

Matha Curriculum overview

SY 2022-23

At Deanshanger Primary School we follow the White Rose Curriculum which links to the National Curriculum. This document shows how maths progresses through the different maths areas across the year groups. The Reception year's curriculum is in a separate table at the beginning of this overview document.

In each of the major areas (Number, Measurement, Geometry and Statistics), the curriculum has been broken down into key areas. For each of these areas, you can then see which National Curriculum objectives are covered along with the term and block number in which that objective is first met on the White Rose Maths schemes.

At Deanshanger Primary School we also promote the use of the following apps to be used in school and at home:

- Numbots for Reception, Year One and Year Two-supporting the learning of Number, Addition and Subtraction.
- TT Rockstars from Years Two to Six-supporting the learning of Multiplication and Division.

Reception Year Mathematics at Deanshanger School

Mathematics (Number and Numerical Pattern)	mathematically. Children sh those numbers. By providing frequent and o organising counting – child	EYFS Statutory Educational Programme: Developing a strong grounding in number is essential so that all children develop the necessary building blocks to excel nathematically. Children should be able to count confidently, develop a deep understanding of the numbers to 10, the relationships between them and the patterns within hose numbers. By providing frequent and varied opportunities to build and apply this understanding - such as using manipulatives, including small pebbles and tens frames for significant and country - children will develop a secure base of knowledge and vocabulary from which mastery of mathematics is built. In addition, it is important that the curriculum includes rich opportunities for children to develop their spatial reasoning skills across all areas of mathematics including shape, space, and measures. It is								
	'	important that children develop positive attitudes and interests in mathematics, look for patterns and relationships, spot connections, 'have a go', talk to adults and peers about what they notice and not be afraid to make mistakes.								
Learning	Getting to know you:	It's me 1,2,3: WRM	Alive in 5: WRM	Building 9 and 10: WRM	To 20 and beyond: WRM	Find my pattern-				
Opportunities	WRM	*Looking at making the	*Counting 1-5 ext 1-10.	*Making 9 and 10.	*Number patterns to 20.	Doubling: WRM				
		*Using, different objects to represent the numbers. *Counting, with different objects.	*Using 5 frames/10 frames. *Looking at how many altogether. *Taking away-one less. *Composition of 5. *Writing numbers to 5-showing one less using symbols. *Rolling number song- 2, 5 10's. Alive in 5: WRM	different ways. *Using 10 frames and representing how many. *Matching numerals and amounts. *Ordering numbers to 10-some children may be able to go beyond 10.	using ten frames. *Matching objects and numerals. *Counting-how many. *Beyond 20- what comes next- using ten frameshow many do I need? *Estimating different amounts.	*Doubling numbers. *Looking at pairs. *Use of dice for doubling. *Counting how many. *Making a matching pair. *Domino game. *Addition sentences- 1+1, 2+2 etc. Eind my pattern- Sharing. WRM				

*Sorting objects into	*Match objects to the	*Composition of numbers	*Counting back from 10-	*Missing numbers.	*Looking at half.
different groups.	numeral.	2-5.	some children may count back from 20.	*Number sequence.	*Equal amounts between
*Colour, size and shape sorting.	*Looking at one more/one less.	*Looking at how many altogether-basic addition	*Making 10 in different	*Ordering numbers to 20-	different groups.
*Opportunities for counting	g *Sorting 2D shapes into	(possibility of introducing signs + =).	ways- use of 10 frames/20 frames:	what comes first? What comes next?	Reciting and writing numbers to 10.
different items- buttons, number beads, numicon, cubes.	different groups. *Create a 2D shape	*Using a five frame- how many on the bus? How	*Comparing numbers within 10- some children	*Most and least. *Number patterns.	*Making different groups. *Sea creatures-
*Comparing different	picture/collage link to artist Piet Mondrian who uses	· ·	may compare to 20.	*Making numbers to 10 and	corresponding shapes
groups with different amounts in-children to choose different objects fo	shapes to create abstract art. r	*Different objects to support with addition-number line,	' "	20. *Writing different numbers	*Seashell repeating pattems. Find My Pattern odd and
comparing. Who has more? Exploring this in	 Shape walks around the school- hunting for 2D shapes. 	5 frame, 10 frame, introduction of signs.	*Counting backwards- different number songs to	to show different amounts. *Matching- different	even numbers – WRM *Even and Odd (does
groups with a partner. *Printing using fruits and	Light and dark: WRM	Alive in 5: WRM	help- revisiting 10 green bottles.	shapes. First, then, now: WRM	everybody have a friend concept)
vegetables	*Making 4 and 5.	*Comparing mass- discussing heavier/lighter.	*Using weighing scales-		*Even and odd extension- numbers.
*Creating repeating patterns using different	*Using 5 frames and looking at how to make 4 and 5 in	"Use of weighing scales.	digital ones. *Exploring floating and	*Counting back	*One Odd Day- story link
objects. -Beads and threads,	different ways. *Ladybird playdough mats-	*Capacity- exploring half full, full, empty, nearly full.	sinking- link to the story.	*Adding more. *Simple addition sentences.	*Making our own odd day.
counting bears, pegs and boards, cubes and blocks.	making numbers 1-5 in different ways.	*Measuring capacity-how many cups of water can I	Shape and pattern 3D and 2D shapes: WRM	*Adding- missing	*How many cubes. Writing amounts.
*Hand printing a repeating	*Making four and five in different ways.	fit in here? Growing 6.7.8- WRM.	*Using, 3D and 2D shapes to make houses.	amounts. *Number bonds to 5 and	*Barrier Game.
production 1 to	ugjerei w wuyos	•Composition of numbers.,	*Counting how many shapes used-linking to	possibly 10 depending on children's abilities.	*Making equal groups- use plates and bears.

*Adding one more and taking	*Looking, at the numbers	numbers to 10 and	First, then now: WRM	*Pattern spotting- odd and
Ŭ	6,7,8.	possibly beyond.	LUSC ULEVILOW: VVIVIVI	
one away.	0,7,0.	possibly beyond.	*Subtracting different	even.
*Opportunities to write	*Making the numbers	*Recap naming 2D and 3D	amounts.	*Recapping number bonds to
numbers showing how to	6,7,8- how many ways car	shapes and their	*Writing some simple	5/10.
make numbers 1-5.	we make these numbers?	properties.	'	On the Move- WRM
*Sorting 2D shapes into	*Sorting the numbers	Assessment-covering	Salar action is seriled ices.	<u> </u>
different groups.	6,7,8.	aspects from Autumn and	*Saying how many are left	*Problem solving- book links
		Spring 1: WRM	after taking some away.	(dinosaurs and animals).
*Matching numerals to	Growing 6,7,8: WRM		*Counting how many are	*How many-looking at the
objects-on the snowman.	*Matching the numbers	*Exploring composition of		different animals and their
*Matching each amount to	6,7,8.	numbers to 10- making		legs.
the numeral.		numbers in different ways-		
	*Combing numbers-	using ten frames.	ľ	*Making boats- exploring
*Making different groups-	addition sentences, number	*Number bonds to 5	First, then, now: WRM	floating and sinking.
looking at how many in each	· ·	(composition link).		*Making bridges- how do
group-some simple additions.	frames.		*Making different shapes	we make them strong- prior
*Positional language walk-	*Writing number sentences	*Writing numbers to 10,	using circles.	link Isambard Kingdom
can we go over, under,	to show combining two	possibly to 20.	*Making different shapes	Brunel.
behind, next to, through?	numbers.	Spring consolidation:	using triangles	
	-D	WRM		*One more one less teddy's
	*Part whole models- how		*Making different shapes	picnic.
	many altogether?	*Map work- Looking at ways Little Red Riding	using rectangles.	*Exploring the different
	Making pairs: WRM	ways Luie Rea Riaing Hood could cross the forest	*Looking at different shapes	shapes of food, Emphasis
	- I I I I I I I I I I I I I I I I I I I	safely.		shapes within other shapes.
	*Looking at making pairs.	safeag.		O II VA/DAA
	*Counting in 2's.	*Recognising numbers from	000	On the move: WRM
	***	1-10 and 1-20.	shapes.	*Cuisenaire rods.
	*Combing two groups.	*Matching numbers and	*Making different patterns.	. 1. ± 1
		numerals.		*Looking at place value.

*Making more than 8- hov	*D	*D.++ D +
ů .	11 0 1	•Patterns- Repeating
many pairs can we make?	patterns.	patterns.
*Looking at how many	Spring consolidation:	•Relationships between
altogether.	WRM	rumbers.
*Making number sentences	. *Exploring number	*Counting, how many-
	composition- 1-10- making	Matching the correct number
Length and height	numbers in different ways.	of animals/creatures to each
time/days of the week: WRM	*Number bonds to 5	family group.
*Comparing length- look at	(composition link).	*Shape patterns.
whole class heights- who	*One more and one less-	On the move: WRM
is taller? How do you	using addition and	
know? Who is the tallest?	· ·	*Spatial reasoning.
T	sentences.	*Completing an obstacle
*Introducing different units		course.
of measure.	*Some capacity links-	
	story book link.	Number bonds to 5 and
	To 20 and beyond: WRM	10- using bowls and teddies (part whole models).
	*Rolling number song- 2, 5, 10's.	*Using shapes to develop spatial reasoning.
	•Weighing the ingredients using the digital scales.	*Making our own maps-
	*Number patterns to 20.	getting to school. <u>Consolidation: WRM</u>
	 Matching numbers and numerals. 	*Recap number bonds to 10.
		*One more and one less.

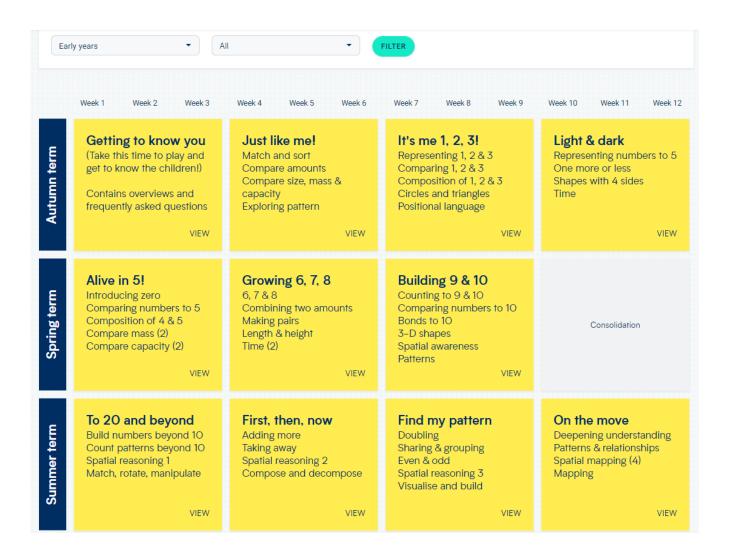
				*Using ten frames- counting how many, *Estimating- how many,		*Writing numbers and matching correct number of objects. *Shapes (recognition and shape pictures). *Repeating patterns.
						*Subtraction.
White Rose Maths	Number and place value- numbers to 5.	Number and place value- numbers to 5.	*Addition and subtraction- numbers to 5. *Number and		*Geometry- exploring patterns. *Addition and	*Geometry- exploring patterns, *Addition and
	*Addition and subtraction- sorting.	*Addition and subtraction- sorting.			*Number and place value-	subtraction- change. *Number and place value- numbers to 20.
	*Number and place value- comparing groups.	*Number and place value- comparing groups.	*Geometry- shape and	*Geometry- shape and		*Multiplication and division- numerical patterns.
		*Addition and subtraction-		1	patterns. *Measurement- measure.	*Measurement-measure.
	change within 5.	change within 5.	WHITE ROSE & NUMBER	WHITE ROSE &		
	*Measurement- time.	*Measurement- time.	Alive in 5!	Building 9 and 10.	WHITE ROSE & NUMBER BLOCKS	
			Growing 6,7,8.	Consolidation Numbers.	To 20 and beyond.	Find my pattern. On the move.
	Getting to know you.	105 ME 1,2,3!	Shape Early doubling	subiticing.	First then now. Numbers 10, 11, 12, 13, 14,	Consolidation.
	Just like mel	Light and Dark. Consolidation Numbers.	subitising.		15 Money, time, shape	Numbers 16, 17, 18, 19, 20 Money, time, shape Halving, doubling, sharing subitising.

	Comparing Numbers 1, 2, 3,4,5 subitising Money Time Shape	4, 5, ,6,7,8 Money Time Shape subitising Early doubling:			Halving, doubling, sharing subitising.	
Development	3-4 Years:	3-4 Years:	*Count objects, actions, and	*Count objects, actions,	*Count objects, actions, and	*Count objects, actions, and
Matters	*Talk about and identify	*Solve real world	sounds.		sounds.	sounds.
	the patterns around them.	'	1	*Link the number symbol	*Subitise.	*Subitise.
(Possible age-	For example: stripes on	numbers up to 5.	(numeral) with its cardinal	(numeral) with its cardinal	*Count beyond ten.	*Count beyond ten.
related statements)	clothes, designs on rugs and wallpaper. *Use informal language like (pointy), 'spotty), 'blobs', etc.	, , ,	number value. *Understand the 'one more than/one less than' relationship between	number value. *Compare numbers. *Explore the composition	*Compare numbers. *Understand the 'one more	*Compare numbers.
	Extend and create ABAB patterns – stick, leaf, stick,	*Combine shapes to make new ones – an arch, abigger triangle, etc.	consecutive numbers. *Explore the composition of numbers to 10. *Compare length, weight,	of numbers to 10. *Select, rotate, and manipulate shapes to develop spatial reasoning, skills. *Compose and decompose shapes so that children recognise a shape can	relationship between consecutive numbers. *Explore the composition of numbers to 10. *Automatically recall number bonds for numbers	relationship between consecutive numbers. *Explore the composition of numbers to 10. *Automatically recall number bonds for numbers 0-5 and some to 10.

	6.1. 1	6 . 1 . 2 . 6	*C 1 1 . 1	H 1 .00	*C	*C
	, ,	'sides', 'comers'; 'straight',		have other shapes within	*Select, rotate, and	*Select, rotate, and
s	such as 'first', 'then'	'flat', 'round'.	and capacity.	it, just as numbers can.	' '	manipulate shapes to
*	Make comparisons	*Make comparisons between		* Indepetand the fore more	, ,	develop spatial reasoning
	'	objects relating to size, length,		than/one less than'	skills.	skille.
	iosize, length, weight, and	* * * * * * * * * * * * * * * * * * * *		relationship between	*Compose and decompose	*Compose and decompose
	capacity.	., ., ., ., ., ., .,		'	'	shapes so that children
	supucing.	Reception:			recognise a shape can	recognise a shape can have
<u> </u>	Reception:	*Count objects, actions, and		*Subitise.	have other shapes within it,	· ·
*	Count objects, actions, and	•			just as numbers can.	as numbers can.
s	sounds.	*Subitise.			*Continue, copy, and create	*Continue, copy, and create
•	'Compare numbers.	*Explore the composition of			repeating patterns.	repeating patterns.
*		numbers to 10.			ELG: Number.	ELG: Number
	Explore the composition of	* Link the number symbol			ELG: Numerical Patterns.	ELG: Numerical Patterns.
h	rumbers to 10.	(numeral) with its cardinal				
*	'Continue, copy, and create	number value.				
	epeating patterns.	*Select, rotate, and				
	·C	manipulate shapes to develop				
	'Compare length, weight, and capacity.	spatial reasoning skills.				
	C L.I.	* Link the number symbol				
*	'Subitise.	(numeral) with its cardinal				
*	Select, rotate, and	number value				
	nanipulate shapes to	*Compose and decompose				
	develop spatial reasoning	shapes so that children				
s	skills	recognise a shape can have				
		other shapes within it, just as				
		numbers can.				

*Compare length, weight, and		
capacity.		

Early Years Scheme-White Rose:



Years One to Six Mathematics at Deanshanger Primary School

	Year One	Year Two	Year Three	Year Four	Year Five	Year Six
Place Value:	Count to and across 100,	Count in steps of 2,3, and	Count from 0 in multiples	Count in multiples of	Count forwards or	
	forwards and backwards,	5 from 0, and in tens from	of 4,,8,50, and 100; find 10	6,7,9,25 and 1000.	backwards in steps of	
Counting	beginning with 0 or 1, or	any number forward and	or 100 more or less than a		powers of 10 for any given	
	from any given number.	backward.	given number.	Count backwards through	number up to 1,000,000.	
				zero to include negative		
	Count numbers to 100 in	Autumn 1	Autumn I	numbers.	Count forwards and	
	numerals; count in				backwards with positive	
	multiples of twos, fives and			Autumn 1	and negative whole	
	tens.				numbers, including through	
					zero:	
	Autumn 1					
	Spring 1				Autumn I	
	Spring 3					
	Summer 4					
Place Value:	Identify and represent	Read and write numbers to	Identify, represent and	Identify, represent and	Read, write (order and	Read, write (order and
	numbers using objects and	at least 100 in numerals	estimate numbers using	estimate numbers using	compare) numbers to at	compare) numbers up to
Represent	pictorial representations.	and in words.	different representations.	different representations.	least 1,000,000 and	10,000,000 and determine
	' '		00 1	1	determine the value of each	the value of each digit.
	Read and write numbers	Identify, represent and	Read and write numbers up	Read Roman numerals to	digit.	
	from 100 in numerals.	estimate numbers using	to 1000 in numerals and in	100 (I to C) and know that		Autumn I
	, in the second	different representations,	words.	over time, the numeral	Read Roman numerals to	
	Read and write numbers	including the number line.		system changer to include	1000 (M) and recognise	
	from 1 to 20 in numerals		Autumn 1	the concept of zero and	years written in Roman	
	and words.	Autumn 1		place value.	numerals.	
				·		
	Autumn 1			Autumn 1	Autumn 1	
	Spring 1					
	Spring 3					
	Summer 4					

Place Value:	Given a number, identify	Recognise the place value	Recognise the place value	Find 1000 more or less	(Read, write), order and	(Read, write), order and
Use PV and	one more and one less.	of each digit in a two-digit number (tens, ones).	of each digit in a three- digit number (hundreds,	than a given rumber.	compare numbers to at least 1,000,000 and	compare numbers to at least 10,000,000 and
Compare	Autumn 1		tens, ones).	Recognise the place value	determine the value of each	determine the value of each
	Spring 1	Compare and order		of each digit in a four-digit	digit.	digit.
	Spring 3	numbers from 0 up to 100;	Compare and order	number (thousands,		
	Summer 4	use <, > and = signs.	numbers up to 1000.	hundreds, tens, and ones).	Autumn I	Autumn I
		Autumn 1	Autumn 1	Order and compare		
				numbers beyond 1000.		
				Autumn I		
Place Value:		Use place value and	Solve number problems	Round any number to the	Interpret negative numbers	Round any whole number
Problems and		number facts to solve	and practical problems	nearest 10, 100 or 1000.	in context.	to a required degree of
		problems.	involving these ideas.			accuracy.
Rounding				Solve number and practical	Round any number up to	
		Autumn I	Autumn I	problems that involve all of	1,000,000 to the nearest	Use regative numbers in
				the above and with	10, 100, 1000, 10,000, and	context, and calculate
				increasingly large positive	100,000.	intervals across zero.
				numbers.	Solve number problems	Solve number and practical
				Autumn I	and practical problems that	problems that involve all of
				7 (333,140)	involve all of the above.	the above.
					Autumn I	Autumn I
A 1 1.1.	Read, write and interpret	Recall and use addition	Estimate the answer to a	Estimate and use inverse	Use rounding to check	
Addition and	mathematical statements	and subtraction facts to 20	calculation and use the	operations to check	answers to calculations and	
Subtraction:	involving addition (+),	fluently, and derive and use	inverse operations to check	answers to a calculation.	determine, in the context of	
Recall,	subtraction (-) and equal (=)	related facts up to 100.	answers.		a problem, levels of	
Represent, Use	signs.	, , , , , , , , , , , , , , , , , , ,		Autumn 2	accuracy.	
riquesciu, Use			Autumn 2			

	D 1 1	CI II I III. CI			Autumn 2	
	Represent and use number	Show that addition of two			Autumn 2	
	bonds and related	numbers can be done in				
	subtraction facts within 20.	any order (commutative)				
		and subtraction of one				
	Autumn 2	number from another				
	Spring 2	cannot.				
		Recognise and use the				
		inverse relationship				
		between addition and				
		subtraction and use this to				
		check calculations and				
		solve missing number				
		problems.				
		Autumn 2				
Addition &	Add and subtract one-digit	Add and subtract numbers	Add and subtract numbers	Add and subtract numbers	Add and subtract whole	Perform mental
	and two-digit numbers to	using concrete objects,	mentally, including:	with up to 4 digits using	numbers with more than 4	calculations, including with
Subtraction:	20, including zero.	pictorial representations,	a three-digit number and	the formal written methods	digits, including using	mixed operations and large
Calculations	0	and mentally, including:	ones.	of columnar addition and	formal written methods	numbers.
	Autumn 2	a two-digit number and	a three-digit number and	subtraction where	(columnar addition and	
	Spring 2	ones.	tens.	appropriate.	subtraction).	Use their knowledge of the
	- Fr9 -	a two-digit number and	a three-digit number and		,	order of operations to carry
		tens.	hundreds.	Autumn, 2	Add and subtract numbers	out calculations involving
		two two-digit numbers.			mentally with increasingly	the four operations.
		adding three one-digit	Add and subtract numbers		large numbers.	
		numbers.	with up to three digits,		and go raurabe s.	Autumn 2
		1001000	using formal written		Autumn 2	, idealing E
		Autumn 2	methods of columnar		/ takani v L	
		/\take{\tau}\tau\tau\tau\tau\tau\tau\tau\tau\tau\tau	addition and subtraction.			
			addition and subtraction.			
			Autumn 2			
			Autumn 2			

Addition & Subtraction: Solve Problems	Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and	Solve problems with addition and subtraction, using concrete objects and pictorial representations, including those involving	Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.	Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and	Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and	Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and
	missing number problems	numbers, quantities and	V T 3	why.	why.	why.
	such as 7= 9	measures.	Autumn 2	Autumn 2	Solve problems involving	Autumn 2
	Autumn 2 Spring 2	Apply their increasing knowledge of mental and written methods. Autumn 2			addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign.	
					Autumn 2	
Multiplication & Division: Recall, Represent, Use		Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers.	Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables. Autumn 3	Recall multiplication and division facts for multiplication tables up to 12x12. Use place value, known	Identify multiples and factors, including finding all factor pairs of a number, and common factors of factors of two numbers.	Identify common factors, common multiples and prime numbers. Use estimation to check answers to calculations and determine, in the context of
		Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot.	Spring 1	and derived facts to multiply and divide mentally, including; multiplying by 0 and 1; dividing by 1; multiplying together three numbers.	Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers.	a problem, an appropriate degree of accuracy. Autumn 2
		Spring 2		Recognise and use factor pairs and commutativity in mental calculations.	Establish whether a number up to 100 is prime and recall prime numbers up to 19.	

			Autumn 4		
			Spring 1	Recognise and use square	
				numbers and cube	
				numbers, and the notation	
				for squared and cubed.	
				Autumn 3	
				Spring 1	
Multiplication &	Calculate mathematical	Write and calculate	Multiply two-digit and	Multiply numbers up to 4	Multiply multi-digit number
Division:	statements for	mathematical statements	three-digit numbers by a	digits by a one- or two-	up to 4 digits by a two-
	multiplication and division	for multiplication and	one-digit number using	digit number using a	digit whole number using
Calculations	within the multiplication	division using the	formal written layout.	formal written method,	the formal written method
	tables and write them using	multiplication tables that		including long	of long multiplication.
	the multiplication (x),	they know, including for	Spring 1	multiplication for two-digit	
	division (÷) and equals (=)	two-digit numbers times		numbers.	Divide numbers up to 4
	signs.	one-digit numbers, using			digits by a two-digit whole
		mental and progressing to		Multiply and divide	number using the formal
	Spring 2	formal written methods.		numbers mentally drawing	written method of long
				upon known facts.	division, and interpret
		Autumn 3			remainders as whole
		Spring 1		Divide numbers up to 4	number remainders,
				digits by a one-digit	fractions, or by rounding,
				number using the formal	as appropriate for the
				written method of short	context.
				division and interpret	
				remainders appropriately	Divide numbers up to 4
				for the context.	digits by a two-digit
					number using the formal
				Multiply and divide whole	written method of short
				numbers and those	division where appropriate,
				involving decimals by 10,	interpreting remainders
				100 and 1000.	according to the context.
					Perform mental
				Autumn 3	calculations, including with

					Spring 1	mixed operations and large numbers. Autumn 2
Multiplication & Division: Solve Problems	Solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher.	Solve one-step problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.	Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects.	Solve problems involving, multiplying and adding, including using the distributive law to multiply two-digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are	Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes. Solve problems involving multiplication and division,	Solve problems involving addition, subtraction, multiplication and division. Autumn 2
	Summer I	Spring, 2	Autumn 3 Spring 1	connected to m objects. Spring 1	including scaling by simple fractions and problems involving simple rates. Autumn 3 Spring 1	
Multiplication & Division: Combined Operations					Solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign.	Use their knowledge of the order of operations to carry out calculations involving the four operations. Autumn 2
Fractions: Recognise and Write	Recognise, find and name a half as one of two equal parts of an object, shape or quantity.	Recognise, find, name and write fractions 1/3 1/4, 2/4, and 3/4 of a length, shape, set of objects or quantity.	Count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts, and in dividing one-digit	Count up and down in hundredth; recognise that hundredths arise when dividing and object by one	Autumn 3 Spring I Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths.	

	Recognise, find and name a	Summer I	numbers or quantities by	hundred and dividing		
	quarter as one of four		10.	tentho by ten.	Recognise mixed numbers	
	equal parts of an object,			0	and improper fractions and	
	shape or quantity.		Recognise, find and write	Spring 3	convert from one form to	
			fractions of a discrete set of		the other and write	
	Summer 2		objects: unit fractions and		mathematical statements >1	
			non-unit fractions with		as a mixed number.	
			small denominators.			
					Autumn 4	
			Spring 3		Spring 2	
Fractions:		Recognise the equivalence	Recognise and show, using	Recognise and show, using	Compare and order	Use common factors to
Camanana		of 2/4 and ½.	diagrams, equivalent	diagrams, families of	fractions whose	simplify fractions; use
Compare			fractions with small	common equivalent	denominators are all	common multiples to
		Summer 1	denominators.	fractions.	multiples of the same	express fractions in the
					number.	same denomination.
			Compare and order unit	Spring 3		
			fraction, and fractions with		Autumn 4	Compare and order
			the same denominators.		Spring 2	fractions, including
						fractions >1.
			Summer 1			
						Autumn 3
						Autumn 4
Fractions:		Write simple fractions, for	Add and subtract fractions	Add and subtract fractions	Add and subtract fractions	Add and subtract fractions
		example ½ of 6 = 3	with the same denominator	with the same denominator.	with the same denominator	with different denominators
Calculations			within one whole.		and denominators that are	and mixed numbers, using
		Summer 1		Spring 3	multiples of the same	the concept of equivalent
			Summer 1	1 0	number.	fractions.
						,
					Multiple proper fractions	Multiply simple pairs of
					and mixed numbers by	proper fractions, writing the
					whole numbers, supported	answer in its simplest form.
					by materials and diagrams.	

			Autumn 4 Spring 2	Divide proper fractions by whole numbers. Autumn 3 Autumn 4
Fractions: Solve Problems	Solve problems that involve all of the above. Spring 3 Summer I	Solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including nonOunit fractions where the answer is a whole number. Spring 3		
Decimals: Recognise and Write		Recognise and write decimal equivalents of any number of tenths or hundredths. Recognise and write decimal equivalents to ½, ½, ¾ Spring 4 Summer I	Read and write decimal numbers as fractions. Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents. Spring 3 Summer 3	Identify the value of each digit in numbers given to three decimal places. Spring 3
Decimals: Compare		Round decimals with one decimal place to nearest whole number. Compare numbers with the same number of decimal	Round decimals with two decimal places to the nearest whole number and to one decimal place.	

places up to two decimal places. Read, write, order and compare numbers with up to three decimal places. Summer I Spring 3 Summer 3 Find the effect of dividing a one- or two-digit number up to three decimal numbers by 10, 100 a.
Summer I Spring 3 Summer 3 Find the effect of dividing a Solve problems involving Multiply and divide
Summer I Spring 3 Summer 3 Find the effect of dividing as Solve problems involving Multiply and divide
Spring 3 Summer 3 Pecimals: Find the effect of dividing a Solve problems involving Multiply and divide
Decimals: Summer 3 Find the effect of dividing a Solve problems involving Multiply and divide
Decimals: Find the effect of dividing a Solve problems involving Multiply and divide
and an interest pumpher and pumpher by 10 100 a
and as two digit numbers, number up to those desimal injury has by 10,100 a
Calculations & places. 1000 giving answers
Problems three decimal places.
Identifying the value of the Spring 3
digits in the answer as Summer 3 Multiply one-digit nun
ones, tenths and with up to two decimal
hundredths. places by whole numb
Spring 4 Use written division
methods in cases whe
answer has up to two
decimal places.
Solve problems which
require answers to be
rounded to specified
degrees of accuracy.
Spring 3
Fractions, Solve simple measure and Recognise the percent Associate a fraction w
money problems, involving, symbol (%) and understand, division, and calculate
Decimals and fractions and decimals to that per cent relates to decimal fraction
Percentages two decimal places. 'number of parts per equivalents.
hundred' and write
Spring 3 percentages as a fraction Recall and use
Spring 4 with denominator 100, and equivalences between
Summer I as a decimal, simple fractions, decim

			Solve problems which require knowing percentage and decimal equivalents of ½, ¼, 1/5, 2/5. 4/5 and those fractions with a denominator of a multiple of 10 or 25. Spring 3	and percentages, including in different contexts. Spring 4
Ratio and Proportion				Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts. Solve problems involving the calculation of percentages and use of percentages for comparison.
				Solve problems involving similar shapes where the scale factor is known or can be found. Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples. Spring 1

Algebra	Solve one-step problems	Recognise and use the	Solve problems, including		Use simple formulae.
O	that involve addition and	inverse relationship	missing number problems.		
	subtraction, using concrete	between addition and			Generate and describe
	objects and pictorial	subtraction and use this to			linear number sequences.
	representations, and	check calculations and			
	missing number problems	solve missing number			Express missing number
	such as 7= 9	problems.			problems algebraically.
					Find pairs of numbers that
					satisfy and equation with
					two unknowns.
					Enumerate possibilities of
					combinations of two
					variables.
					Spring 2

	Year One	Year Two	Year Three	Year Four	Year Five	Year Six
Measurement:	Compare, describe and	Choose and use appropriate	Measure, compare, add and	Convert between different	Convert between different	Solve problems involving
	solve practical problems	standard units to estimate	subtract: lengths	units of measure.	units of metric measure.	the calculation and
Using Measures	for:	and measure length/height	(m/cm/mm); mass (kg/g);			conversion of units of
	Lengths and heights	in any direction (m/cm);	volume/capacity (Vml).	Estimate, compare and	Understand and use	measure, using decimal
	Mass/weight	mass (kg/g); temperature		calculate different	approximate equivalences	notation up to three
	Capacity and volume	(°C); capacity (litres/ml) to	Spring 2	measures.	between metric units and	decimal places where
	Time	the nearest appropriate	Spring 4		common imperial units such	appropriate.
		unit, using rulers, scales,		Autumn 3	as inches, pounds and	
	Measure and begin to	thermometers and		Spring 2	pints.	Use, read, write and
	record the following:	measuring vessels.		Summer 3		convert between standard
	Lengths and heights				Use all four operations to	units, converting
	Mass/weight				solve problems involving	measurements of length,

	Capacity and volume Time (hours, minutes, seconds). Spring 4 Spring 5 Summer 6	Compare and order lengths, mass, volume/capacity and record the results using > < and =. Spring 3 Spring 4			measure using decimal notation, including scaling. Summer 5	mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to three decimal places. Convert between miles and kilometres. Spring 5
Measurement: Money	Recognise and know the value of different denominations of coins and notes. Summer 5	Recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value. Find different combinations of coins that equal the same amounts of money. Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change.	Add and subtract amounts of money to give change, using both £ and p in practical contexts. Summer 2	Estimate, compare and calculate different measures, including money in pounds and pence. Summer 2	Use all four operations to solve problems involving measure (money).	
Measurement: Time	Sequence events in chronological order using language (before, after, next, first, today, yesterday,	Compare and sequence interval of time. Tell and write the time to five minutes, including	Tell and write the time from an analogue clock, including using Roman numerals from I to XII,	Read, write and convert time between analogue and digital 12and 24-hour clocks.	Solve problem involving converting between units of time.	Use, read, write and convert between standard units, converting measurements of time from a smaller unit of measure

	tomorrow, morning,	quarter past/to the hour	and 12-hour and 24-hour	Solve problems involving		to a larger unit, and vice
	afternoon and evening)	and draw hands on a clock	clocks.	converting from hours to		versa.
		face to show these times.		minutes; minutes to		
	Recognise and use		Estimate and read time	seconds; years to months;		
	language relating to dates,	Know the number of	with increasing accuracy to	weeks to days.		
	including days of the week,	minutes in an hour and the	the nearest minute; record			
	weeks, months and years.	number in a day.	and compare time in terms	Summer 3		
			of seconds, minutes and			
	Tell the time to the hour	Summer 2	hours; use vocabulary such			
	and half past the hour and		as o'clock, a.m./p.m.,			
	draw the hands on a clock		morning, afternoon, noon			
	face to show these times.		and midnight.			
	Summer 6		Know the number of			
			seconds in a minute and			
			the number of days in each			
			month, year and leap year.			
			Compare durations of			
			events.			
			Summer 3			
Measurement:			Measure the perimeter of	Measure and calculate the	Measure and calculate the	Recognise that shapes with
			simple 2-D shapes.	perimeter of a rectilinear	perimeter of composite	the same area can have
Perimeter, Area,				figure (including squares) in	rectilinear shapes in	different perimeter and vice
Volume			Spring 2	centimetres and metres.	centimetres and metres.	versa.
			Spring 4			
				Find the area of rectilinear	Calculate and compare the	Recognise when it is
				shapes by counting	area of rectangles	possible to use formulae for
				squares.	(including squares), and	area and volume of shapes.
					including using standard	
				Autumn 3	units, square centimetres	Calculate the area of
				Spring 2	(cm2) and square metres	parallelograms and
						triangles.

		(m2) and estimate the area	
		of irregular shapes.	Calculate, estimate and
			compare volume of cubes
		Estimate volume (including	and cuboids using standard
		cubes) and capacity.	units, including cubic
			centimetres (cm3) and cubic
		Spring 4	metres (m3), and extending
		Summer 6	to other units (for example,
			mm3 and km3)
			Spring 5

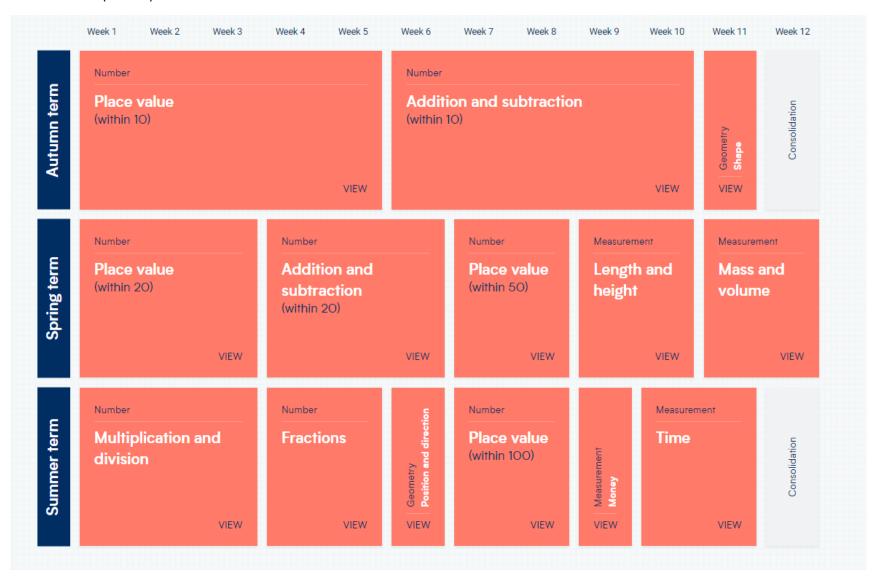
	Year One	Year Two	Year Three	Year Four	Year Five	Year Six
Geometry: 2-D Shapes	Recognise and name common 2-D shapes, for example, rectangles	Identify and describe the properties of 2-D shapes, including the number of	Draw 2-D shapes. Summer 4	Compare and classify geometric shapes, including quadrilaterals and	Distinguish between regular and irregular polygons based on reasoning about	Draw 2-D shapes using given dimensions and angles.
	(including squares), circles, and triangles.	sides and line symmetry in a vertical line.		triangles, based on their properties and sizes. Identify lines of symmetry	equal sides and angles. Use the properties of	Compare and classify geometric shapes based on
	Autumn 3	Identify 2-D shapes on the surface of 3-D shapes.		in 2-D shapes presented in different orientations.	rectangles to deduce related facts and find missing lengths and angles.	their properties and sizes.
		Compare and sort common 2-D shapes and everyday, objects.		Summer 5	Summer I	
	D	Autumn 3	MI 2DI		T1 +C 2 D 1 C	D . I .I I
Geometry: 3-D Shapes	Recognise and name common 3-D shapes. Including- cuboids, cubes,	Recognise and name common 3-D shapes.	Make 3-D shapes using modelling materials.		Identify 3-D shapes from 2-D representations.	Recognise, describe and build 3D shapes, including nets.
	pyramids and spheres.				Summer I	

		Compare and sort common	Recognise 3-D shapes in			Summer I
	Autumn 3	3-D shapes and everyday	different orientations and			
		objects.	describe them.			
		Autumn 3	Summer 4			
Geometry:			Recognise angles as a	Identify acute and obtuse	Know angles are measured	Find unknown angles in
· ·			property of shape or a	angles and compare and	in degrees: estimate and	any triangles,
Angles & Lines			description of a turn.	order angles up to two	compare acute, obtuse and	quadrilaterals, and regular
				right angles by size.	reflex angles.	polygons.
			Identify right angles,			
			recognise that two right	Identify lines of symmetry	Draw given angles, and	Recognise angles where
			angles make a half turn,	in 2-D shapes presented in	measure them in degrees.	they meet at a point, are on
			three make three quarters	different orientations.		a straight line, or are
			of a turn and four a		Identify:	vertically opposite, and find
			complete turn.	Complete a simple	-angles at a point and one	missing angles.
				symmetric figure with	whole turn (total 360°).	
			Identify whether angles are	respect to a specific line of	-angles at a point on a	Summer 1
			greater than one less than	symmetry.	straight line and ½ a turn	
			a right angle.		(total 180°).	
				Summer 5	-other multiples of 90°.	
			Identify horizontal and			
			vertical lines and pairs of		Summer I	
			perpendicular and parallel			
			lines.			
			Summer 4			
Coomatnus	Describe position, direction	Order and arrange		Describe positions on a	Identify, describe and	Describe positions on the
Geometry:	and movement, including	combinations of		2-D grid as coordinates in	represent the position of a	full coordinate grid (all four
Position and	whole, half, quarter and	mathematical objects in		the first quadrant.	shape following a reflection	quadrante).
Direction	three-quarter turns.	patterns and sequences.		,	or translation, using the	, ,
		·		Describe movements	appropriate language, and	Draw and translate simple
	Summer 3	Use mathematical		between positions as	know that the shape has	shapes on the coordinate
		vocabulary to describe		translations of a given unit	not changed.	

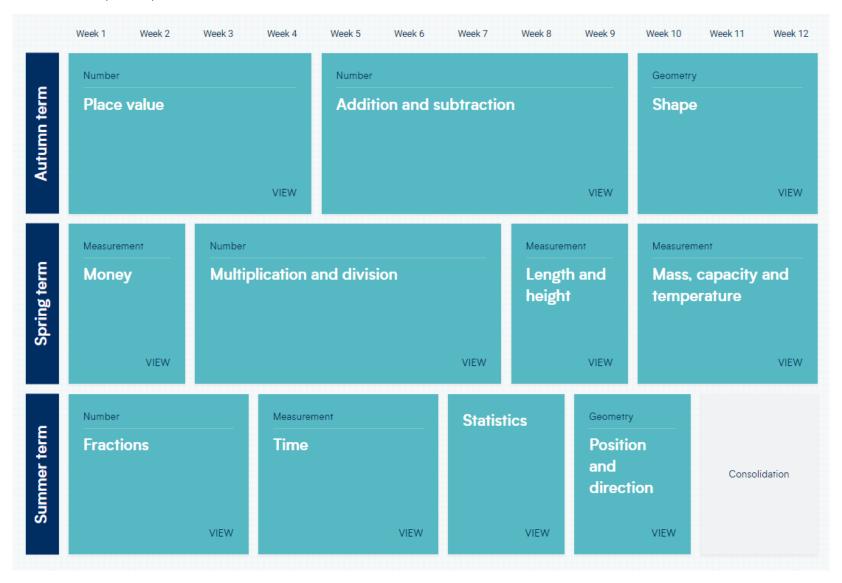
position, direction and	to the left/right and		plane, and reflect them in
movement, including	up/down.	Summer 2	the axes.
movement in a straight line			
and distinguishing between	Plot specified points and		Summer 2
rotation as a turn and in	draw sides to complete a		
terms of right angles for	given polygon.		
quarter, half and three-			
quarter turns (clockwise	Summer 5		
and anti-clockwise).			
Summer 4			

	Year One	Year Two	Year Three	Year Four	Year Five	Year Six
Statistics:		Interpret and construct	Interpret and present data	Interpret and present	Complete, read and	Interpret and construct pie
Present and		simple pictograms, tally	using bar charts,	discrete and continuous	interpret information in	charts and line graphs and
		charts, block diagrams and	pictograms and tables.	data using appropriate	tables, including timetables.	use these to solve problems.
Interpret		simple tables.		graphical methods,		
			Summer 5	including bar charts and	Spring 5	Spring 6
		Summer 3		time graphs.		
				Summer 6		
		Ask and answer simple	Solve one-step and two-	Solve comparison, sum and	Solve comparison, sum and	Calculate and interpret the
		questions by counting the	step questions using	difference problems using	difference problems using	mean as an average.
		number of objects in each	information presented in	information presented in	information presented in a	
		category and sorting the	scaled bar charts and	bar charts, pictograms,	line graph.	Spring 6
		categories by quantity.	pictograms and tables.	tables and other graphs.		, ,
					Spring 5	
		Ask and answer questions	Summer 5	Summer 6		
		about totalling and				
		comparing categorical data.				
		Summer 3				

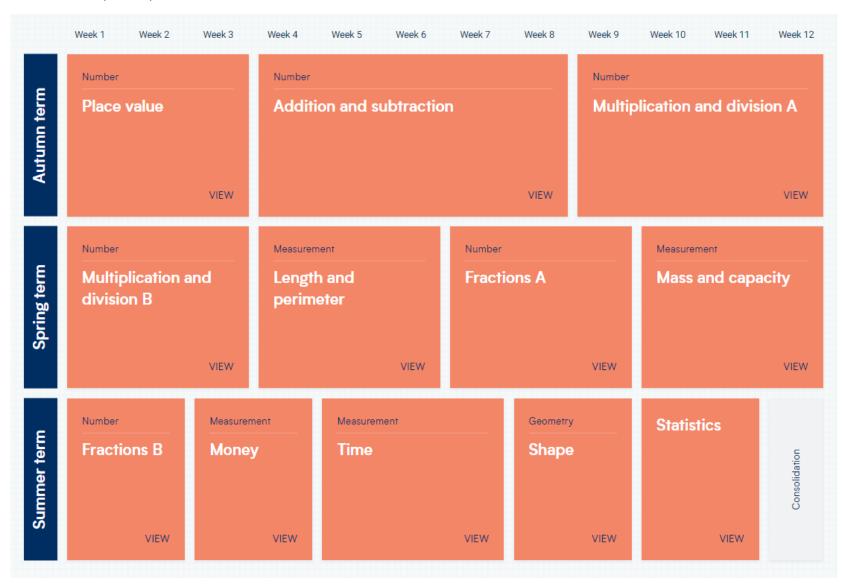
Year 1 Scheme (WR 3.0):



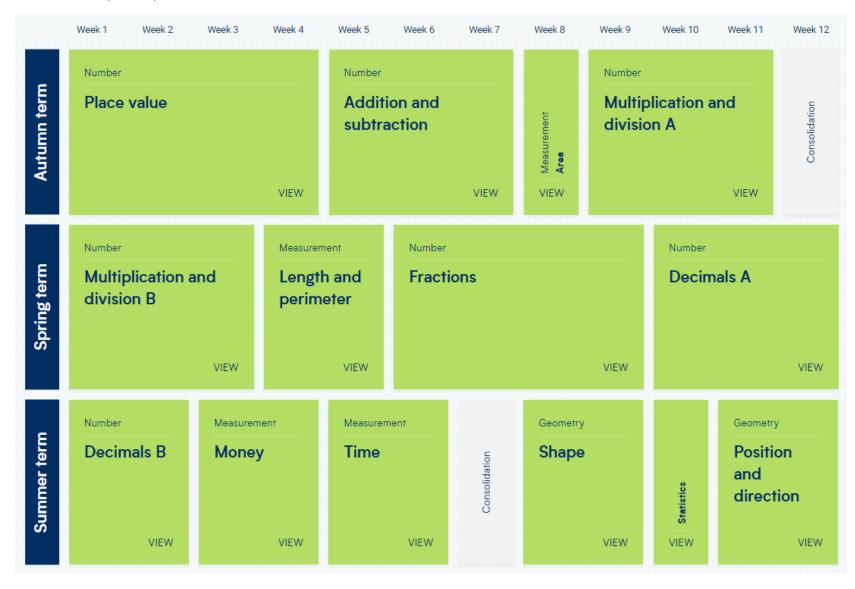
Year 2 Scheme (WR 3.0):



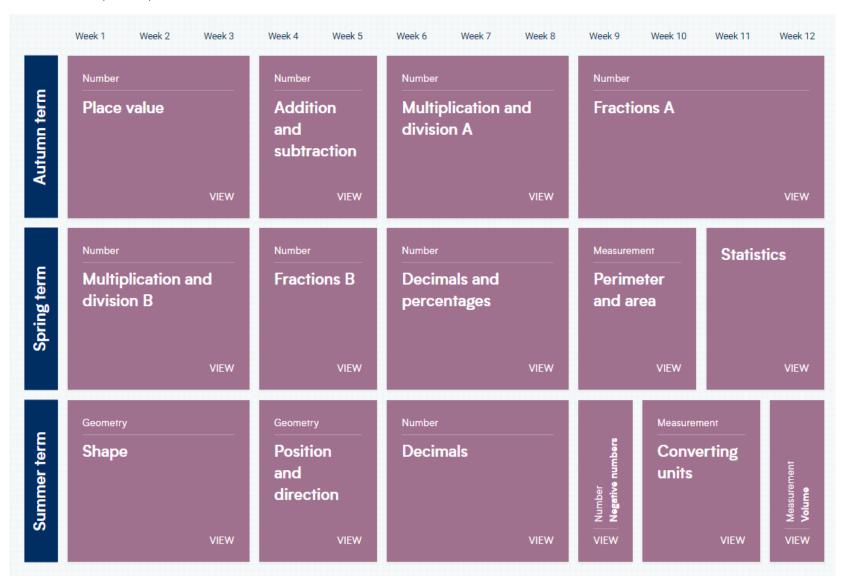
Year 3 Scheme (WR 3.0):



Year 4 Scheme (WR 3.0):



Year 5 Scheme (WR 3.0):



Year 6 Scheme (WR 3.0):

