formal methods and recall all times tables	Solve problems involving scaling, ratio and algebraic thinking
Fractions	Understand sharing and equal parts	Recognise and find simple fractions	Compare, order and calculate with fractions	Solve problems with fractions, decimals and percentages
Measurement	Compare size, weight and capacity	Measure using standard units	Convert units and apply measurement in context	Solve complex problems involving conversion, scale and precision
Geometry	Recognise and describe basic shapes	Identify properties of shapes and simple position	Classify shapes and use angles and coordinates	Reason about shapes, transformations and position in all quadrants

Progression of Knowledge				
Strand	**EYFS**	**KS1**	**LKS2**	**UKS2**
Statistics	Sort and compare objects	Interpret simple charts and pictograms	Interpret and present data in graphs	Analyse data, calculate averages and solve statistical problems
Algebra				Use simple formulae, express relationships and solve equations

For further detail on the progression of knowledge – see the White Rose Maths document.



Vocabulary Progression

The teaching of vocabulary across EYFS, KS1 and KS2 is aligned with the White Rose schemes of learning and KWPS long-term overviews. This section identifies the year groups in which specific vocabulary should be explicitly introduced and taught. However, language should be revisited in subsequent year groups to ensure that pupils are able to consolidate and deepen their understanding. This document is fully editable, allowing vocabulary to be adapted or moved to earlier or later year groups where appropriate. While some vocabulary (for example, shapes) may be introduced earlier if required or as part of a specific activity, this document ensures that vocabulary progression is planned and coherent across the school. Definitions of vocabulary are shared from NCTEM Vocabulary dictionary to ensure all teachers and TA's are giving the same explanations and using the same terminology to explain. It is expected that key vocabulary is displayed on 'Maths Learning Walls' at appropriate times during the academic year and in line with the current topic area being taught within the class and is promoted through mathematical talk in lessons.

Number - Number and place value

EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6

count	sort	count in steps	ascending	negative numbers	ten thousands	millions
subitise	represent	count in multiples	descending	roman numerals	one hundred thousands	ten millions
order/ordinal	multiples	place value	10 or 100 more	1000 more	powers of	
compare	partitioning	estimate	10 or 100 less	1000 less	integer	
forwards	ones	compare	hundreds	thousands		
backwards	tens			round		
numerals						
digit						
one more						
one less						
equal to						
more than						
less than (fewer)						

Addition and Subtraction

Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
add	addition/add	sum	column addition	4-digit number		
plus	subtraction	3-digit number	column subtraction	operations		
altogether	difference	commutative	exchange	methods		
total	equals		estimate			
take away /minus	facts					
number bonds	problems					
part	missing number problems					
whole	2-digit number					
digit	inverse					

Multiplication and Division

Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
double	multiplication	multiplication tables	exchange	factor pairs	multiples	multi-digit numbers
half	division	commutative	mathematical statements	formal written layout	factors	long division
twice as many	arrays	repeated addition	missing number problems	distributive law	prime numbers	
equal			integer scaling problems	remainders	square numbers	

unequal			correspondence problems		cube numbers	
share			derived facts		short division	
group					product	
odd					dividend	
even					divisor	
					quotient	
					operations	

Fractions/Decimals/Percentages

Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	whole	three quarters	tenths	decimal equivalence	fifth	
	half	third		hundredths	thousandths	
	quarter	equivalent fractions		convert	mixed numbers	
	equal parts	unit fractions		proper fractions	per cent %	
		non unit fractions		improper fractions	factors	
		numerator		decimal point	integer	
		denominator			complements	
		one whole				

Ratio and proportion

Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
						relative size
						missing values
						integer multiplication

						percentages
						scale factor
						unequal sharing & grouping

Algebra

Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
						formulae
						linear number sequences
						algebraically
						equation
						unknowns
						combinations
						variables

Measurement (Measure and Length)

Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
measure	compare	standard units	millimetre mm	kilometres km	decimal notation	conversion
wide(er)		estimate	perimeter	rectilinear figure	scaling	miles
narrow(er)		order		area	metric units	formulae
compare		record results			imperial units	parallelograms
long(er)(est)		centimetre cm			inches	triangles
short(er)(est)		metre m			compound shape	feet
length					irregular shapes	
					square centimetres	
					square metres	

Measurement (Height, Weight and Capacity)

Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
height	mass	kilogram kg			cubic centimetre	cubic metre
long(er)/short(er)	volume	gram g			pounds	cubic millimetre
tall(er)/short(er)		quarter full			pints	cubic kilometre
weight		three quarters full				gallons
capacity		litres l				stones
heavy/light		millilitres ml				ounces
heavier than		temperature				
lighter than		Celsius				
big/bigger/biggest						
full/empty						
more than						
less than						
half/half full						

Measurement (Time)

Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6

time	chronological order	intervals of time	analogue clock	convert		
quicker	*days of the week*	quarter past/to	roman numerals			
slower	*months of the year*	duration	12-hour clock			
earlier	month		24-hour clock			
later	year		a.m./p.m.			
before	o'clock		noon			
after	half past		midnight			
first	second		leap year			
next			digital			
today						
yesterday						
tomorrow						
morning						
afternoon						
evening						
day						
week						
hour						
minutes						

Measurement (Money)

Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	money	value				
	coins	change				
	notes					
	pounds £					
	pence p					

Geometry – Properties of Shape

Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
2-d shapes	sides	pentagon	right-angle triangle	isosceles	regular polygon	radius
rectangle	corners	hexagon	heptagon	equilateral	irregular polygon	diameter
square	properties	line of symmetry	octagon	scalene		circumference
circle	pyramids	properties	polygon	trapezium		dimensions
triangle	faces	cylinder	properties	rhombus		
characteristics		edges	prism	parallelogram		
3-d shapes		vertices		kite		
cuboids		vertex		geometric shapes		
cubes				quadrilaterals		
cone						

spheres						
curved						
straight						
flat						

Geometry – Properties of shape (2)

Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
			orientations		reflex angles	
			angles		degrees	
			acute angle		one whole turn	
			obtuse angle		angles on straight line	
			turn		angles around a point	
			right angles		vertically opposite	
			half turn		missing angles	
			three quarters of a turn			
			greater than right angle			
			less than right angle			
			horizontal lines			
			vertical lines			
			perpendicular lines			
			parallel lines			

Geometry – Position and direction

Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
over	position	clockwise/anti-clockwise		co-ordinates	reflection	four quadrants
under	direction	straight line		first quadrant		co-ordinate plane
between	movement	rotation		grid		
around	whole turn	arrange		translation		
through	quarter turn	sequences		plot		
on	half turn			polygon		
into	three-quarter turn			axis		
next to						
behind						
beneath						
order						
repeat						
patterns						
on top of						

Statistics

Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
		pictograms	table	time graph	timetable	pie chart
		tally chart	bar chart	discrete data	two-way tables	mean
		block diagram	one-step problem	continuous data		
		category	two-step problem	line graph		
		sorting		comparison problem		
		totalling		sum problem		

		comparing		difference problem		
		horizontal		calculate		
		vertical		interpret		

The Impact of our Maths Curriculum

By the end of KS2, pupils at KWPS will:

✓ Recall key number facts fluently
✓ Reason mathematically using appropriate representations
✓ Solve a range of problems with confidence
✓ Explain their thinking clearly and accurately
✓ Be well prepared for secondary school mathematics

We measure impact through:

- ongoing assessment
- pupil discussions
- work scrutiny
- summative assessments
- analysis of fluency data