

Maths Curriculum Teaching Sequence and Guidance September 2023

At Princetown Primary School, we are 'Inspiring Lifelong Learners Our Community' 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:

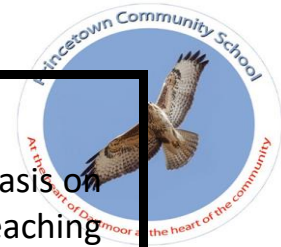
We use The White Rose SOL, with some adaptations to meet the needs of our children) along with the DfE Ready to Progress materials to implement the National Curriculum for Mathematics. Through the use of a range of concrete resources, images and real life links **all** children will :

- 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 Princetown Primary School, 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) have been introduced and are to be learnt half termly to support this. We also use Numbots and TT Rock Stars to promote number fluency.



Mathematics within Princetown Primary School 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 suit the class (discuss with the Maths Lead). 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

Author: Emma Byrom



EYFS

EYFS Autumn

Vocabulary

[Maths Vocab revised \[live\] \(allaboutmaths.com\)](https://www.allaboutmaths.com)

	White Rose Guidance	Mastering Number
	<p>1) WR Getting to know you</p> <p>Microsoft PowerPoint - Reception Scheme Guidance for Teachers and FAQs Autumn 2021 (whiterosemaths.com)</p>	<p>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.</p>
	<p>Settling in</p> <p>The five principles</p> <ul style="list-style-type: none"> • The one-to-one principle • The stable-order principle • The cardinal principle • The abstract principle • The order irrelevance principle 	<p>Pupils will:</p> <ul style="list-style-type: none"> • 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
Phase 1	<p>2) WR Just Like Me</p> <p>Microsoft PowerPoint - Reception Scheme Phase 1 Just Like Me Autumn 2020 (whiterosemaths.com)</p>	<ul style="list-style-type: none"> • spot smaller numbers 'hiding' inside larger numbers



	<p>Number</p> <ul style="list-style-type: none"> • Matching • Sorting • Compare amounts <p>Measure, Shape and Spatial Thinking</p> <ul style="list-style-type: none"> • Compare size, mass, Capacity • Exploring Pattern 	<ul style="list-style-type: none"> • 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
<p>Phase 2</p>	<p>3 WR It's Me 123</p> <p>Microsoft PowerPoint - Reception Scheme Phase 2 123 it's me Autumn 2020 (whiterosemaths.com)</p>	
	<p>Number</p> <ul style="list-style-type: none"> • Representing 1, 2 and 3 • Comparing 1, 2 and 3 • Composition of 1, 2 and 3 	

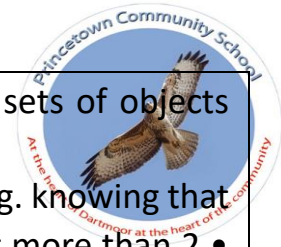
	<p>Measure, Shape and Spatial Thinking</p> <ul style="list-style-type: none"> • Circles and triangles • Positional Language 	
<p>Phase 3</p>	<p>4 WR Light and Dark</p> <p>Microsoft PowerPoint - Reception Scheme Phase 3 Light & Dark Autumn 2020 (whiterosemaths.com)</p>	



	<p>Number</p> <ul style="list-style-type: none"> • Representing numbers to five. • One more and one less <p>Measure, Shape and spatial Thinking</p> <ul style="list-style-type: none"> • Shapes with four sides • Time - Night and Day 	
EYFS Spring		
	White Rose Guidance	Mastering Number
Phase 4	<p>WR Alive in 5!</p> <p>Microsoft PowerPoint - Reception Scheme Phase 4 Spring 2021 (whiterosemaths.com)</p>	<p>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</p>
	<p>Number</p> <ul style="list-style-type: none"> • Introducing 0 • Comparing numbers to 5 • Composition of 4 and 5 <p>Measure, Shape and spatial Thinking</p> <ul style="list-style-type: none"> • Compare mass • Compare capacity 	<p>Pupils will:</p> <ul style="list-style-type: none"> • 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
Phase 5	<p>WR Growing 6,7,8</p> <p>Microsoft PowerPoint - Reception Scheme Phase 5 Spring 2021 (whiterosemaths.com)</p>	<ul style="list-style-type: none"> • sort odd and even numbers according to their 'shape' • continue to develop their understanding of the counting
	<p>Number</p> <ul style="list-style-type: none"> • Numbers 6, 7 and 8 	



	<ul style="list-style-type: none"> Combining 2 amounts Making pairs <p>Measure, Shape and spatial Thinking</p> <ul style="list-style-type: none"> Length and height Time 	<p>sequence and link cardinality and ordinality through the 'staircase' pattern</p> <ul style="list-style-type: none"> order numbers and play track games join in with verbal counts beyond 20, hearing the repeated pattern within the counting numbers
Phase 6	<p>WR Building 9 and 10</p> <p>Microsoft PowerPoint - Reception Scheme Phase 6 Spring 2021 (whiterosemaths.com)</p>	
	<p>Number</p> <ul style="list-style-type: none"> Counting to 9 and 10 Comparing numbers to 10 Number bonds to 10 <p>Measure, Shape and spatial Thinking</p> <ul style="list-style-type: none"> 3d-shapes Patterns 	
EYFS Summer		
	White Rose Guidance	Mastering Number
Phase 7	<p>WR To 20 and beyond</p> <p>Microsoft PowerPoint - Reception Scheme Phase 7 Summer 2021 (whiterosemaths.com)</p>	<p>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.</p>
	<p>Number</p> <ul style="list-style-type: none"> Building numbers beyond 10 Counting patterns beyond <p>Measure, Shape, and spatial Thinking</p> <ul style="list-style-type: none"> Spatial Reasoning 	<p>* continue to develop their counting skills, counting larger sets as well as counting actions and sounds</p> <ul style="list-style-type: none"> explore a range of representations of numbers, including the 10frame, and see how doubles can be arranged in a 10-frame



	<ul style="list-style-type: none"> Match, Rotate, Manipulate 	<ul style="list-style-type: none"> 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	<p>WR First Then Now</p> <p>Microsoft PowerPoint - Reception Scheme Phase 8 Summer 2021 (whiterosemaths.com)</p>	
	Number	

	<ul style="list-style-type: none"> Adding more Taking away <p>Measure, Shape, and spatial Thinking</p> <ul style="list-style-type: none"> Spatial Reasoning 3 Compose and decompose 	<p>numbers within 10</p> <ul style="list-style-type: none"> continue to identify when sets can be subitised and when counting is necessary develop conceptual subitising skills including when using a rekenrek
Phase 9	<p>WR Find My Pattern</p> <p>PowerPoint Presentation (whiterosemaths.com)</p>	
	<p>Number</p> <ul style="list-style-type: none"> Doubling Sharing and Grouping Even and Odd <p>Measure, Shape, and spatial Thinking</p> <ul style="list-style-type: none"> Spatial Reasoning 3 Visualise and Build 	

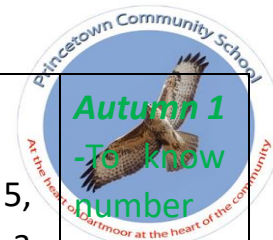


Phase 10	WR On the Move PowerPoint Presentation (whiterosemaths.com)
	Number <ul style="list-style-type: none"> • Deepening understanding • Patterns and Relationships Measure, Shape, and spatial Thinking <ul style="list-style-type: none"> • Spatial Reasoning 4 Mapping

Year 1

- NCETM Year 1 Teaching for Mastery: Questions tasks and activities to support ssession [01-Yr1 Front cover-ccp.indd \(ncetm.org.uk\)](http://01-Yr1_Front_cover-ccp.indd)
- NCETM Y1 Exemplification teaching material: [Exemplification of ready-to-progress criteria | NCETM](#) • Vocabulary [Maths Vocab revised \[live\] \(allaboutmaths.com\)](#)

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 continue to explore the composition of numbers within 10, and the position of these numbers in the linear number system	KIRFS



Autumn 1
-To know
number
bonds for
each
number
to 6.

	<ul style="list-style-type: none"> • <i>Sort objects</i> • <i>Count objects</i> • <i>Count objects from a larger group</i> • <i>Represent objects</i> • <i>Recognise numbers as words</i> • <i>Count on from any number</i> • <i>1 more</i> • <i>Count backwards within 10</i> • <i>1 less</i> • <i>Compare groups by matching</i> • <i>Fewer, more, same</i> • <i>Less than, greater than, equal to</i> • <i>Compare numbers</i> • <i>Order objects and numbers</i> • <i>The number line</i> 	<p>1NPV–1 Count within 100, forwards and backwards, starting with any number. (in relation to the number being worked on)</p> <p>NPV–2 Reason about the location of numbers to 20 within the linear number system, including comparing using $<$ $>$ and $=$ (in relation to the number being worked on)</p>	<p>Pupils will:</p> <ul style="list-style-type: none"> • 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 	
	<p>2- WR Autumn Block 2: Addition and Subtraction within 10</p> <p>Small Steps (suggested only – adapt to the needs of your class.)</p>	<p>Ready to Progress Criteria and Guidance.</p> <p>Maths guidance year 1 (publishing.service.gov.uk)</p>	<ul style="list-style-type: none"> • re-cap the order of numbers within 10 and connect this to ‘1 more’ 	



<p>(5 weeks) 6-10</p>	<ul style="list-style-type: none"> • <i>Introduce parts and wholes</i> • <i>Part-whole model</i> • <i>Write number sentences</i> • <i>Fact families - addition facts</i> • <i>Number bonds within 10</i> • <i>Systematic number bonds within 10</i> • <i>Number bonds to 10</i> • <i>Addition - add together</i> • <i>Addition - add more</i> • <i>Addition problems</i> • <i>Find a part</i> • <i>Subtraction - find a part</i> • <i>Fact families - the eight facts</i> • <i>Subtraction - take away/crossing out (How many left?)</i> • <i>Subtraction - take away (How many left?)</i> • <i>Subtraction on a number line</i> • <i>Add or subtract 1 or 2</i> 	<p>1NF–1 Develop fluency in addition and subtraction facts within 10.</p> <p>1AS–1 Compose numbers to 10 from 2 parts, and partition numbers to 10 into parts, including recognising odd and even numbers.</p> <p>1AS–2 Read, write and interpret equations containing addition (+), subtraction (-) and equals (=) symbols, and relate additive expressions and equations to real-life contexts.</p>	<p>and ‘1 less’ than a given number</p> <p>*explore the structure of even numbers (including that even numbers can be composed by doubling any number, and can be composed of 2s)</p> <ul style="list-style-type: none"> • 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
	<p>3- WR Autumn Block 3: Shape Small Steps (suggested only – adapt to the needs of your class.)</p>	<p>Ready to Progress Criteria and guidance</p> <p>Maths guidance year 1 (publishing.service.gov.uk)</p>	<ul style="list-style-type: none"> • explore number tracks and number lines and

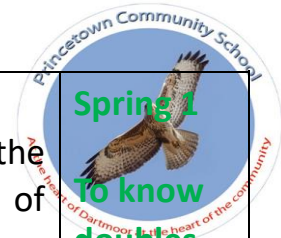
Autumn - 2 To count forwards and back in 2s, 5s and 10s.



<p>(1 week) 11</p>	<ul style="list-style-type: none"> • <i>Recognise and name 3-D shapes</i> • <i>Sort 3-D shapes</i> • <i>Recognise and name 2-D shapes</i> • <i>Sort 2-D shapes</i> • <i>Patterns with 2-D and 3-D shapes</i> 	<p>1G–1 Recognise common 2D and 3D shapes presented in different orientations, and know that rectangles, triangles, cuboids and pyramids are</p>	<p>identify the differences between them</p>	
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		<p>not always similar to one another.</p> <p>1G–2 Compose 2D and 3D shapes from smaller shapes to match an example, including manipulating shapes to place them in particular orientations.</p>		
<p>(1 week) 12</p>	<p>Consolidation</p>			

<p>Year 1 Spring Term</p>				
<p>3 weeks 1-3</p>	<p>1- WR Spring Block 1: Place Value (Within 20) Small Steps (suggested only – adapt to the needs of your class.)</p>	<p>Ready to Progress Criteria Maths guidance year 1 (publishing.service.gov.uk)</p>	<p>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).</p>	<p>KIRFS</p>



Spring 1
To know
doubles
and
halves to
number
to 10.

	<ul style="list-style-type: none"> • Count within 20 • Understand 10 • Understand 11, 12 and 13 • Understand 14, 15 and 16 • Understand 17, 18 and 19 • Understand 20 • 1 more and 1 less • The number line to 20 • Use a number line to 20 	<p>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 $=$</p>	<p>Pupils will:</p> <ul style="list-style-type: none"> • 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 	
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	<ul style="list-style-type: none"> • Estimate on a number line to 20 • Compare numbers to 20 • Order numbers to 20 	<p>(in relation to the number being worked on)</p>	<p>or two even parts, and that odd numbers can be composed of one odd part and one even part</p>	
<p>3 weeks 4-6</p>	<p>2- WR Spring Block 2: Addition and Subtraction Small Steps (suggested only – adapt to the needs of your class.)</p>	<p>Ready to Progress Criteria and guidance Maths guidance year 1 (publishing.service.gov.uk)</p>	<ul style="list-style-type: none"> • identify the number that is two more or two less than a given 	



Spring 2
To know
number
bonds to
10

	<ul style="list-style-type: none"> • Add by counting on within 20 • Add ones using number bonds • Find and make number bonds to 20 • Doubles Step 5 Near doubles • Subtract ones using number bond • Subtraction – counting back Step 8 • Subtraction – finding the difference • Related facts • Missing number problems 	<p>1NF–1 Develop fluency in addition and subtraction facts within 10.</p> <p>1AS–1 Compose numbers to 10 from 2 parts, and partition numbers to 10 into parts, including recognising odd and even numbers.</p> <p>1AS–2 Read, write and interpret equations containing addition (), subtraction () and equals () symbols, and relate additive expressions and equations to real-life contexts.</p>	<p>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</p> <ul style="list-style-type: none"> • 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 	
<p>2 weeks 7-8</p>	<p>3- WR Spring Block 3: Place Value (within 50) Small Steps (suggested only – adapt to the needs of your class.)</p>	<p>Ready to Progress Criteria and guidance Maths guidance year 1</p>		

		<p>publishing.service.gov.uk</p>		
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	<ul style="list-style-type: none"> • Count from 20 to 50 • 20, 30, 40 and 50 • Count by making groups of tens • Groups of tens and ones Step 5 Partition into tens and ones • The number line to 50 • Estimate on a number line to 50 Step 8 1 more, 1 less 	<p>1NPV–1 Count within 100, forwards and backwards, starting with any number. (in relation to the number being worked on)</p> <p>NPV–2 Reason about the location of numbers to 20 within the linear number system, including comparing using $<$ $>$ and $=$ (in relation to the number being worked on)</p>	<ul style="list-style-type: none"> • explore the augmentation and reduction structures of addition and reduction using number stories, 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.)		
	<ul style="list-style-type: none"> • Compare lengths and heights • Measure length using objects • Measure length in centimetres 		
2 weeks 11-12	5- WR Spring Block 5: Measure – Mass and volume Small Steps (suggested only – adapt to the needs of your class.)		



	<ul style="list-style-type: none"> • <i>Heavier and lighter</i> • <i>Measure and mass</i> • <i>Compare mass</i> • <i>Full and empty</i> • <i>Compare volume</i> 			
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	<ul style="list-style-type: none"> • <i>Compare capacity</i> 			
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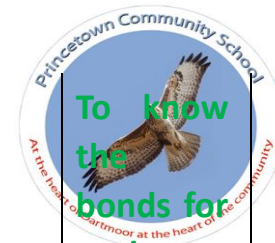
Year 1 Summer Term				
3 weeks 1-3	<p>1- WR Summer Block 1: Multiplication and division</p> <p>Small Steps (suggested only – adapt to the needs of your class.)</p>	<p>Ready to Progress Criteria and guidance</p> <p>Maths guidance year 1 (publishing.service.gov.uk)</p>	<p>Mastering Number</p> <p>Pupils 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’.</p>	KIRFS
	<ul style="list-style-type: none"> • <i>Count in 2s</i> • <i>Count in 10s</i> • <i>Count in 5s</i> • <i>Recognise equal groups</i> • <i>Add equal groups</i> • <i>Make arrays</i> • <i>Make doubles</i> • <i>Make equal groups – grouping</i> 	<p>1NF–2 Count forwards and backwards in multiples of 2, 5 and 10, up to 10 multiples, beginning with any multiple, and count forwards and backwards through the odd numbers.</p>	<p>Pupils will:</p> <ul style="list-style-type: none"> • explore the composition of the numbers 11 to 19 as ‘10 and a bit’ and compare numbers within 20 	<p>Summer 1</p> <p>To be able to tell the time to the nearest hour. To</p>



be able to tell the time to the nearest half hour.

2 weeks 4-5	<p>2- WR Summer Block 2: Fractions Small Steps (suggested only – adapt to the needs of your class.)</p>		<ul style="list-style-type: none"> 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 understand how addition and subtraction 	
	<ul style="list-style-type: none"> Recognise a half of an object or a shape Find a half of an object or a shape Recognise a half of a quantity Find a half of a quantity Recognise a quarter of an object or a shape Find a quarter of an object or a shape Recognise a quarter of a quantity Find a quarter of a quantity 			

1 week 6	<p>3- WR Summer Block 3: Geometry – Position and Direction Small Steps (suggested only – adapt to the needs of your class.)</p>		<p>equations can represent previously explored structures of addition and subtraction (aggregation/ partitioning/ augmentation/ reduction)</p> <ul style="list-style-type: none"> practise retrieving previously taught facts and reason about these 	
	<ul style="list-style-type: none"> Describe turns Describe position – left and right Describe position – forwards and backwards Describe position – above and below Ordinal numbers 			
2 weeks 7-8	<p>4- WR Summer Block 4: Place Value (Within 100) Small Steps (suggested only – adapt to the needs of your class.)</p>	<p>Ready to Progress Criteria and guidance Maths guidance year 1 publishing.service.gov.uk</p>		<p>Summer 2</p>



To know
the
bonds for
each
number
to 10.

	<ul style="list-style-type: none"> • Count from 50 to 100 • Tens to 100 • Partition into tens and ones • The number line to 100 Step 5 1 more, 1 less • Compare numbers with the same number of tens Compare any two number 	<p>1NPV–1 Count within 100, forwards and backwards, starting with any number. (in relation to the number being worked on)</p> <p>NPV–2 Reason about the location of numbers to 20 within the linear number system, including comparing using $<$ $>$ and $=$ (in relation to the number being worked on)</p>		
1 week 9	<p>5-WR Summer Block 5: Measurement-Money Small Steps (suggested only – adapt to the needs of your class.)</p>			

	<ul style="list-style-type: none"> • Unitising • Recognise coins • Recognise notes • Count in coins 			
2 weeks 10-11	<p>5-WR Summer Block 6: Measurement- Time Small Steps (suggested only – adapt to the needs of your class.)</p>			



	<ul style="list-style-type: none"> • Before and after • Days of the week • Months of the year • Hours, minutes and seconds • Tell the time to the hour • Tell the time to the half hour 	
1 week 12	Consolidation	

Notes

Year 2

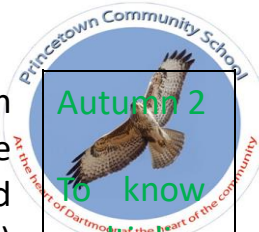
- NCETM Year 2 Teaching for Mastery: Questions tasks and activities to support assessment [01-Yr2 Front cover-ccp.indd \(ncetm.org.uk\)](https://www.ncetm.org.uk/01-Yr2_Front_cover-ccp.indd)
- NCETM Y2 Exemplification teaching material: [Exemplification of ready-to-progress criteria | NCETM](#)
- Y2 Vocabulary [Maths Vocabulary](#) [Maths Vocab revised \[live\] \(allaboutmaths.com\)](#)

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
	<ul style="list-style-type: none"> • Numbers to 20 • Count objects to 100 by making 10s • Recognise tens and ones 	NPV–1 Recognise the place value of each digit in two-digit numbers, and compose and decompose	Pupils will have an opportunity to consolidate their understanding and recall of number bonds within 10; they will re-cap the composition of	Spring 1 To know number



	<ul style="list-style-type: none"> • 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 • Estimate numbers on a number line • Compare objects • Compare numbers • Order objects and numbers • Count in 2s, 5s and 10s • Count in 3s 	<p>two-digit numbers using standard and nonstandard partitioning.</p> <p>2NPV–2 Reason about the location of any two digit number in the linear number system, including identifying the previous and next multiple of 10.</p>	<p>the numbers 11 to 20 and reason about their position within the linear number system.</p> <p>Pupils will:</p> <ul style="list-style-type: none"> • review the composition of the numbers 6 to 9 as ‘5 and a bit’ • compare numbers using the language of comparison and use the symbols < > = 	
<p>5 weeks 5-9</p>	<p>2- WR Autumn Block 2: Addition and Subtraction Small Steps (suggested only – adapt to the needs of your class.)</p>	<p>Ready to Progress Criteria and guidance. Mathematics guidance: year 2 (publishing.service.gov.uk)</p>	<ul style="list-style-type: none"> • review the structure of even numbers (including 	



Autumn 2
To know
multiplication and
division
facts for
the 2x
tables.

	<ul style="list-style-type: none">• 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	<p>2NF–1 Secure fluency in addition and subtraction facts within 10, through continued practice.</p> <p>2AS–1 Add and subtract across 10.</p> <p>2AS–2 Recognise the subtraction structure of ‘difference’ and answer questions of the form,</p>	<p>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</p> <ul style="list-style-type: none">• review the structure of odd numbers (including exploring how odd numbers can be composed of one odd part and one even part)	
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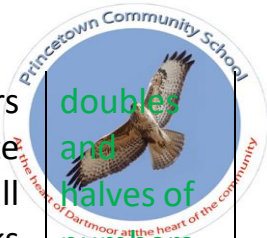
	<ul style="list-style-type: none"> • Subtract a 1-digit number from a 2-digit number • (across a 10) • 10 more, 10 less • Add and subtract 10s • Add two 2-digit numbers (not across a 10) • Add two 2-digit numbers (across a 10) • Subtract two 2-digit numbers (not across a 10) • Subtract two 2-digit numbers (across a 10) • Mixed addition and subtraction • Compare number sentences • Missing number problems 	<p>“How many more...?”.</p> <p>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 twodigit number.</p> <p>4AS–4 Add and subtract within 100 by applying related one-digit addition and subtraction facts: add and subtract any 2 twodigit numbers.</p>	<p>and the composition of each of 7 and 9</p> <ul style="list-style-type: none"> • consolidate their understanding of the numbers 10 and 20 as ‘10 and a bit’ • consolidate their understanding of the linear number system to 20 and reason about midpoints 	
<p>3 weeks 10-12</p>	<p>3- WR Autumn Block 3: Shape Small Steps (suggested only – adapt to the needs of your class.)</p>	<p>Ready to Progress Criteria and guidance. Mathematics guidance: year 2 (publishing.service.gov.uk)</p>		



	<ul style="list-style-type: none"> • 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 	<p>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.</p>		
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	<ul style="list-style-type: none"> • Sort 3-D shapes • Make patterns with 2-D and 3-D shapes 			
	<ul style="list-style-type: none"> • 			


<p>Year 2 Spring Term</p>			<p>Mastering Number</p>	<p>KIRFS</p>
<p>2 weeks 1-2</p>	<p>1- WR Spring Block 1: Measurement - Money Small Steps (suggested only – adapt to the needs of your class.)</p>		<p>Pupils will have an opportunity to use their knowledge of the</p>	<p>Spring 1 To know</p>



doubles
and
halves of
numbers
to 20.

	<ul style="list-style-type: none"> • Count money – pence • Count money – pounds (notes and coins) • Count money – pounds and pence • Choose notes and coins • Make the same amount • Compare amounts of money • Calculate with money Step 8 Make a pound • Find change • Two-step problem 		<p>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.</p>
5 weeks 3-7	<p>2- WR Spring Block 2: Multiplication and Division Small Steps (suggested only – adapt to the needs of your class.)</p>	<p>Ready to Progress Criteria and guidance. Mathematics guidance: year 2 (publishing.service.gov.uk)</p>	<p>Pupils will:</p> <ul style="list-style-type: none"> • 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
	<ul style="list-style-type: none"> • Recognise equal groups • Make equal groups • Add equal groups • Introduce the multiplication symbol • Multiplication sentences • Use arrays • Make equal groups – grouping 	<p>2MD–1 Recognise repeated addition contexts, representing them with multiplication equations and calculating the product, within the 2,</p>	



	<ul style="list-style-type: none"> • Make equal groups – sharing • The 2 times-table • Divide by 2 • Doubling and halving • Odd and even numbers • The 10 times-table • Divide by 10 Step 15 The 5 times-table • Divide by 5 • The 5 and 10 times-tables 	<p>5 and 10 multiplication tables.</p> <p>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).</p>	<p>reason about bonds of 20, in which the given addend is greater than 10</p> <ul style="list-style-type: none"> • use known number bonds within 10 to calculate within 20, working within the 10boundary • 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 	
2 weeks 8-9	<p>3- WR Spring Block 3: Measurement-Length and Height</p> <p>Small Steps (suggested only – adapt to the needs of your class.)</p>			
	<ul style="list-style-type: none"> • Measure in centimetres • Measure in metres • Compare lengths and heights • Order lengths and heights • Four operations with lengths and heights 			
2 weeks 10-12	<p>4- WR Spring Block 3: Mass, Capacity and Temperature</p> <p>Small Steps (suggested only – adapt to the needs of your class.)</p>			
				<p>Spring 2 To know multiplication and division facts for the 10 times table.</p>



	<ul style="list-style-type: none">• <i>Compare mass</i>• <i>Measure in grams</i>• <i>Measure in kilograms</i>• <i>Four operations with mass</i>• <i>Compare volume and capacity</i>			
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	<ul style="list-style-type: none">• <i>Measure in millilitres</i>• <i>Measure in litres</i>• <i>Four operations with volume and capacity</i> <p><i>Temperature</i></p>			
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Year 2	Summer Term			
			Mastering Number	KIRFS



<p>3 weeks 1-3</p>	<p>1- WR Summer Block 1: Fractions Small Steps suggested only – adapt to the needs of your class)</p> <ul style="list-style-type: none"> • <i>Introduction to parts and whole</i> • <i>Equal and unequal parts</i> • <i>Recognise a half</i> • <i>Find a half</i> • <i>Recognise a quarter</i> • <i>Find a quarter</i> • <i>Recognise a third</i> • <i>Find a third</i> • <i>Find the whole</i> • <i>Unit fractions</i> • <i>Non-unit fractions</i> • <i>Recognise the equivalence of a half and twoquarters</i> • <i>Recognise three-quarters</i> • <i>Find three-quarters</i> • <i>Count in fractions up to a whole</i> 		<p>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.</p> <p>Pupils will:</p> <ul style="list-style-type: none"> • continue to explore a range of strategies to subtract across the 10boundary • 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 	<p>Summer 1 To be able to recall multiplication and division facts for the 5 times table</p>
<p>3 weeks 4-6</p>	<p>2- WR Summer Block 2: Time Small Steps suggested only – adapt to the needs of your class.)</p>		<p>To be able to</p>	<p>Summer 1 To be able to</p>



	<ul style="list-style-type: none"> • <i>O'clock and half past</i> • <i>Quarter past and quarter to</i> • <i>Tell the time past the hour</i> • <i>Tell the time to the hour Step 5 Tell the time to 5 minutes</i> • <i>Minutes in an hour</i> • <i>Hours in a day</i> 		<p>about inequalities and equations</p> <ul style="list-style-type: none"> • 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 	<p>tell the time to the nearest hour.</p> <p>To be able to tell the time to the nearest half hour.</p> <p>To be able to tell the time to the nearest quarter hour.</p> <p>To be able to tell the time to the nearest 5 minutes.</p>
2 weeks 7-8	3- WR Summer Block 3: Statistics Small Steps suggested only – adapt to the needs of your class.)			
	<ul style="list-style-type: none"> • <i>Make tally charts Step 2 Tables</i> • <i>Block diagrams Step 4 Draw pictograms (1–1) Interpret pictograms (1–1)</i> • <i>Draw pictograms (2, 5 and 10)</i> • <i>Interpret pictograms (2, 5 and 10)</i> 			
2 weeks 9-10	4- WR Summer Block 4: Position and direction Small Steps suggested only – adapt to the needs of your class.)			
	<ul style="list-style-type: none"> • <i>Language of position</i> • <i>Describe movement</i> • <i>Describe turns</i> • <i>Describe movement and turns</i> • <i>Shape patterns with turn</i> 			
2 weeks 11-12	Consolidation			



Notes

Year 3

- NCETM Year 3 Teaching for Mastery: Questions tasks and activities to support assessment. [01-Yr3 Front cover-ccp.indd \(ncetm.org.uk\)](#)
- NCETM Y3 Exemplification teaching resources: [Exemplification of ready-to-progress criteria | NCETM](#) • [Vocabulary Maths Vocab revised \[live\] \(allaboutmaths.com\)](#)

Year 3

Autumn Term

3 weeks
1-3

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 3 \(publishing.service.gov.uk\)](#)

KIRFS

- **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**

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



	<ul style="list-style-type: none">• Count in 50s		
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)	





<p>4 weeks 9-12</p>	<p>3- WR Autumn Block 3: multiplication and Division Small Steps (suggested only – adapt to the needs of your class.)</p>	<p>Ready to Progress Criteria and Guidance Mathematics guidance: year 3 (publishing.service.gov.uk)</p>	<p>Autumn 2 To know multiplication and division</p>
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	<ul style="list-style-type: none"> • Multiplication - equal groups • Use arrays • Multiples of 2 • Multiples of 5 and 10 • Sharing and grouping • 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 	<p>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.</p> <p>3NF–3 Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 10).</p> <p>3MD–1 Apply known multiplication and division facts to solve contextual problems with different structures, including quotitive and partitive division.</p>	<p>facts for 3x tables.</p>
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<p>Year 3</p>	<p>Spring Term</p>		
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<p>3 weeks 1-3</p>	<p>1- WR Spring Block 1: Multiplication and Division Small Steps (suggested only – adapt to the needs of your class.)</p>	<p>Ready to Progress Criteria and Guidance Mathematics guidance: year 3 (publishing.service.gov.uk)</p>	<p>KIRFS</p>
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Spring 1
 To be able
 to recall
 facts
 about
 duration
 of time.

	<ul style="list-style-type: none"> • Multiples of 10 • Related calculations • Reasoning about multiplication • Multiply a 2-digit number by a 1-digit number – no exchange • Multiply a 2-digit number by a 1-digit number – with exchange • Link multiplication and division • Divide a 2-digit number by a 1-digit number – 	<p>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.</p> <p>3NF–3 Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 10).</p> <p>3MD–1 Apply known multiplication and division facts to solve contextual problems with different structures, including quotitive and partitive division.</p>	
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	<p><i>no exchange</i></p> <ul style="list-style-type: none"> • Divide a 2-digit number by a 1-digit number – flexible partitioning • Divide a 2-digit number by a 1-digit number – with remainders • Scaling • How many ways? 		
<p>3 weeks 4-6</p>	<p>2-WR Spring Block 2: Measurement-Length and perimeter Small Steps (suggested only – adapt to the needs of your class.)</p>		



	<ul style="list-style-type: none"> • <i>Measure in metres and centimetres</i> • <i>Measure in millimetres</i> • <i>Measure in centimetres and millimetres</i> • <i>Metres, centimetres and millimetres</i> • <i>Equivalent lengths (metres and centimetres)</i> • <i>Equivalent lengths (centimetres and millimetres)</i> • <i>Compare lengths Step 8 Add lengths</i> • <i>Subtract lengths Step 10 What is perimeter? Step 11 Measure perimeter Step 12 Calculate perimeter</i> 		
<p>3 weeks 7-9</p>	<p>3-WR Spring Block 3: Fractions Small Steps (suggested only – adapt to the needs of your class.)</p>	<p>Ready to Progress Criteria and Guidance Mathematics guidance: year 3 (publishing.service.gov.uk)</p>	<p>KIRFS</p>
	<ul style="list-style-type: none"> • <i>Understand the denominators of unit fractions</i> • <i>Compare and order unit fractions</i> • <i>Understand the numerators of non-unit</i> 	<p>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</p>	<p>Spring 2 To be able to recall multiplica</p>
	<p><i>fractions Step 4 Understand the whole</i></p> <ul style="list-style-type: none"> • <i>Compare and order non-unit fractions</i> • <i>Fractions and scales</i> • <i>Fractions on a number line</i> • <i>Count in fractions on a number line</i> • <i>Equivalent fractions on a number line</i> • <i>Equivalent fractions as bar models</i> 	<p>facts (multiplication tables fluency).</p> <p>3F–3 Reason about the location of any fraction within 1 in the linear number system.</p> <p>F–4 Add and subtract fractions with the same denominator, within 1.</p>	<p>tion and division facts for the 4 times table.</p>



2 weeks 10-12	4-WR Spring Block 4: Measurement-Mass and capacity <i>Small Steps (suggested only – adapt to the needs of your class.)</i>		
	<ul style="list-style-type: none"> • Use scales • Measure mass in grams • Measure mass in kilograms and grams <i>Equivalent masses (kilograms and grams)</i> • Compare mass • Add and subtract mass • Measure capacity and volume in millilitres • Measure capacity and volume in litres and millilitres • Equivalent capacities and volumes (litres and millilitres) • Compare capacity and volume • Add and subtract capacity and volume 		
Year 3 Summer Term			
2 weeks 1-2	1-WR Summer Block 1: Fractions <i>Small Steps (suggested only – adapt to the needs of your class.)</i>	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 table.

	<ul style="list-style-type: none"> • Add fractions • Subtract fractions • Partition the whole • Unit fractions of a set of objects • Non-unit fractions of a set of objects • Reasoning with fractions of an amount 	<p>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).</p> <p>3F-2 Find unit fractions of quantities using known division facts (multiplication tables fluency).</p> <p>3F-3 Reason about the location of any fraction within 1 in the linear number system.</p> <p>F-4 Add and subtract fractions with the same denominator, within 1.</p>
<p>2 weeks 3-4</p>	<p>2-WR Summer Block 2: Measurement-Money Small Steps (suggested only – adapt to the needs of your class.)</p>	
	<ul style="list-style-type: none"> • Pounds and pence • Convert pounds and pence • Add money Step 4 Subtract money • Find change 	
<p>3 weeks 5-7</p>	<p>3-WR Summer Block 3: Measurement Time Small Steps (suggested only – adapt to the needs of your class.)</p>	

Summer 2



To be able to tell the time to the nearest hour. To be able to tell the

	<ul style="list-style-type: none"> • Roman numerals to 12 • Tell the time to 5 minutes • Tell the time to the minute • Read time on a digital clock • Use am and pm • Years, months and days Step 7 Days and hours • Hours and minutes – use start and end times 		
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	<ul style="list-style-type: none"> • Hours and minutes - use durations • Minutes and seconds • Units of time • Solve problems with time 		<p>time to the nearest half hour.</p>
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<p>2 weeks 8-9</p>	<p>4-WR Summer Block 4: Shape Small Steps (suggested only – adapt to the needs of your class.)</p>	<p>Ready to Progress Criteria and Guidance Mathematics guidance: year 3 (publishing.service.gov.uk)</p>	<p>To be able to tell the time to the</p>
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	<ul style="list-style-type: none"> • Turns and angles • Right angles • Compare angles • Measure and draw accurately • Horizontal and vertical • Parallel and perpendicular • Recognise and describe 2-D shapes • Draw polygons • Recognise and describe 3-D shapes 	<p>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.</p> <p>G–2 Draw polygons by joining marked points, and identify parallel and perpendicular sides.</p>	<p>nearest quarter hour. To be able to tell the time to the nearest 5 minutes.</p>
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	<ul style="list-style-type: none"> • Make 3-D shapes 	
	53-WR Summer Block 5: Statistics Small Steps (suggested only – adapt to the needs of your class.)	
	Consolidation	

Notes

Year 4

- NCETM Year 4 Teaching for Mastery: Questions tasks and activities to support assessment: [01-Yr4 Front cover-Final.indd](#) (ncetm.org.uk)
- **NCETM Y4 Exemplification teaching resources:** [Exemplification of ready-to-progress criteria | NCETM](#) • **Vocabulary** [Maths Vocab revised \[live\] \(allaboutmaths.com\)](#)

Year 4 Autumn term

4 weeks	1 – WR Autumn Block 1: Place Value – including	Ready to Progress Criteria and guidance Mathematics	KIRFS
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<p>1-4</p>	<p><i>decimals</i> Small Steps (suggested only – adapt to the needs of your class)</p>	<p>guidance: year 4 (publishing.service.gov.uk)</p>
	<ul style="list-style-type: none"> • 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 • 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 	<p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p>
<p>1 week 5</p>	<p><i>Introduce place value of decimals</i> 2 - WR Spring Block 4 – Decimals – only progress to decimals if ready -discuss with ML Small Steps (suggested only – adapt to the needs of your class)</p>	

Autumn 1
 To know number bonds to 100.



	<p>Decimals (WR Spring 4)</p> <ul style="list-style-type: none"> • Recognise tenths and hundredths • Tenths as decimals 		
	<ul style="list-style-type: none"> • Tenths on a place value grid • Tenths on a number line • 		
<p>3 weeks 6-8</p>	<p>Autumn WR Block 2: Number –Addition and Subtraction 3wks Small Steps (suggested only – adapt to the needs of your class)</p>	<p>Ready to Progress Criteria and guidance Mathematics guidance: year 4 (publishing.service.gov.uk)</p>	
	<ul style="list-style-type: none"> • 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 	<p>NF–3 Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 100)</p>	<p>Autumn 2 To be able to recall the multiplication and division facts for the 6 times table.</p>



1 week 9	1- WR Autumn Block 3: Measure – Area (carried over) Small Steps (suggested only – adapt to the needs of your class)		
	<ul style="list-style-type: none"> • What is area? • Counting squares • Make shapes • Compare area 		
3 weeks 10-12	2- WR Autumn Block 4: Number – multiplication and Division	Ready to Progress Criteria and guidance Mathematics guidance: year 4 (publishing.service.gov.uk)	
	Small Steps (suggested only – adapt to the needs of your class)		



	<ul style="list-style-type: none"> • 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 	<p>4NF–1 Recall multiplication and division facts up to , and recognise products in multiplication tables as multiples of the corresponding number.</p> <p>4NF–2 Solve division problems, with two-digit dividends and one-digit divisors, that involve remainders, and interpret remainders appropriately according to the context.</p> <p>4 NF–3 Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 100)</p> <p>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.</p> <p>4 MD–2 Manipulate multiplication and division equations, and understand and apply the commutative property of multiplication.</p> <p>4 MD–3 Understand and apply the distributive property of multiplication.</p>	
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Year 4 Spring Term			
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3 weeks 1-3	<p>3 <i>WR Spring Block 1: multiplication and Division</i></p> <p>4 <i>Small Steps (suggested only – adapt to the needs of your class)</i></p>	<p>Ready to Progress Criteria and guidance</p> <p>Mathematics guidance: year 4 (publishing.service.gov.uk)</p>	KIR FS
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	<ul style="list-style-type: none"> • Factor pairs • Use factor pairs • Multiply by 10 • Multiply by 100 	<p>4NF–1 Recall multiplication and division facts up to , and recognise products in multiplication tables as multiples of the corresponding number.</p> <p>4NF–2 Solve division problems, with two-</p>	Spring 1 To be able to recall multiplica
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tion and
division
facts for
the 9 and
11 times
tables.

	<ul style="list-style-type: none"> • Divide by 10 • Divide by 100 • Related facts – multiplication and division • Informal written methods for multiplication • Multiply a 2-digit number by a 1-digit number • Multiply a 3-digit number by a 1-digit number • Divide a 2-digit number by a 1-digit number (1) • Divide a 2-digit number by a 1-digit number (2) • Divide a 3-digit number by a 1-digit number • Correspondence problems • Efficient multiplication 	<p>digit dividends and one-digit divisors, that involve remainders, and interpret remainders appropriately according to the context.</p> <p>4 NF–3 Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 100)</p> <p>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.</p> <p>4 MD–2 Manipulate multiplication and division equations, and understand and apply the commutative property of multiplication.</p> <p>4 MD–3 Understand and apply the distributive property of multiplication.</p>	
<p>2 weeks 4-5</p>	<p>4-WR Spring Block 2: Length and perimeter 2wks Small Steps (suggested only – adapt to the needs of your class)</p>		



	<ul style="list-style-type: none"> • <i>Measure in kilometres and metres</i> • <i>Equivalent lengths (kilometres and metres)</i> • <i>Step 3 Perimeter on a grid</i> • <i>Perimeter of a rectangle</i> • <i>Perimeter of rectilinear shapes</i> • <i>Find missing lengths in rectilinear shapes</i> • <i>Calculate perimeter of rectilinear shapes</i> • <i>Perimeter of regular polygons</i> • <i>Perimeter of polygons</i> 		
<p>4 weeks 6-9</p>	<p>5-WR Spring Block 3: Fractions Small Steps (suggested only – adapt to the</p>	<p>Ready to Progress Criteria and guidance Mathematics guidance: year 4 (publishing.service.gov.uk)</p>	<p>KIRFS</p>
	<p>needs of your class)</p>		



Spring 2
 To be able to recall multiplication and division facts for the 7 times tables.

	<ul style="list-style-type: none"> • Understand the whole • Count beyond 1 • Partition a mixed number • Number lines with mixed numbers • Compare and order mixed numbers • Understand improper fractions • Convert mixed numbers to improper fractions • Convert improper fractions to mixed numbers • Equivalent fractions on a number line • Equivalent fraction families • Add two or more fractions • Add fractions and mixed numbers • Subtract two fractions • Subtract from whole amounts • Subtract from mixed numbers 	<p>4F-1 Reason about the location of mixed numbers in the linear number system.</p> <p>4F-2 Convert mixed numbers to improper fractions and vice versa.</p> <p>4F-3 Add and subtract improper and mixed fractions with the same denominator, including bridging whole numbers.</p>	
<p>2 weeks 10-11</p>	<p>2 - WR Spring Block 4 – Decimals – Some may have been covered in Aut 1</p> <ul style="list-style-type: none"> • Small Steps (suggested only – adapt to the needs of your class) 		



	<ul style="list-style-type: none"> • <i>Tenths as fractions</i> • <i>Tenths as decimals</i> • <i>Tenths on a place value chart</i> • <i>Tenths on a number line</i> • <i>Divide a 1-digit number by 10</i> • <i>Divide a 2-digit number by 10</i> • <i>Hundredths as fractions</i> • <i>Hundredths as decimals</i> 		
	<ul style="list-style-type: none"> • <i>Hundredths on a place value chart</i> • <i>Divide a 1- or 2-digit number by 100</i> 		
1 week 12	<i>Consolidation</i>		
Year 4 Summer Term			
2 weeks Summer 1-2	<p><i>1-WR Summer : Block 1 Decimals B</i></p> <p><i>Small Steps (suggested only – adapt to the needs of your class)</i></p> <p>Consolidate decimals</p>	<p><i>Ready to Progress Criteria and guidance</i> Mathematics guidance: year 4 (publishing.service.gov.uk)</p>	KIRFS



	<ul style="list-style-type: none"> • <i>Make a whole with tenths</i> • <i>Make a whole with hundredths</i> • <i>Partition decimals</i> • <i>Flexibly partition decimals</i> • <i>Compare decimals</i> • <i>Order decimals</i> • <i>Round to the nearest whole number</i> • <i>Halves and quarters as decimals</i> 		<p>Summer 1 To recognise decimal equivalents of fractions.</p>
2 weeks 3-4	2-WR Summer Block2: Measurement - Money Small Steps (suggested only – adapt to the needs of your class)		
	<ul style="list-style-type: none"> • <i>Write money using decimals</i> • <i>Convert between pounds and pence</i> • <i>Compare amounts of money</i> • <i>Estimate with money</i> • <i>Calculate with money</i> • <i>Solve problems with money</i> 		
2 weeks	3-WR Summer Block 3 Measurement - Time		
5-6	Small Steps (suggested only – adapt to the needs of your class)		
	<ul style="list-style-type: none"> • <i>Years, months, weeks and days</i> • <i>Hours, minutes and seconds</i> • <i>Convert between analogue and digital times</i> • <i>Convert to the 24-hour clock</i> • <i>Convert from the 24-hour clock</i> 		<p>Summer 2 To be able to multiply</p>



and divide
single
digits by
10 and
100.

	Consolidation	
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 4 (publishing.service.gov.uk)
	<ul style="list-style-type: none"> • Understand angles as turns • Identify angles • Compare and order angles • Triangles • Quadrilaterals • Polygons • Lines of symmetry • Complete a symmetric figure 	<p>4G–1 Draw polygons, specified by coordinates in the first quadrant, and translate within the first quadrant.</p> <p>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.</p> <p>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.</p>
10	5-WR Summer Block 5: Statistics Small Steps (suggested only – adapt to the needs of your class)	•
	<ul style="list-style-type: none"> • Interpret charts • Comparison, sum and difference • Interpret line graphs • Draw line graphs 	
2 weeks	6-WR Summer Block 6: Position and Direction	
11-12	Small Steps (suggested only – adapt to the needs of your class)	



- *Describe position using coordinates*
- *Plot coordinates*
- *Draw 2-D shapes on a grid*
- *Translate on a grid*
- *Describe translation on a gri*

Notes

Year 5

- NCETM Year 5 Teaching for Mastery: Questions tasks and activities to support assessment [01-Yr5 Front cover-ccp.indd \(ncetm.org.uk\)](#) • **NCETM Y5 Exemplification teaching resources:** [Exemplification of ready-to-progress criteria | NCETM](#) • **Vocabulary** [Maths Vocab revised \[live\] \(allaboutmaths.com\)](#)

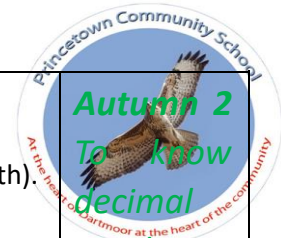
Year 5 Autumn Term

<p>3weeks 1-3</p>	<p><i>1- WR Autumn Block 1: Place Value (including decimals)</i> <i>Small Steps (suggested only – adapt to the needs of your class)</i></p>	<p>Related Ready to Progress Criteria and guidance. Mathematics guidance: year 5 (publishing.service.gov.uk)</p>	<p>KIRFS</p>
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	<ul style="list-style-type: none"> • Roman numerals to 1,000 • Numbers to 10,000 • Numbers to 100,000 • Numbers to 1,000,000 • 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 	<p>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.</p> <p>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.</p>	<p>Autumn 1 To be able to recall all multiplication and division for all table up</p>
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	<ul style="list-style-type: none"> • Round to the nearest 10, 100 or 1,000 • Round within 100,000 • Round within 1,000,000 		<p>to 12 x 12.</p>
<p>1 weeks 4</p>	<p>2-WR Spring Block 3 – Decimals <i>Small Steps</i> (suggested only – adapt to the needs of your class)</p>	<p>Related Ready to Progress Criteria and guidance. Mathematics guidance: year 5 (publishing.service.gov.uk)</p>	
	<ul style="list-style-type: none"> • Decimals up to 2 d.p. Introduced 		
<p>2 weeks 5-6</p>	<p>3-Autumn Block 2: Number – addition and subtraction <i>Small Steps</i> (suggested only – adapt to the needs of your class)</p>		<p>KIRFS</p>



Autumn 2
 To know
 decimal
 number
 bonds to 1
 and 10.

	<ul style="list-style-type: none"> • Mental strategies • Add whole numbers with more than four digits • Subtract whole numbers with more than four digits • Round to check answers • Inverse operations (addition and subtraction) • Multi-step addition and subtraction problems • Compare calculations • Find missing numbers • 	<p>5NF–2 Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 1 tenth or 1 hundredth).</p>	
<p>2 weeks 7-8</p>	<p>4-WR Summer 3 addition and subtraction of decimals <i>Small Steps (suggested only – adapt to the needs of your class)</i></p>		
	<ul style="list-style-type: none"> • Adding decimals within 1 		



	<ul style="list-style-type: none">• 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 9-10	<i>Autumn Block 3: Number -Multiplication and Division A</i> <i>Small Steps (suggested only – adapt to the needs of your class)</i>	Related Ready to Progress Criteria and guidance. Mathematics guidance: year 5 (publishing.service.gov.uk)	



	<ul style="list-style-type: none"> • 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 	<p>5NF–1 Secure fluency in multiplication table facts, and corresponding division facts, through continued practice.</p> <p>5NF–2 Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 1 tenth or 1 hundredth).</p> <p>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.</p> <p>5MD–3 Multiply any whole number with up to 4 digits by any</p>	
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		<p>one-digit number using a formal written method.</p> <p>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.</p>	
<p>2 of 3 weeks 11-12</p>	<p>1 WR Autumn Block 4 – Fractions A <i>Small Steps (suggested only – adapt to the needs of your class)</i></p>	<p>Related Ready to Progress Criteria and guidance. Mathematics guidance: year 5 (publishing.service.gov.uk)</p>	



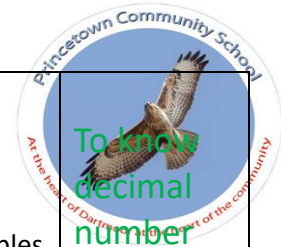
	<ul style="list-style-type: none"> • Find fractions equivalent to a unit fraction • Find fractions equivalent to a non-unit fraction • Recognise equivalent fractions • Convert improper fractions to mixed numbers • Convert mixed numbers to improper fractions • Compare fractions less than 1 • Order fractions less than 1 • Compare and order fractions greater than 1 • Add and subtract fractions with the same denominator • Add fractions within 1 • Add fractions with total greater than 1 • Add to a mixed number • Add two mixed numbers 	<p>5F-1 Find non-unit fractions of quantities.</p> <p>5F-2 Find equivalent fractions and understand that they have the same value and the same position in the linear number system.</p> <p>5F-3 Recall decimal fraction equivalents for , , and , and for</p>	
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Notes

Some of decimals have been brought earlier in the year which – adapt according to pupils.

Year 5 Spring Term

<p>3 of 3 weeks 1</p>	<p>1 WR Autumn Block 4 – Fractions A <i>Small Steps (suggested only – adapt to the needs of your class)</i></p>	<p>Related Ready to Progress Criteria and guidance. Mathematics guidance: year 5 (publishing.service.gov.uk)</p>	<p>KIRFS</p>
	<ul style="list-style-type: none"> • Subtract fractions 	<p>5F-1 Find non-unit fractions of quantities.</p>	<p>Spring 1</p>



To know decimal number bonds to 1 and 10.

	<ul style="list-style-type: none"> • Subtract from a mixed number • Subtract from a mixed number – breaking the whole • Subtract 2 mixed numbers 	<p>5F–2 Find equivalent fractions and understand that they have the same value and the same position in the linear number system.</p> <p>5F–3 Recall decimal fraction equivalents for $\frac{1}{2}$, $\frac{1}{4}$, and $\frac{3}{4}$, and for multiples of these proper fractions.</p>	
<p>3 weeks 2-4</p>	<p>2 WR Spring Block1 – Multiplication combined with division B Small Steps (suggested only – adapt to the needs of your class)</p>		
	<ul style="list-style-type: none"> • Multiply up to a 4-digit number by a 1-digit number • Multiply a 2-digit number by a 2-digit number (area model) • Multiply a 2-digit number by a 2-digit number • Multiply a 3-digit number by a 2-digit number • Multiply a 4-digit number by a 2-digit number • Solve problems with multiplication • Short division • Divide a 4-digit number by a 1-digit number • Divide with remainders • Efficient division • Solve problems with multiplication and division 	<p>5NF–1 Secure fluency in multiplication table facts, and corresponding division facts, through continued practice.</p> <p>5NF–2 Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 1 tenth or 1 hundredth).</p> <p>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.</p> <p>5MD–3 Multiply any whole number with up to 4 digits by any one-digit number using a formal written method.</p> <p>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.</p>	



<p>2 weeks 5-6</p>	<p>3 WR Spring Block 2 – Fractions B <i>Small Steps</i> (suggested only – adapt to the needs of your class)</p>	<p>Related Ready to Progress Criteria and guidance. Mathematics guidance: year 5 (publishing.service.gov.uk)</p>	
	<ul style="list-style-type: none"> • <i>Multiply a unit fraction by an integer</i> • <i>Multiply a non-unit fraction by an integer</i> • <i>Multiply a mixed number by an integer</i> • <i>Calculate a fraction of a quantity</i> • <i>Fraction of an amount</i> • <i>Find the whole Step 7 Use fractions as operators</i> 	<p>5F–1 Find non-unit fractions of quantities.</p> <p>5F–2 Find equivalent fractions and understand that they have the same value and the same position in the linear number system.</p> <p>5F–3 Recall decimal fraction equivalents for $\frac{1}{2}$, $\frac{1}{4}$, and $\frac{3}{4}$, and for multiples of these proper fractions.</p>	<p>to recall metric conversions.</p>
<p>1 week 7</p>	<p>4 WR Spring Block 3 – Decimals and Percentages (decimals touched on earlier) <i>Small Steps</i> (suggested only – adapt to the needs of your class)</p>		



	<ul style="list-style-type: none"> • <i>Decimals up to 2 decimal places</i> • <i>Equivalent fractions and decimals (tenths)</i> • <i>Equivalent fractions and decimals (hundredths)</i> • <i>Equivalent fractions and decimals</i> • <i>Thousandths as fractions</i> • <i>Thousandths as decimals</i> • <i>Thousandths on a place value chart</i> • <i>Order and compare decimals (same number of decimal places)</i> • <i>Order and compare any decimals with up to 3 decimal places</i> • <i>Round to the nearest whole number</i> • <i>Round to 1 decimal place</i> • <i>Understand percentages</i> • <i>Percentages as fractions</i> • <i>Percentages as decimals</i> • <i>Equivalent fractions, decimals and</i> 	<p>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.</p> <p>NPV–5 Convert between units of measure, including using common decimals and fractions.</p>	
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	<i>percentages</i>		
2 weeks 8-9	5 WR Spring Block 4 – Perimeter and area <i>Small Steps</i> (suggested only – adapt to the needs of your class)	Related Ready to Progress Criteria and guidance. Mathematics guidance: year 5 (publishing.service.gov.uk)	



	<ul style="list-style-type: none"> • <i>perimeter of rectangles</i> • <i>Perimeter of rectilinear shapes</i> • <i>Perimeter of polygons</i> • <i>Area of rectangles</i> • <i>Area of compound shapes</i> • <i>Estimate area</i> 	5G–2 Compare areas and calculate the area of rectangles (including squares) using standard units.	
2 weeks 10-11	1 WR Spring Block 5 – statistics <ul style="list-style-type: none"> • <i>Small Steps (suggested only – adapt to the needs of your class)</i> 		
	<ul style="list-style-type: none"> • <i>Draw line graphs</i> • <i>Read and interpret line graphs</i> • <i>Read and interpret tables</i> • <i>Two-way tables</i> • <i>Read and interpret timetable</i> 		
1 week	Consolidation		
Year 5 Summer Term			
3 weeks 1-3	1 WR Summer Block 3 – Decimals <i>Small Steps (suggested only – adapt to the needs of your class)</i>		KIRFS
	<ul style="list-style-type: none"> • <i>Use known facts to add and subtract decimals within 1</i> • <i>Complements to 1</i> • <i>Add and subtract decimals across 1</i> • <i>Add decimals with the same number of</i> 		Summer 1 To be able to recall square numbers and their



	<p><i>decimal places</i></p> <ul style="list-style-type: none"> • <i>Subtract decimals with the same number of decimal places</i> • <i>Add decimals with different numbers of decimal places</i> • <i>Subtract decimals with different numbers of decimal places</i> • <i>Efficient strategies for adding and subtracting decimals</i> • <i>Decimal sequences</i> • <i>Multiply by 10, 100 and 1,000</i> • <i>Divide by 10, 100 and 1,000</i> • <i>Multiply and divide decimals – missing values</i> 	
1 week 4	<p>2 WR Summer Block 4 – Negative numbers <i>Small Steps (suggested only – adapt to the needs of your class)</i></p>	
	<ul style="list-style-type: none"> • <i>Understand negative numbers</i> • <i>Count through zero in 1s</i> • <i>Count through zero in multiples</i> • <i>Compare and order negative numbers</i> • <i>Find the difference</i> 	
3 weeks 5-7	<p>3 WR Summer Block 1 – Shape <i>Small Steps (suggested only – adapt to the needs of your class)</i></p>	<p>Related Ready to Progress Criteria and guidance. Mathematics guidance: year 5 (publishing.service.gov.uk)</p>



	<ul style="list-style-type: none"> • Understand and use degrees • Classify angles • Estimate angles • Measure angles up to 180° • Draw lines and angles accurately 	5G –1 Compare angles, estimate and measure angles in degrees (°) and draw angles of a given size.	
	<ul style="list-style-type: none"> • Calculate angles around a point • Calculate angles on a straight line • Lengths and angles in shapes • Regular and irregular polygons • 3-D shapes 		
2 weeks 8 -9	4 WR Summer Block 2 – Position and Direction <i>Small Steps</i> (suggested only – adapt to the needs of your class)		KIRFS Summer 2
	<i>Read and plot coordinates</i> <i>Problem solving with coordinates</i> <i>Translation</i> <i>Translation with coordinates</i> <i>Lines of symmetry</i> <i>Reflection in horizontal and vertical lines</i>		To be able to give factor pairs of a number.
2 week10-11	5 WR Summer Block 5 – Converting units <i>Small Steps</i> (suggested only – adapt to the needs of your class)		



	<ul style="list-style-type: none"> • Kilograms and kilometres • Millimetres and millilitres • Convert units of length • Convert between metric and imperial units • Convert units of time • Calculate with timetables 		
1 week 12	<ul style="list-style-type: none"> • WR Summer Block 6 -Volume • Small Steps (suggested only – adapt to the needs of your class) 		
	<ul style="list-style-type: none"> • Cubic centimetres • Compare volume 		

	<ul style="list-style-type: none"> • Estimate volume • Estimate capacit 		
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Year 6

NCETM Year 6 Teaching for Mastery: Questions tasks and activities to support assessment [01-Yr6 Front cover ccp.indd \(ncetm.org.uk\)](#) **NCETM**
Y6 Exemplification teaching resources: [Exemplification of ready-to-progress criteria | NCETM](#)

Vocabulary [Maths Vocab revised \[live\] \(allaboutmaths.com\)](#)

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
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Autumn 1
To use a
table to
multiply
and divide
decimals.

<p>Y6 Autumn Block 1 SOL Place value.pdf (whiterose maths.com)</p>	<ul style="list-style-type: none"> • 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 <p>Place value of decimals may be introduced here. Adapt later small steps accordingly.</p>	<p>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).</p> <p>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.</p> <p>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.</p> <p>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.</p>	
<p>5 weeks 3-7</p>	<p><i>2- WR Autumn Block 2: Number- Addition, Subtraction, Multiplication and Number</i></p>	<p><i>Related Ready to Progress Criteria and guidance.</i> Maths guidance year 6 (publishing.service.gov.uk)</p>	<p>KIRFS</p>
	<ul style="list-style-type: none"> • Add and subtract integers 	<p>6AS/MD–1 Understand that 2 numbers can be related additively or multiplicatively, and quantify additive and</p>	<p>Autumn 2</p>



To be able to instantly identify common factors of a number

	<ul style="list-style-type: none"> • 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 • Reason from known facts 	<p>multiplicative relationships (multiplicative relationships restricted to multiplication by a whole number).</p> <p>6AS/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.</p> <p>6AS/MD–3 Solve problems involving ratio relationships.</p> <p>6AS/MD–4 Solve problems with 2 unknowns.</p>	
<p>2weeks 8-9</p>	<p>3WR Autumn Block 3: Fractions A Small Steps (suggested only – adapt to the needs of your class)</p>	<p>Related Ready to Progress Criteria and guidance. Maths guidance year 6 (publishing.service.gov.uk)</p>	



	<ul style="list-style-type: none"> • 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 	<p>6 F–1 Recognise when fractions can be simplified, and use common factors to simplify fractions.</p> <p>6 F–2 Express fractions in a common denomination and use this to compare fractions that are similar in value.</p> <p>6 F–3 Compare fractions with different denominators, including fractions greater than 1, using reasoning, and choose between reasoning and common denomination as a</p>	
	<ul style="list-style-type: none"> • Multi-step problems 	<p>comparison strategy.</p>	
<p>2 weeks 10-11</p>	<p>4 WR - Autumn Block 4: Fractions B (carried over) Small Steps (suggested only – adapt to the needs of your class)</p>	<p>Related Ready to Progress Criteria and guidance. Maths guidance year 6 (publishing.service.gov.uk)</p>	
	<ul style="list-style-type: none"> • 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 	<p>6 F–1 Recognise when fractions can be simplified, and use common factors to simplify fractions.</p> <p>6 F–2 Express fractions in a common denomination and use this to compare fractions that are similar in value.</p> <p>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.</p>	



1 week 12	5. WR Autumn Block 4: Measure – converting Units (caried over) Small Steps (suggested only – adapt to the needs of your class)		
	<ul style="list-style-type: none"> • Metric measures • Convert metric measures • Calculate with metric measures • Miles and kilometres Imperial measures 		

Year 6 Spring Term

2 weeks 1-2	1. WR Spring Block 1: Ration <ul style="list-style-type: none"> • Small Steps (suggested only – adapt to the needs of your class) 		KIRFS
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	<ul style="list-style-type: none"> • Add or multiply? • Use ratio language • Introduction to the ratio symbol • Ratio and fractions • drawing Step 6 Use scale factors • Similar shapes • Ratio problems • <i>Proportion problems</i> • <i>Recipes</i> 		Spring 1 To be able to instantly convert between decimals, fractions and percentag es.
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<p>2 weeks 3-4</p>	<p>2. WR Spring block 2: Algebra</p> <ul style="list-style-type: none"> • Small Steps (suggested only – adapt to the needs of your class) 		
	<ul style="list-style-type: none"> • 1-step function machines • 2-step function machines • Form expressions • Substitution Step 5 Formulae • Form equations • Solve 1-step equations • Solve 2-step equations • Find pairs of values • Solve problems with two unknowns 		
<p>2 weeks 5-6</p>	<p>3. WR Spring block 3: Decimals – some place value may have been covered previously.</p> <p>Small Steps (suggested only – adapt to the needs of your class)</p>		
	<ul style="list-style-type: none"> • Place value within 1 • Place value – integers and decimals 		
	<ul style="list-style-type: none"> • Round decimals • Add and subtract decimals • Multiply by 10, 100 and 1,000 • Divide by 10, 100 and 1,000 • Multiply decimals by integers • Divide decimals by integers • Multiply and divide decimals in context 		



	•		
2 weeks 7-8	4. WR Spring Block 4: Fractions, decimals and percentages Small Steps (suggested only – adapt to the needs of your class)		
	<ul style="list-style-type: none"> • Decimal and fraction equivalents • Fractions as division • Understand percentages • Fractions to percentages • Equivalent fractions, decimals and percentages • Order fractions, decimals and percentages • Percentage of an amount – one step • Percentage of an amount – multi-step • Percentages- missing values 		
2 weeks 9-10	5 WR Spring Block 5: Area, perimeter and volume Small Steps (suggested only – adapt to the needs of your class)		
	<ul style="list-style-type: none"> • Shapes – same area • Area and perimeter 		

Spring 2
To be able to instantly recall prime numbers up to 50.



	<ul style="list-style-type: none"> • <i>Area of a triangle – counting squares</i> • <i>Area of a right-angled triangle</i> • <i>Area of any triangle</i> • <i>Area of a parallelogram</i> • <i>Volume – counting cubes</i> • <i>Volume of a cuboid</i> 		
2 weeks 11-12	6 WR Spring Block 6: Statistics Small Steps (suggested only – adapt to the needs of your class)		
	<ul style="list-style-type: none"> • <i>Line graphs</i> • <i>Dual bar charts</i> • <i>Read and interpret pie charts</i> • <i>Pie charts with percentages</i> • <i>Draw pie charts</i> • <i>The mean</i> 		
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 .



	<ul style="list-style-type: none"> • Measure and classify angles • Calculate angles • Vertically opposite angles • Angles in a triangle • Angles in a triangle – special cases • Angles in a triangle – missing angles 	6G–1 Draw, compose, and decompose shapes according to given properties, including dimensions, angles and area, and solve related problems.	
	<ul style="list-style-type: none"> • Angles in a quadrilateral • Angles in polygons • Circles Step 10 Draw shapes accurately • Nets of 3-D shapes 		
1 week	2 WR Summer Block 2: Position and Direction Small Steps (suggested only – adapt to the needs of your class)		
	<ul style="list-style-type: none"> • The first quadrant • Read and plot points in four quadrants • Solve problems with coordinates • Translations Step 5 Reflection 		
	Consolidation		
	Transition work		
Notes			