Windmill Hill Academy

Maths Curriculum Teaching Sequence and Guidance

September 2022

At Windmill Hill Academy, we are 'Inspiring Passionate Lifelong Learners' by providing them with a broad and balanced to inspire and motivate pupils to have high aspirations; provide them with the tools to become assessment-capable learners and be socially responsible within the school and wider community.

Intent

In Mathematics, we strive to develop a passion and the skills for lifelong learning. We continue to develop our teaching and learning for maths mastery approach, where **all** children are encouraged to succeed and are challenged every day.

We believe that :

- the basic skills of mathematics are vital for life opportunities;
- every child should see themselves as a mathematician.

Through our curriculum we therefore intend that :

- all pupils develop positive attitudes towards maths through our teaching and learning, where they become numerate, creative, independent, inquisitive and confident learners.
- learners develop a 'can do' attitude when tackling a range of problems, including cross-curricular applications where they make mathematical links through drawing on prior learning,
- pupils broaden their knowledge and understanding of how mathematics is used in the wider world,

- pupils are able to use and understand mathematical language in communicating their thinking.

Implementation:

We use The White Rose SOL, with some adaptations to meet the needs of our children) along with the DfE Ready to Progress materials to implement the National Curriculum for Mathematics. Through the use of a range of concrete resources, images and real life links **all** children will :

- become **fluent** in the fundamentals of mathematics, including through **varied** and frequent practice with increasingly complex problems over time, so that pupils develop conceptual understanding and the ability to **recall and apply** knowledge rapidly and **accurately**, **efficiently,** in a **variety** of problems

- **reason** mathematically through developing their **mathematical thinking** -conjecturing relationships and generalisations, and developing an argument, justification or proof using **mathematical language**

- can solve problems by applying their mathematics to a **variety** of routine and non-routine problems with increasing sophistication, including breaking down problems into a series of simpler steps and **persevering** in seeking solutions

- develop confidence to approach **challenges,** considering what they already **know** or what they **notice**, and broaden their own understanding through selecting different representations and aiming to apply **efficient** methods.

Number Fluency

At Winddmill Hill Academy, we encourage rapid recall of known facts in all 4 operations with the building blocks of this starting in the Foundation Stage. EYFS and KS1 follow the Mastering Number programme to develop number sense and fluency, building confidence in number talk.

Key Instant Recall Facts (KIRFs) are learnt half termly to support this. We also use Numbots and TT Rock Stars to promote number fluency.

Mathematics withing Windmill Hill Academy largely follows the White Rose Scheme of Learning with emphasis on the 2020 Mathematics guidance document (Department for Education / National Centre for Excellence in the Teaching of Mathematics).

This teaching sequence is a guide and can be adapted to suite the class (discuss with the Maths Lead NO/JB). It is to be used in accordance to the National Curriculum, White Rose Scheme of Learning and the Mathematics guidance: Key stages 1 and 2.

The programme:

- delivers a manageable tool for meeting the requirements of the 2014 National Curriculum
- has a clear progression through blocks of teaching units across the year
- comprehensively explains how to teach mathematics for 'mastery'

KIRFS – Key instant recall facts

EYFS
EYFS Autumn

	White Rose Guidance	Mastering Number
	1) WR Getting to know you Microsoft PowerPoint - Reception Scheme Guidance for Teachers and FAQs Autumn 2021 (whiterosemaths.com)	Pupils will build on previous experiences of number from their home and nursery environments, and further develop their subitising and counting skills. They will explore the composition of numbers within 5. They will begin to compare sets of objects and use the language of comparison.
	Settling in The five principles • The one-to-one principle • The stable-order principle • The cardinal principle • The abstract principle • The order irrelevance principle	Pupils will: • identify when a set can be subitised and when counting is needed • subitise different arrangements, both unstructured and structured, including using the Hungarian number frame • make different arrangements of numbers within 5 and talk about what they can see, to develop their conceptual subitising skills • spot smaller numbers 'hiding' inside larger numbers • connect quantities and numbers to finger patterns and explore different ways of representing numbers on their fingers * hear and join in with the counting sequence, and connect this to the 'staircase' pattern of the counting numbers, seeing that each number is made of one more than the previous number • develop counting skills and knowledge, including: that the last number in the count tells us 'how many' (cardinality); to be accurate in counting, each thing must be counted once and once only and in any order; the need for 1:1 correspondence; understanding that anything can be counted, including actions and sounds • compare sets of objects by matching • begin to develop the language of 'whole' when talking about objects which have parts
Phase 1	2) WR Just Like Me Microsoft PowerPoint - Reception Scheme Phase 1 Just Like Me Autumn 2020 (whiterosemaths.com)	
	Number • Matching • Sorting • Compare amounts Measure, Shape and Spatial Thinking • Compare size, mass, Capacity • Exploring Pattern	
Phase 2	3 WR It's Me 123 Microsoft PowerPoint - Reception Scheme Phase 2 123 it's me Autumn 2020 (whiterosemaths.com)	
	Number • Representing 1, 2 and 3 • Comparing 1, 2 and 3 • Composition of 1, 2 and 3	

	Measure, Shape and Spatial Thinking • Circles and triangles • Positional Language	
Phase 3	4 WR Light and Dark Microsoft PowerPoint - Reception Scheme Phase 3 Light & Dark Autumn 2020 (whiterosemaths.com)	
	Number • Representing numbers to five. • One more and one less Measure, Shape and spatial Thinking • Shapes with four sides • Time - Night and Day	
EYFS Spring		
	White Rose Guidance	Mastering Number
Phase 4	WR Alive in 5! Microsoft PowerPoint - Reception Scheme Phase 4 Spring 2021 (whiterosemaths.com)	Pupils will continue to develop their subitising and counting skills and explore the composition of numbers within and beyond 5. They will begin to identify when two sets are equal or unequal and connect two equal groups to doubles. They will begin to connect quantities to numerals
	Number • Introducing 0 • Comparing numbers to 5 • Composition of 4 and 5 Measure, Shape and spatial Thinking • Compare mass • Compare capacity	Pupils will: • continue to develop their subitising skills for numbers within and beyond 5, and increasingly connect quantities to numerals • begin to identify missing parts for numbers within 5 • explore the structure of the numbers 6 and 7 as '5 and a bit' and connect this to finger patterns and the Hungarian number frame • focus on equal and unequal groups when comparing numbers *understand that two equal groups can be called a 'double' and connect this to finger patterns • sort odd and even numbers according to their 'shape' • continue to develop their understanding of the counting
Phase 5	WR Growing 6,7,8 Microsoft PowerPoint - Reception Scheme Phase 5 Spring 2021 (whiterosemaths.com)	
	Number • Numbers 6, 7 and 8	

	• Combining 2 amounts • Making pairs Measure, Shape and spatial Thinking • Length and height • Time	sequence and link cardinality and ordinality through the 'staircase' pattern • order numbers and play track games • join in with verbal counts beyond 20, hearing the repeated pattern within the counting numbers
Phase 6	WR Building 9 and 10 Microsoft PowerPoint - Reception Scheme Phase 6 Spring 2021 (whiterosemaths.com)	
	Number • Counting to 9 and 10 • Comparing numbers to 10 • Number bonds to 10 Measure, Shape and spatial Thinking • 3d-shapes • Patterns	
EYFS Summer		
	White Rose Guidance	Mastering Number
Phase 7	WR To 20 and beyond Microsoft PowerPoint - Reception Scheme Phase 7 Summer 2021 (whiterosemaths.com)	Pupils will consolidate their counting skills, counting to larger numbers and developing a wider range of counting strategies. They will secure knowledge of number facts through varied practice.
	Number • Building numbers beyond 10 • Counting patterns beyond Measure, Shape, and spatial Thinking • Spatial Reasoning • Match, Rotate, Manipulate	* continue to develop their counting skills, counting larger sets as well as counting actions and sounds • explore a range of representations of numbers, including the 10-frame, and see how doubles can be arranged in a 10-frame • compare quantities and numbers, including sets of objects which have different attributes • continue to develop a sense of magnitude, e.g. knowing that 8 is quite a lot more than 2, but 4 is only a little bit more than 2 • begin to generalise about 'one more than' and 'one less than'
Phase 8	WR First Then Now Microsoft PowerPoint - Reception Scheme Phase 8 Summer 2021 (whiterosemaths.com)	
	Number	

	• Adding more • Taking away Measure, Shape, and spatial Thinking • Spatial Reasoning 3 • Compose and decompose	numbers within 10 • continue to identify when sets can be subitised and when counting is necessary • develop conceptual subitising skills including when using a rekenrek
Phase 9	WR Find My Pattern PowerPoint Presentation (whiterosemaths.com)	
	Number • Doubling • Sharing and Grouping • Even and Odd Measure, Shape, and spatial Thinking • Spatial Reasoning 3 • Visualise and Build	
Phase 10	WR On the Move PowerPoint Presentation (whiterosemaths.com)	
	Number • Deepening understanding • Patterns and Relationships Measure, Shape, and spatial Thinking • Spatial Reasoning 4 Mapping	

Year 1

Year 1	**Autumn Term**			
(5 weeks) 1-5	***1 - WR Autumn Block 1: Place Value (within 10)*** **Small Steps (suggested only – adapt to the needs of your class.)**	**Ready to Progress Criteria and guidance** Maths_guidance_year_1 (publishing.service.gov.uk)	Mastering Number Autumn Term Pupils will have an opportunity to consolidate the Early Learning Goals and	KIRFS

			continue to explore the composition of numbers within 10, and the position of these numbers in the linear number system	
	• *Sort objects* • *Count objects* • *Count objects from a larger group* • *Represent objects* • *Recognise numbers as words* • *Count on from any number* • *1 more* • *Count backwards within 10* • *1 less* • *Compare groups by matching* • *Fewer, more, same* • *Less than, greater than, equal to* • *Compare numbers* • *Order objects and numbers* • *The number line*	1NPV–1 Count within 100, forwards and backwards, starting with any number. (in relation to the number being worked on) NPV–2 Reason about the location of numbers to 20 within the linear number system, including comparing using < > and = (iIn relation to the number being worked on)	Pupils will: • subitise within 5, including when using a rekenrek, and re-cap the composition of 5 • develop their understanding of the numbers 6 to 9 using the '5 and a bit' structure • compare numbers within 10 and use precise mathematical language when doing so • re-cap the order of numbers within 10 and connect this to '1 more' and '1 less' than a given number *explore the structure of even numbers (including that even numbers can	***Autumn 1*** -To know number bonds for each number to 6.
	2- WR Autumn Block 2: Addition and Subtraction within 10 **Small Steps (suggested only – adapt to the needs of your class.)**	Ready to Progress Criteria and Guidance. Maths_guidance_year_1 (publishing.service.gov.uk)		
(5 weeks) 6-10	• ***Introduce parts and wholes*** • ***Part-whole model*** • ***Write number sentences*** • ***Fact families - addition facts*** • ***Number bonds within 10***	1NF–1 Develop fluency in addition and subtraction facts within 10. 1AS–1 Compose numbers to 10 from 2 parts, and		***Autumn-2 To count forwards and back in 2s, 5s***

	• ***Systematic number bonds within 10*** • ***Number bonds to 10*** • ***Addition - add together*** • ***Addition - add more*** • ***Addition problems*** • ***Find a part*** • ***Subtraction - find a part*** • ***Fact families - the eight facts*** • ***Subtraction - take away/crossing out (How many left?)*** • ***Subtraction - take away (How many left?)*** • ***Subtraction on a number line*** • ***Add or subtract 1 or 2***	partition numbers to 10 into parts, including recognising odd and even numbers. 1AS–2 Read, write and interpret equations containing addition ( ), subtraction ( ) and equals ( ) symbols, and relate additive expressions and equations to real-life contexts.	be composed by doubling any number, and can be composed of 2s) • explore the structure of the odd numbers as being composed of 2s and 1 more • explore the composition of each of the numbers 6, 8, and 10 • explore number tracks and number lines and identify the differences between them	***and 10s.***
	3- WR Autumn Block 3: Shape **Small Steps (suggested only – adapt to the needs of your class.)**	**Ready to Progress Criteria and guidance** Maths_guidance_year_1 (publishing.service.gov.uk)		
(1 week) 11	• ***Recognise and name 3-D shapes*** • ***Sort 3-D shapes*** • ***Recognise and name 2-D shapes*** • ***Sort 2-D shapes*** • ***Patterns with 2-D and 3-D shapes***	1G–1 Recognise common 2D and 3D shapes presented in different orientations, and know that rectangles, triangles, cuboids and pyramids are not always similar to one another. 1G–2 Compose 2D and 3D shapes from smaller		

		shapes to match an example, including manipulating shapes to place them in particular orientations.		
(1 week) 12	**Consolidation**			
Year 1 Spring Term				
3 weeks 1-3	***1- WR Spring Block 1: Place Value (Within 20)*** **Small Steps (suggested only – adapt to the needs of your class.)**	**Ready to Progress Criteria** Maths_guidance_year_1 (publishing.service.gov.uk)	***Mastering number*** Pupils will continue to explore the composition of numbers within 10 and explore addition and subtraction structures and the related language (without the use of symbols).	KIRFS
		1NPV−1 Count within 100, forwards and backwards, starting with any number. (in relation to the number being worked on) 1NPV–2 Reason about the location of numbers to 20 within the linear number system, including comparing using < > and = (iIn relation to the number being worked on)	Pupils will: • explore the composition of each of the numbers 7 and 9 • explore the composition of odd and even numbers, seeing that even numbers can be made of two odd or two even parts, and that odd numbers can be composed of one odd part and one even part	**Spring 1** **To know doubles and halves to number to 10.**
3 weeks	***2- WR Spring Block 2: Addition and Subtraction***	**Ready to Progress**		

4-6	**Small Steps (suggested only – adapt to the needs of your class.)**	**Criteria and guidance** Maths_guidance_year_1 (publishing.service.gov.uk)	• identify the number that is two more or two less than a given odd or even number, identifying that two more/ less than an odd number is the next/ previous odd number, and two more/ less than an even number is the next/ previous even number • explore the aggregation and partitioning structures of addition and subtraction through systematically partitioning and re-combining numbers within 10 and connecting this to the part-part-whole diagram, including using the language of parts and wholes • explore the augmentation and reduction structures of addition and reduction using number stories,	
	•	1NF–1 Develop fluency in addition and subtraction facts within 10. 1AS–1 Compose numbers to 10 from 2 parts, and partition numbers to 10 into parts, including recognising odd and even numbers. 1AS–2 Read, write and interpret equations containing addition ( ), subtraction ( ) and equals ( ) symbols, and relate additive expressions and equations to real-life contexts.	**Spring 2** **To know number bonds to 10**
2 weeks 7-8	***3- WR Spring Block 3: Place Value (within 50)*** **Small Steps (suggested only – adapt to the needs of your class.)**	**Ready to Progress Criteria and guidance** Maths_guidance_year_1 (publishing.service.gov.uk)		
	•	1NPV–1 Count within 100, forwards and backwards, starting with any number. (in relation to the number		

		being worked on) NPV–2 Reason about the location of numbers to 20 within the linear number system, including comparing using < > and = (iIn relation to the number being worked on)	including introducing the 'first, then, now' language structure	
2 weeks 9-10	***4- WR Spring Block 4: Measure – length and height*** **Small Steps (suggested only – adapt to the needs of your class.)**			
	•			
2 weeks 11-12	***5- WR Spring Block 5: Measure – Mass and volume*** **Small Steps (suggested only – adapt to the needs of your class.)**			
Year 1	**Summer Term**			
3 weeks 1-3	***1- WR Summer Block 1: Multiplication and division*** **Small Steps (suggested only – adapt to the needs of your class.)**	**Ready to Progress Criteria and guidance** Maths_guidance_year_1 (publishing.service.gov.uk)	**Mastering Number** Pupils will explore the composition of numbers within 20 and their position in the linear number system. They will connect addition and subtraction expressions and equations to 'number stories').	**KIRFS**
		1NF–2 Count forwards and backwards in multiples of 2, 5 and 10, up to 10 multiples, beginning with any	Pupils will: • explore the composition of the numbers 11 to 19 as '10 and a bit' and compare numbers within	**Summer 1** **To be able to tell the**

		multiple, and count forwards and backwards through the odd numbers.	20 • connect the composition of the numbers 11 to 19 to their position in the linear number system, including identifying the midpoints of 5, 10 and 15 • compare numbers within 20	**time to the nearest hour. To be able to tell the time to the nearest half hour.**
2 weeks 4-5	***2- WR Summer Block 2: Fractions*** **Small Steps (suggested only – adapt to the needs of your class.)**			
1 week 6	**3- WR Summer Block 3: Geometry – Position and Direction Small Steps (suggested only – adapt to the needs of your class.)**			
2 weeks 7-8	**4- WR Summer Block 4: Place Value (Within 100) Small Steps (suggested only – adapt to the needs of your class.)**	**Ready to Progress Criteria and guidance** Maths_guidance_year_1 (publishing.service.gov.uk)	• understand how addition and subtraction equations can represent previously explored structures of addition and subtraction (aggregation/ partitioning/ augmentation/ reduction) • practise retrieving previously taught facts and reason about these	**Summer 2** **To know the bonds for each number to 10.**
		1NPV–1 Count within 100, forwards and backwards, starting with any number. (in relation to the number being worked on) NPV–2 Reason about the location of numbers to 20 within the linear number system, including comparing using < > and = (iIn relation to the		

		number being worked on)		
1 week 9	**5-WR Summer Block 5: Measurement-Money Small Steps (suggested only – adapt to the needs of your class.)**			
2 weeks 10-11	**5-WR Summer Block 6: Measurement- Time Small Steps (suggested only – adapt to the needs of your class.)**			
1 week 12	**Consolidation**			
Notes				

Year 2

Year 2 Autumn Term

4 weeks 1-4	***1-WR Autumn Block 1: Place Value*** **Small Steps (suggested only – adapt to the needs of your class.)**	**Ready to Progress Criteria and guidance.** Mathematics guidance: year 2 (publishing.service.gov.uk)	**Mastering Number**	KIRFS
	• ***Numbers to 20*** • ***Count objects to 100 by making 10s*** • ***Recognise tens and ones*** • ***Use a place value chart*** • ***Partition numbers to 100*** • ***Write numbers to 100 in words*** • ***Flexibly partition numbers to 100*** • ***Write numbers to 100 in expanded form*** • ***10s on the number line to 100*** • ***10s and 1s on the number line to 100***	NPV–1 Recognise the place value of each digit in two-digit numbers, and compose and decompose two-digit numbers using standard and nonstandard partitioning. 2NPV–2 Reason about the location of any two digit number in the linear	Pupils will have an opportunity to consolidate their understanding and recall of number bonds within 10; they will re-cap the composition of the numbers 11 to 20 and reason about their position within the linear number system. Pupils will: • review the composition of the numbers 6 to 9 as	Spring 1 To know number bonds to 20.

	• ***Estimate numbers on a number line*** • ***Compare objects*** • ***Compare numbers*** • ***Order objects and numbers*** • ***Count in 2s, 5s and 10s*** • ***Count in 3s***	number system, including identifying the previous and next multiple of 10.	'5 and a bit' • compare numbers using the language of comparison and use the symbols < > =	
5 weeks 5-9	***2- WR Autumn Block 2: Addition and Subtraction*** **Small Steps (suggested only – adapt to the needs of your class.)**	**Ready to Progress Criteria and guidance.** Mathematics guidance: year 2 (publishing.service.gov.uk)	 • review the structure of even numbers (including exploring how even numbers can be composed of two odd parts or two even parts) and the composition of each of 6, 8 and 10	
	• **Bonds to 10** • **Fact families – addition and subtraction bonds within 20** • **Related facts** • **Bonds to 100 (tens)** • **Add and subtract 1s** • **Add by making 10** • **Add three 1-digit numbers** • **Add to the next 10** • **Add across a 10** • **Subtract across 10** • **Subtract from a 10** • **Subtract a 1-digit number from a 2-digit number** • **(across a 10)** • **10 more, 10 less** • **Add and subtract 10s** • **Add two 2-digit numbers (not across a 10)** • **Add two 2-digit numbers (across a 10)**	2NF–1 Secure fluency in addition and subtraction facts within 10, through continued practice. 2AS–1 Add and subtract across 10. 2AS–2 Recognise the subtraction structure of 'difference' and answer questions of the form, "How many more…?". 3AS–3 Add and subtract within 100 by applying related one-digit addition and subtraction facts: add and subtract only ones or only tens to/from a	• review the structure of odd numbers (including exploring how odd numbers can be composed of one odd part and one even part) and the composition of each of 7 and 9 • consolidate their understanding of the numbers 10 and 20 as '10 and a bit'	Autumn 2 To know multiplication and division facts for the 2x tables.

	• **Subtract two 2-digit numbers (not across a 10)** • **Subtract two 2-digit numbers (across a 10)** • **Mixed addition and subtraction** • **Compare number sentences** • **Missing number problems**	twodigit number. 4AS–4 Add and subtract within 100 by applying related one-digit addition and subtraction facts: add and subtract any 2 twodigit numbers.	• consolidate their understanding of the linear number system to 20 and reason about midpoints	
3 weeks 10-12	***3- WR Autumn Block 3: Shape*** **Small Steps (suggested only – adapt to the needs of your class.)**	**Ready to Progress Criteria and guidance.** Mathematics guidance: year 2 (publishing.service.gov.uk)		
	• ***Recognise 2-D and 3-D shapes*** • ***Count sides on 2-D shapes*** • ***Count vertices on 2-D shapes*** • ***Draw 2-D shapes*** • ***Lines of symmetry on shapes*** • ***Use lines of symmetry to complete shapes*** • ***Sort 2-D shapes*** • ***Count faces on 3-D shapes*** • ***Count edges on 3-D shapes*** • ***Count vertices on 3-D shapes*** • ***Sort 3-D shapes*** • ***Make patterns with 2-D and 3-D shapes***	2G–1 Use precise language to describe the properties of 2D and 3D shapes, and compare shapes by reasoning about similarities and differences in properties.		
	•			
Year 2 Spring Term				
			Mastering Number	KIRFS
2 weeks	***1- WR Spring Block 1: Measurement - Money***		Pupils will have an	Spring 1

1-2	**Small Steps (suggested only – adapt to the needs of your class.)**		opportunity to use their knowledge of the composition of numbers within 10 to calculate within 20; they will explore the links between the numbers in the linear number system within 10 to numbers within 100, focusing on multiples of 10 and the midpoint of 50. Pupils will: • explore how the numbers 6 to 9 can be doubled using the '5 and a bit' and '10 and a bit' structure • use doubles to calculate near doubles • use bonds of 10 to reason about bonds of 20, in which the given addend is greater than 10 • use known number bonds within 10 to calculate within 20, working within the 10-	To know doubles and halves of numbers to 20.
5 weeks **3-7**	***2- WR Spring Block 2: Multiplication and Division*** **Small Steps (suggested only – adapt to the needs of your class.)**	**Ready to Progress Criteria and guidance.** Mathematics guidance: year 2 (publishing.service.gov.uk)		
		2MD–1 Recognise repeated addition contexts, representing them with multiplication equations and calculating the product, within the 2, 5 and 10 multiplication tables. 2MD–2 Relate grouping problems where the number of groups is unknown to multiplication equations with a missing factor, and to division equations (quotitive division).		
2 weeks **8-9**	***3- WR Spring Block 3: Measurement-Length and Height*** **Small Steps (suggested only – adapt to the needs of your class.)**			Spring 2 To know multiplication and division

2 weeks 10-12	***4- WR Spring Block 3: Mass, Capacity and Temperature*** **Small Steps (suggested only – adapt to the needs of your class.)**		boundary • use their knowledge of bonds of 10 to find three addends that sum to 10 • use their knowledge of the composition of numbers within 20 to add and subtract across the 10-boundary • use their understanding of the linear number system to 10 to position multiples of 10 on a 0 - 100 number line and reason about midpoints	facts for the 10 times table.
Year 2	**Summer Term**			
			Mastering Number	KIRFS
3 weeks 1-3	***1- WR Summer Block 1: Fractions*** **Small Steps suggested only – adapt to the needs of your class.)**		Pupils will have further opportunities to use their knowledge of the composition of numbers within 10 to calculate within 20 and to reason about equations and inequalities. Pupils will: • continue to explore a range of strategies to subtract across the 10-	***Summer 1*** ***To be able to recall multiplication and division facts for the 5 times table***
				Summer 1

3 weeks 4-6	***2- WR Summer Block 2: Time*** **Small Steps suggested only – adapt to the needs of your class.)**		boundary • review bonds of 20 in which the given addend is greater than 10, and reason about bonds of 20, in which the given addend is less than 10 • practise previously explored strategies to support their reasoning about inequalities and equations • review doubles and near doubles and transform additions in which two addends are adjacent odd/ even numbers into doubles • consolidate previously taught facts and strategies through continued, varied practice	To be able to tell the time to the nearest hour. To be able to tell the time to the nearest half hour. To be able to tell the time to the nearest quarter hour. To be able to tell the time to the nearest 5 minutes.
2 weeks 7-8	***3- WR Summer Block 3: Statistics*** **Small Steps suggested only – adapt to the needs of your class.)**			
2 weeks 9-10	***4- WR Summer Block 4: Position and direction*** **Small Steps suggested only – adapt to the needs of your class.)**			
2 weeks 11-12	***Consolidation***			
Notes				

Year 3

Year 3 Autumn Term

3 weeks 1-3	***1- WR Autumn Block 1 : Place Value*** **Small Steps (suggested only – adapt to the needs of**	**Ready to Progress Criteria and Guidance** Mathematics guidance: year 3 (publishing.service.gov.uk)	**KIRFS**

	your class.)		
	• ***Represent numbers to 100*** • ***Partition numbers to 100*** • ***Number line to 100*** • ***Hundreds*** • ***Represent numbers to 1,000*** • ***Partition numbers to 1,000*** • ***Flexible partitioning of numbers to 1000*** • ***Hundreds, tens and ones*** • ***Find 1, 10 or 100 more or less*** • ***Number line to 1,000*** • ***Estimating on a number line to 1,000*** • ***Compare numbers to 1,000*** • ***Order numbers to 1,000*** • ***Count in 50s***	NPV–1 Know that 10 tens are equivalent to 1 hundred, and that 100 is 10 times the size of 10; apply this to identify and work out how many 10s there are in other threedigit multiples of 10. NPV–2 Recognise the place value of each digit in three-digit numbers, and compose and decompose three-digit numbers using standard and non-standard partitioning. NPV–3 Reason about the location of any threedigit number in the linear number system, including identifying the previous and next multiple of 100 and 10. NPV–4 Divide 100 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in multiples of 100 with 2, 4, 5 and 10 equal parts.	**Autumn 1** To know number bonds to all numbers to 20
5 weeks **4-8**	***2- WR Autumn Block 2: Addition and Subtraction*** **Small Steps (suggested only – adapt to the needs of your class.)**	**Ready to Progress Criteria and Guidance** Mathematics guidance: year 3 (publishing.service.gov.uk)	

	• ***Apply number bonds within 10*** • ***Add and subtract 1s*** • ***Add and subtract 10s*** • ***Add and subtract 100s*** • ***Spot the pattern*** • ***Add 1s across a 10*** • ***Add 10s across a 100*** • ***Subtract 1s across a 10*** • ***Subtract 10s across a 100*** • ***Make connections***	3NF–1 Secure fluency in addition and subtraction facts that bridge 10, through continued practice. 3NF–3 Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 10). 3AS–1 Calculate complements to 100. 3AS–2 Add and subtract up to three-digit numbers using columnar methods. 3AS–3 Manipulate the additive relationship: Understand the inverse relationship between addition and subtraction, and how both relate to the part–part–whole structure. Understand and	

	• ***Add two numbers (no exchange)*** • ***Subtract two numbers (no exchange)*** • ***Add two numbers (across a 10)*** • ***Add two numbers (across a 100)*** • ***Subtract two numbers (across a 10)*** • ***Subtract two numbers (across a 100)*** • ***Add 2-digit and 3-digit numbers*** • ***Subtract a 2-digit number from a 3-digit number*** • ***Complements to 100*** • ***Estimate answers*** • ***Inverse operations*** • ***Make decisions***	use the commutative property of addition, and understand the related property for subtraction.	***Autumn 2*** To know multiplication and division facts for 3x tables.
4 weeks 9-12	***3- WR Autumn Block 3: multiplication and Division*** ***Small Steps* (suggested only – adapt to the needs of your class.)**	**Ready to Progress Criteria and Guidance** Mathematics guidance: year 3 (publishing.service.gov.uk)	
	• ***Multiplication - equal groups*** • ***Use arrays*** • ***Multiples of 2*** • ***Multiples of 5 and 10*** • ***Sharing and grouping***	3NF–2 Recall multiplication facts, and corresponding division facts, in the 10, 5, 2, 4 and 8 multiplication tables, and recognise products in these multiplication tables as multiples of the corresponding number. 3NF–3 Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 10).	

	• ***Multiply by 3*** • ***Divide by 3*** • ***The 3 times-table*** • ***Multiply by 4*** • ***Divide by 4*** • ***The 4 times-table*** • ***Multiply by 8*** • ***Divide by 8*** • ***The 8 times-table*** • ***The 2, 4 and 8 times-tables***	3MD–1 Apply known multiplication and division facts to solve contextual problems with different structures, including quotitive and partitive division.	
Year 3	**Spring Term**		
3 weeks 1-3	***1- WR Spring Block 1: Multiplication and Division*** ***Small Steps* (suggested only – adapt to the needs of your class.)**	**Ready to Progress Criteria and Guidance** Mathematics guidance: year 3 (publishing.service.gov.uk)	***KIRFS***
		3NF–2 Recall multiplication facts, and corresponding division facts, in the 10, 5, 2, 4 and 8 multiplication tables, and recognise products in these multiplication tables as multiples of the corresponding number. 3NF–3 Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 10). 3MD–1 Apply known multiplication and division facts to solve contextual problems with different structures, including quotitive and partitive division.	***Spring 1*** To be able to recall facts about duration of time.
3 weeks 4-6	***2-WR Spring Block 2: Measurement-Length and perimeter*** ***Small Steps* (suggested only – adapt to the needs of your class.)**		

3 weeks 7-9	***3-WR Spring Block 3: Fractions*** ***Small Steps* (suggested only – adapt to the needs of your class.)**	**Ready to Progress Criteria and Guidance** Mathematics guidance: year 3 (publishing.service.gov.uk)	***KIRFS***
		3F–1 Interpret and write proper fractions to represent 1 or several parts of a whole that is divided into equal parts 3F–2 Find unit fractions of quantities using known division facts (multiplication tables fluency). 3F–3 Reason about the location of any fraction within 1 in the linear number system. F–4 Add and subtract fractions with the same denominator, within 1.	***Spring 2*** To be able to recall multiplication and division facts for the 4 times table.
2 weeks 10-12	***4-WR Spring Block 4: Measurement-Mass and capacity*** ***Small Steps* (suggested only – adapt to the needs of your class.)**		
	•		
Year 3	**Summer Term**		
2 weeks 1-2	***1-WR Summer Block 1: Fractions*** ***Small Steps* (suggested only – adapt to the needs of your class.)**	**Ready to Progress Criteria and Guidance** Mathematics guidance: year 3 (publishing.service.gov.uk)	***Summer 1*** To be able recall multiplication and division facts for the 8 times
		3F–1 Interpret and write proper fractions to represent 1 or several parts of a whole that is divided into equal parts 3F–2 Find unit fractions of quantities using known division facts (multiplication tables fluency). 3F–2 Find unit fractions of quantities using known division facts (multiplication tables fluency).	

		3F–3 Reason about the location of any fraction within 1 in the linear number system. F–4 Add and subtract fractions with the same denominator, within 1.	table.
2 weeks **3-4**	***2-WR Summer Block 2: Measurement-Money*** ***Small Steps* (suggested only – adapt to the needs of your class.)**		
3 weeks **5-7**	***3-WR Summer Block 3: Measurement Time*** ***Small Steps* (suggested only – adapt to the needs of your class.)**		***Summer 2*** To be able to tell the time to the nearest hour. To be able to tell the time to the nearest half hour. To be able to tell the time to the nearest quarter
	•		
2 weeks **8-9**	***4-WR Summer Block 4: Shape*** ***Small Steps* (suggested only – adapt to the needs of your class.)**	**Ready to Progress Criteria and Guidance** Mathematics guidance: year 3 (publishing.service.gov.uk)	
	•	3G–1 Recognise right angles as a property of shape or a description of a turn, and identify right angles in 2D shapes presented in different orientations. G–2 Draw polygons by joining marked points, and identify parallel and perpendicular sides.	
	53-WR Summer Block 5: Statistics ***Small Steps* (suggested only – adapt to the needs of your class.)**		
	•		

			hour. To be able to tell the time to the nearest 5 minutes.
	Consolidation		
Notes			

Year 4

Year 4 Autumn term

4 weeks 1-4	***1 – WR Autumn Block 1: Place Value – including decimals*** ***Small Steps* (suggested only – adapt to the needs of your class)**	***Ready to Progress Criteria and guidance*** Mathematics guidance: year 4 (publishing.service.gov.uk)	***KIRFS***
	• ***Represent numbers to 1,000*** • ***Partition numbers to 1,000*** • ***Number line to 1,000*** • ***Thousands*** • ***Represent numbers to 10,000*** • ***Partition numbers to 10,000*** • ***Flexible partitioning of numbers to 10,000*** • ***Find 1, 10, 100, 1,000 more or less*** • ***Number line to 10,000*** • ***Estimate on a number line to 10,000*** • ***Compare numbers to 10,000*** • ***Order numbers to 10,000*** • ***Roman numerals***	NPV–1 Know that 10 hundreds are equivalent to 1 thousand, and that 1,000 is 10 times the size of 100; apply this to identify and work out how many 100s there are in other four-digit multiples of 100. NPV–2 Recognise the place value of each digit in four-digit numbers, and compose and decompose four-digit numbers using standard and nonstandard partitioning. NPV–3 Reason about the location of any fourdigit number in the linear number system, including identifying the previous and next multiple of 1,000 and 100, and rounding to the nearest of each. NPV–4 Divide 1,000 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in multiples of 1,000 with 2, 4, 5 and 10 equal parts.	***Autumn 1*** To know number bonds to 100.

	• ***Round to the nearest 10*** • ***Round to the nearest 100*** • ***Round to the nearest 1,000*** • ***Round to the nearest 10, 100 or 1,000*** •		
3 weeks **5-7**	***2 - WR Spring Block 4 – Decimals – only progress to decinals if ready -discuss with ML*** ***Small Steps* (suggested only – adapt to the needs of your class)**		
	Decimals (WR Spring 4) • ***Recognise tenths and hundredths*** • ***Tenths as decimals*** • ***Tenths on a place value grid*** • ***Tenths on a number line*** • ***Divide 1-digit by 10*** • ***Divide 2-digits by 10*** • ***Hundredths*** • ***Hundredths as decimals*** • ***Hundredths on a place value grid*** • ***Divide 1 or 2-digits by 10***		
2 weeks **8-9**	***3 - WR Summer Block 1 – Decimals*** ***Small Steps* (suggested only – adapt to the needs of your class)**		
	Decimals (WR Summer Block 1) • ***Bonds to 10 and 100*** • ***Make a whole*** • ***Write decimals*** • ***Compare decimals***		

	• ***Order decimals*** • ***Round decimals*** ***Halves and quarters***		
3 weeks **10-12**	***Autumn WR Block 2: Number –Addition and Subtraction 3wks*** ***Small Steps* (suggested only – adapt to the needs of your class)**	***Ready to Progress Criteria and guidance*** Mathematics guidance: year 4 (publishing.service.gov.uk)	
	• ***Add and subtract 1s, 10s, 100s and 1,000s*** • ***Add up to two 4-digit numbers - no exchange*** • ***Add two 4-digit numbers - one exchange*** • ***Add two 4-digit numbers– more than one exchange*** • ***Subtract two 4-digit numbers - no exchange*** • ***Subtract two 4-digit numbers - one exchange*** • ***Subtract two 4-digit numbers – more than one exchange*** • ***Efficient subtraction*** • ***Estimate answers*** • ***Checking strategies***	NF–3 Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 100)	***Autumn 2*** To be able to recall the multiplication and division facts for the 6 times table.
Year 4	**Spring Term**		
1 week **1**	***1- WR Autumn Block 3: Measure – Area (carried over)*** ***Small Steps* (suggested only – adapt to the needs of your class)**		***KIRFS***
	• ***What is area?*** • ***Counting squares*** • ***Make shapes*** • ***Compare area***		***Spring 1*** To be able to recall multiplica

3 weeks 2-4	***2- WR Autumn Block 4: Number – multiplication and Division*** ***Small Steps* (suggested only – adapt to the needs of your class)**	***Ready to Progress Criteria and guidance*** Mathematics guidance: year 4 (publishing.service.gov.uk)	tion and division facts for the 9 and 11 times tables.
	• **Multiples of 3** • **Multiply and divide by 6** • **6 times-table and division facts** • **Multiply and divide by 9** • **9 times-table and division facts** • **The 3, 6 and 9 times-tables** • **Multiply and divide by 7** • **7 times-table and division facts** • **11 times-table and division facts** • **12 times-table and division facts** • **Multiply by 1 and 0** • **Divide by 1 and itself** • **Multiply three numbers**	4NF–1 Recall multiplication and division facts up to , and recognise products in multiplication tables as multiples of the corresponding number. 4NF–2 Solve division problems, with two-digit dividends and one-digit divisors, that involve remainders, and interpret remainders appropriately according to the context. 4 NF–3 Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 100) 4 MD–1 Multiply and divide whole numbers by 10 and 100 (keeping to whole number quotients); understand this as equivalent to making a number 10 or 100 times the size. 4 MD–2 Manipulate multiplication and division equations, and understand and apply the commutative property of multiplication. 4 MD–3 Understand and apply the distributive property of multiplication.	
1 week 5	**Consolidation**		
3 weeks 6-8	***3 WR Spring Block 1: multiplication and Division*** ***4 Small Steps* (suggested only – adapt to the needs of your class)**	***Ready to Progress Criteria and guidance*** Mathematics guidance: year 4 (publishing.service.gov.uk)	***KIR*** ***FS***
	•	4NF–1 Recall multiplication and division facts up to , and recognise products in multiplication tables as multiples of the	***Spring 2*** To be able

		corresponding number. 4NF–2 Solve division problems, with two-digit dividends and one-digit divisors, that involve remainders, and interpret remainders appropriately according to the context. 4 NF–3 Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 100) 4 MD–1 Multiply and divide whole numbers by 10 and 100 (keeping to whole number quotients); understand this as equivalent to making a number 10 or 100 times the size. 4 MD–2 Manipulate multiplication and division equations, and understand and apply the commutative property of multiplication. 4 MD–3 Understand and apply the distributive property of multiplication.	to recall multiplication and division facts for the 7 times tables.
2 weeks 9-10	***4-WR Spring Block 2: Length and perimeter 2wks*** ***Small Steps* (suggested only – adapt to the needs of your class)**		
	•		
4weeks (2+2) 11-12 (Summer 1-2)	***5-WR Spring Block 3: Fractions*** ***Small Steps* (suggested only – adapt to the needs of your class)**	***Ready to Progress Criteria and guidance*** Mathematics guidance: year 4 (publishing.service.gov.uk)	
	•	4F–1 Reason about the location of mixed numbers in the linear number system. 4F–2 Convert mixed numbers to improper fractions and vice versa.	

		4F–3 Add and subtract improper and mixed fractions with the same denominator, including bridging whole numbers.	
	•		
	•		
Year 4 Summer Term			
4weeks (2+2) (Spring 11-12) Summer 1-2	***1-WR Spring Block 3: Fractions*** **Small Steps (suggested only – adapt to the needs of your class)** **Consolidate decimals**	***Ready to Progress Criteria and guidance*** Mathematics guidance: year 4 (publishing.service.gov.uk)	***KIRFS***
		4F–1 Reason about the location of mixed numbers in the linear number system. 4F–2 Convert mixed numbers to improper fractions and vice versa. 4F–3 Add and subtract improper and mixed fractions with the same denominator, including bridging whole numbers.	***Summer 1*** To recognise decimal equivalents of fractions.
2 weeks 3-4	***2-WR Summer Block2: Measurement - Money*** **Small Steps (suggested only – adapt to the needs of your class)**		
2 weeks 5-6	***3-WR Summer Block 3 Measurement - Time*** **Small Steps (suggested only – adapt to the needs of your class)**		
	•		***Summer 2*** To be able to multiply
	Consolidation		
2 weeks 8-9	***4-WR Summer Block 4 Shape*** **Small Steps (suggested only – adapt to the needs of**	***Ready to Progress Criteria and guidance*** Mathematics guidance: year 4 (publishing.service.gov.uk)	

	your class)		and divide single digits by 10 and 100.
	•	***4***G–1 Draw polygons, specified by coordinates in the first quadrant, and translate within the first quadrant. 4G–2 Identify regular polygons, including equilateral triangles and squares, as those in which the side-lengths are equal and the angles are equal. Find the perimeter of regular and irregular polygons. 4G–3 Identify line symmetry in 2D shapes presented in different orientations. Reflect shapes in a line of symmetry and complete a symmetric figure or pattern with respect to a specified line of symmetry.	
10	***5-WR Summer Block 5: Statistics*** ***Small Steps* (suggested only – adapt to the needs of your class)**		
	•		
2 weeks 11-12	***6-WR Summer Block 6: Position and Direction*** ***Small Steps* (suggested only – adapt to the needs of your class)**		
Notes			

Year 5

Year 5 Autumn Term

3weeks 1-3	***1- WR Autumn Block 1: Place Value (including decimals)*** ***Small Steps* (suggested only – adapt to the needs of your class)**	**Related Ready to Progress Criteria and guidance.** Mathematics guidance: year 5 (publishing.service.gov.uk)	***KIRFS***
	• **Roman numerals to 1,000** • **Numbers to 10,000** • **Numbers to 100,000** • **Numbers to 1,000,000**	5NPV–1 Know that 10 tenths are equivalent to 1 one, and that 1 is 10 times the size of 0.1. Know that 100 hundredths are equivalent to 1 one, and that 1 is 100 times the size of 0.01. Know that 10 hundredths are equivalent to 1 tenth, and that 0.1 is 10 times the size of 0.01.	***Autumn 1*** ***To be able to recall***

	• **Read and write numbers to 1,000,000** • **Powers of 10** • **10/100/1,000/10,000/100,000 more or less** • **Partition numbers to 1,000,000** • **Number line to 1,000,000** • **Compare and order numbers to 100,000** • **Compare and order numbers to 1,000,000** • **Round to the nearest 10, 100 or 1,000** • **Round within 100,000** • **Round within 1,000,000**	5NPV–2 Recognise the place value of each digit in numbers with up to 2 decimal places, and compose and decompose numbers with up to 2 decimal places using standard and nonstandard partitioning. 5 NPV–3 Reason about the location of any number with up to 2 decimals places in the linear number system, including identifying the previous and next multiple of 1 and 0.1 and rounding to the nearest of each. NPV–5 Convert between units of measure, including using common decimals and fractions.	***all multiplication and division faction for all table up to 12 x 12.***
2 weeks **4-5**	**2-WR Spring Block 3 – Decimals** ***Small Steps* (suggested only – adapt to the needs of your class)**		
	• **Decimals up to 2 d.p.** • **Decimals as fractions** • **Understand thousandths** • **Thousandths as decimals** • **Rounding decimals** • **Order and compare decimals** • **Decimal sequences** **Percentages with fractions**		
2 weeks **6-7**	***3-Autumn Block 2: Number – addition and subtraction*** ***Small Steps* (suggested only – adapt to the needs of your class)**	**Related Ready to Progress Criteria and guidance.** Mathematics guidance: year 5 (publishing.service.gov.uk)	***KIRFS***
	• **Mental strategies** • **Add whole numbers with more than four digits** • **Subtract whole numbers with more than four**	5NF–2 Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 1 tenth or 1 hundredth).	***Autumn 2*** *To know decimal number*

	digits • Round to check answers • Inverse operations (addition and subtraction) • Multi-step addition and subtraction problems • Compare calculations • Find missing numbers •		*bonds to 1 and 10.*
2 weeks 8-9	**4-WR Summer 3 addition and subtraction of decimals** ***Small Steps* (suggested only – adapt to the needs of your class)**		
	• Adding decimals within 1 • Subtracting decimals within 1 • Complements to 1 • Adding decimals – crossing the whole • Adding decimals with the same number of decimal places • Subtracting decimals with the same number of decimal places • Adding decimals with a different number of decimal places • Subtracting decimals with a different number of decimal places • Adding and subtracting wholes and decimals •		
2 weeks 10-11	***Autumn Block 3: Number -Multiplication and Division A*** ***Small Steps* (suggested only – adapt to the needs of**	**Related Ready to Progress Criteria and guidance.** Mathematics guidance: year 5 (publishing.service.gov.uk)	

	your class)		
	• Multiples • Common multiples • Factors • Common factors • Prime numbers • Square numbers • Cube numbers • Multiply by 10, 100 and 1,000 • Divide by 10, 100 and 1,000 • Multiples of 10, 100 and 1,000	5NF–1 Secure fluency in multiplication table facts, and corresponding division facts, through continued practice. 5NF–2 Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 1 tenth or 1 hundredth). 5MD–1 Multiply and divide numbers by 10 and 100; understand this as equivalent to making a number 10 or 100 times the size, or 1 tenth or 1 hundredth times the size. 5MD–2 Find factors and multiples of positive whole numbers, including common factors and common multiples, and express a given number as a product of 2 or 3 factors. 5MD–3 Multiply any whole number with up to 4 digits by any one-digit number using a formal written method. MD–4 Divide a number with up to 4 digits by a one-digit number using a formal written method, and interpret remainders appropriately for the context.	
1 week **12**	**Consolidation**	**Related Ready to Progress Criteria and guidance.** Mathematics guidance: year 5 (publishing.service.gov.uk)	
Notes ***Decimals have been brought earlier in the year which means that Fractions A will need to commence later at the beginning of the Spring Term***			
Year 5	**Spring Term**		
3 weeks **1-3**	**1 WR Autumn Block 4 – Fractions A** ***Small Steps* (suggested only – adapt to the needs of your class)**	**Related Ready to Progress Criteria and guidance.** Mathematics guidance: year 5 (publishing.service.gov.uk)	***KIRFS***
	Find fractions equivalent to a unit fraction **Step 2 Find fractions equivalent to a non-unit fraction**	5F–1 Find non-unit fractions of quantities. 5F–2 Find equivalent fractions and understand that they have the same value and the same position in the linear number	***Spring 1*** To know

	Step 3 Recognise equivalent fractions **Step 4 Convert improper fractions to mixed numbers** **Step 5 Convert mixed numbers to improper fractions** **Step 6 Compare fractions less than 1** **Step 7 Order fractions less than 1** **Step 8 Compare and order fractions greater than 1**	system. 5F–3 Recall decimal fraction equivalents for , , and , and for multiples of these proper fractions.	decimal number bonds to 1 and 10.
3 weeks **4-6**	**2 WR Spring Block1 – Multiplication combined with division** ***Small Steps* (suggested only – adapt to the needs of your class)**		
2 weeks **7-8**	**3 WR Spring Block 2 – Fractions B** ***Small Steps* (suggested only – adapt to the needs of your class)**	**Related Ready to Progress Criteria and guidance.** Mathematics guidance: year 5 (publishing.service.gov.uk)	***KIRFS*** ***Spring 2*** To be able to recall metric conversions.
		5F–1 Find non-unit fractions of quantities. 5F–2 Find equivalent fractions and understand that they have the same value and the same position in the linear number system. 5F–3 Recall decimal fraction equivalents for , , and , and for multiples of these proper fractions.	
1 week **9-10**	**4 WR Spring Block 3 – Percentages (decimals completed earlier)** ***Small Steps* (suggested only – adapt to the needs of your class)**		
2 weeks **11-12**	**5 WR Spring Block 4 – Perimeter and area** ***Small Steps* (suggested only – adapt to the needs of**	**Related Ready to Progress Criteria and guidance.** Mathematics guidance: year 5 (publishing.service.gov.uk)	

	your class)		
		5G–2 Compare areas and calculate the area of rectangles (including squares) using standard units.	
Year 5 Summer Term			
2 weeks? **1-2**	**1 WR Spring Block 5 – statistics** ***Small Steps* (suggested only – adapt to the needs of your class)**		***KIRFS*** ***Summer 1*** To be able to recall square numbers and their routes.
1 week **3**	**2 WR Summer Block 4 – Negative numbers** ***Small Steps* (suggested only – adapt to the needs of your class)**		
3 weeks **4-6**	**3 WR Summer Block 1 – Shape** ***Small Steps* (suggested only – adapt to the needs of your class)**	**Related Ready to Progress Criteria and guidance.** Mathematics guidance: year 5 (publishing.service.gov.uk)	
		5G–1 Compare angles, estimate and measure angles in degrees (°) and draw angles of a given size.	
2 weeks **7-8**	**4 WR Summer Block 2 – Position and Direction** ***Small Steps* (suggested only – adapt to the needs of your class)**		***KIRFS*** ***Summer 2*** To be able to give factor pairs of a number.
	•		
2 week **9-10**	**5 WR Summer Block 5 – Converting units** ***Small Steps* (suggested only – adapt to the needs of your class)**		
	•		
1 week	**6 WR Summer Block 6 -Volume** • ***Small Steps* (suggested only – adapt to the needs of your class)**		

Year 6

Year 6 Autumn Term

2 weeks 1-2	*1- WR Autumn Block 1:Place Value* *Small Steps* (suggested only – adapt to the needs of your class)	*Related Ready to Progress Criteria and guidance.* Maths guidance year 6 (publishing.service.gov.uk)	*KIRFS*
Y6 Autumn Block 1 SOL Place value.pdf (whiterosemaths.com)	• **Numbers to 1,000,000** • **Numbers to 10,000,000** • **Read and write numbers to 10,000,000** • **Powers of 10** • **Number line to 10,000,000** • **Compare and order any integers** • **Round any integers** • **Negative numbers**	6 NPV–1 Understand the relationship between powers of 10 from 1 hundredth to 10 million, and use this to make a given number 10, 100, 1,000, 1 tenth, 1 hundredth or 1 thousandth times the size (multiply and divide by 10, 100 and 1,000). 6 NPV–2 Recognise the place value of each digit in numbers up to 10 million, including decimal fractions, and compose and decompose numbers up to 10 million using standard and nonstandard partitioning. 6 NPV–3 Reason about the location of any number up to 10 million, including decimal fractions, in the linear number system, and round numbers, as appropriate including in contexts. 6 NPV–4 Divide powers of 10, from 1 hundredth to 10 million, into 2, 4, 5 and 10 equal parts, and read scales/number lines with labelled intervals divided into 2, 4, 5 and 10 equal parts.	Autumn 1 To use x table to multiply and divide decimals.
2weeks 3-4	**2 -WR Spring Block 3 – Decimals (may need to mix / merge with other units)** *Small Steps* (suggested only – adapt to the needs of your class)	**Related Ready to Progress Criteria and guidance.** Mathematics guidance: year 5 (publishing.service.gov.uk)	
	• **Decimals up to 2 decimal places** • **Understand thousandths** • **Three decimal places** • **Multiply by 10, 100 and 1,000** • **Divide by 10, 100 and 1,000**	6 NPV–1 Understand the relationship between powers of 10 from 1 hundredth to 10 million, and use this to make a given number 10, 100, 1,000, 1 tenth, 1 hundredth or 1 thousandth times the size (multiply and divide by 10, 100 and 1,000). 6 NPV–2 Recognise the place value of each digit in numbers up to 10 million, including decimal fractions, and compose and	

	• **Multiply decimals by integers** • **Divide decimals by integers** • **Division to solve problems** • **Decimals as fractions** • **Fractions to decimals (1)** • **Fractions to decimals (2) may want to do with fractions**	decompose numbers up to 10 million using standard and nonstandard partitioning. 6 NPV–3 Reason about the location of any number up to 10 million, including decimal fractions, in the linear number system, and round numbers, as appropriate including in contexts. 6 NPV–4 Divide powers of 10, from 1 hundredth to 10 million, into 2, 4, 5 and 10 equal parts, and read scales/number lines with labelled intervals divided into 2, 4, 5 and 10 equal parts.	
5 weeks **5-9**	***3- WR Autumn Block 2: Number- Addition, Subtraction, Multiplication and Number***	***Related Ready to Progress Criteria and guidance.*** Maths guidance year 6 (publishing.service.gov.uk)	***KIRFS***
	• **Add and subtract integers** • **Common factors** • **Common multiples** • **Rules of divisibility** • **Primes to 100** • **Square and cube numbers** • **Multiply up to a 4-digit number by a 2-digit number** • **Solve problems with multiplication** • **Short division** • **Division using factors** • **Introduction to long division** • **Long division with remainders** • **Solve problems with division** • **Solve multi-step problems** • **Order of operations** • **Mental calculations and estimation**	6AS/MD–1 Understand that 2 numbers can be related additively or multiplicatively, and quantify additive and multiplicative relationships (multiplicative relationships restricted to multiplication by a whole number). ***6***AS/MD–2 Use a given additive or multiplicative calculation to derive or complete a related calculation, using arithmetic properties, inverse relationships, and place-value understanding. 6AS/MD–3 Solve problems involving ratio relationships. ***6***AS/MD–4 Solve problems with 2 unknowns.	***Autumn 2*** To be able to instantly identify common factors of a number

	• **Reason from known facts**		
2weeks 10-11	1- ***WR Autumn Block 3: Fractions A*** ***Small Steps* (suggested only – adapt to the needs of your class)**	***Related Ready to Progress Criteria and guidance.*** Maths guidance year 6 (publishing.service.gov.uk)	
	• **Equivalent fractions and simplifying** • **Equivalent fractions on a number line** • **Compare and order (denominator)** • **Compare and order (numerator)** • **Add and subtract simple fractions** • **Add and subtract any two fractions** • **Add mixed numbers** • **Subtract mixed numbers** • **Multi-step problems**	***6*** F–1 Recognise when fractions can be simplified, and use common factors to simplify fractions. ***6*** F–2 Express fractions in a common denomination and use this to compare fractions that are similar in value. 6 F–3 Compare fractions with different denominators, including fractions greater than 1, using reasoning, and choose between reasoning and common denomination as a comparison strategy.	
	Consolidation		
Year 6 Spring Term			
	•		
2 weeks 1-2	***1 WR - Autumn Block 4: Fractions B (carried over)*** ***Small Steps* (suggested only – adapt to the needs of your class)**	***Related Ready to Progress Criteria and guidance.*** Maths guidance year 6 (publishing.service.gov.uk)	***KIRFS***
	• **Multiply fractions by integers** • **Multiply fractions by fractions** • **Divide a fraction by an integer** • **Divide any fraction by an integer** • **Mixed questions with fractions** • **Fraction of an amount** • **Fraction of an amount - find the whole**	***6*** F–1 Recognise when fractions can be simplified, and use common factors to simplify fractions. ***6*** F–2 Express fractions in a common denomination and use this to compare fractions that are similar in value. 6 F–3 Compare fractions with different denominators, including fractions greater than 1, using reasoning, and choose between reasoning and common denomination as a	***Spring 1*** To be able to instantly convert between decimals, fractions

		comparison strategy.	and percentages.
1 week 3	***2 WR Autumn Block 4: Measure – converting Units (caried over)*** ***Small Steps* (suggested only – adapt to the needs of your class)**		
	• **Metric measures** • **Convert metric measures** • **Calculate with metric measures** • **Miles and kilometres** • **Imperial measures**		
2 weeks 4-5	***3 WR Spring Block 1: Ration*** ***Small Steps* (suggested only – adapt to the needs of your class)**		
	•		
2 weeks 6-7	***4 WR Spring block 2: Algebra*** ***Small Steps* (suggested only – adapt to the needs of your class)**		
			Spring 2 To be able to instantly recall prime numbers up to 50.
2 weeks 8-9	***5 WR Spring Block 4: Fractions, decimals and percentages*** ***Small Steps* (suggested only – adapt to the needs of your class)**		
2 weeks 10-11	***5 WR Spring Block 5: Area, perimeter and volume*** ***Small Steps* (suggested only – adapt to the needs of your class)**		
	6 WR Spring Block 6: Statistics		

	***Small Steps* (suggested only – adapt to the needs of your class)**		
	•		
Year 6 Summer term			
3 weeks **1-3**	***1 WR Summer Block 1: Shape*** ***Small Steps* (suggested only – adapt to the needs of your class)**	***Related Ready to Progress Criteria and guidance.*** Maths guidance year 6 (publishing.service.gov.uk)	***Summer 1*** To recall facts for area and perimeter .
		6G–1 Draw, compose, and decompose shapes according to given properties, including dimensions, angles and area, and solve related problems.	
1 week	***2 WR Summer Block 2: Position and Direction*** ***Small Steps* (suggested only – adapt to the needs of your class)**		
	Consolidation		
	Transition work		
Notes			