

WALT: We Are Learning To  
WAP: We Are Practising

## Autumn 1: The World Through Our Senses

Week	Unit	National Curriculum objectives Possible lesson objectives	White Rose Maths (WRM) ‘small steps’	Models and images representing number Key vocabulary	Reasoning (in addition to WRM questions)	Fluency
1	Warm-Up Week: Counting practice					
2	Number Numbers to 10					
	<ul style="list-style-type: none"><li>count, read and write numbers to [10] in numerals</li></ul> <p>WALT sort objects into groups WALT count a group of objects WALT count objects from a larger group WALT represent groups of objects with numerals WALT read and write numerals up to 10</p>	<ul style="list-style-type: none"><li>Sort objects</li><li>Count objects</li><li>Count objects from a larger group</li><li>Represent objects</li></ul>	Cubes, counters, dice  <i>Same, different ,count(ing), forwards, backwards, more (than), less (than), total, fewer (than), equal (to), most, least, sum, amount, value, size, number, order, part, whole</i>	<b>Spot the mistake:</b> 5,6,8,9 <b>Missing numbers</b>		
3	<ul style="list-style-type: none"><li>read and write numbers from 1 to [10] in numerals and words</li><li>given a number, identify one more</li></ul> <p>WALT recognise numbers up to 10 WALT read and write numbers up to 10 WALT count forwards from any number WALT use objects to find one more WALT to use our counting skills to find one more</p>	<ul style="list-style-type: none"><li>Recognise numbers as words</li><li>Count on from any number</li><li>Count one more</li></ul>	Cubes, Numicon <b>Introduce</b> Number track, ten-frame  <i>Same, different ,count(ing), forwards, backwards, more (than), less (than), total, fewer (than), equal (to), most, least, sum, amount, value, size, number, order, part, whole</i>	<b>What’s the same, what’s different</b> Counting forwards and backwards		
4	<ul style="list-style-type: none"><li>given a number, identify one less</li><li>use the language of: equal to, more than, less than (fewer), most, least</li></ul> <p>WALT count backwards within 10 WALT count backwards from any number WALT use objects to find one less WALT use our counting skills to find one less WALT compare the size of groups of objects by matching</p>	<ul style="list-style-type: none"><li>Count backwards within 10</li><li>Count one less</li><li>Compare groups by matching</li></ul>	Cubes, Numicon, number track  <i>Same, different ,count(ing), forwards, backwards, more (than), less (than), total, fewer (than), equal (to), most, least, sum, amount, value, size, number, order, part, whole</i>	<b>Do, then explain</b> Look at the objects. Are there more of one type than another? How can you find out? <b>NRICH Same Length Trains</b>		

5	<ul style="list-style-type: none"> <li>use the language of: equal to, more than, less than (fewer), most, least</li> <li>identify and represent numbers using objects and pictorial representations including the number line</li> </ul> <p>WALT use 'comparing' words: fewer, more, same WALT use comparing words: less than, greater than, equal to WALT the meaning of the = sign WALT compare and describe groups of objects WALT compare and describe numbers</p>	<ul style="list-style-type: none"> <li>Fewer, more, same</li> <li>Less than, greater than, equal to</li> <li>Compare numbers</li> </ul>	<p>Ten-frame, number track, cubes, Numicon</p> <p><i>Same, different ,count(ing), forwards, backwards, more (than), less (than), total, fewer (than), equal (to), most, least, sum, amount, value, size, number, order, part, whole</i></p>	<p><b>Prove it</b> Convince me that you've ordered the numbers correctly <b>NRICH Number Balance</b></p>	
6	<ul style="list-style-type: none"> <li>use the language of: equal to, more than, less than (fewer), most, least</li> <li>identify and represent numbers using objects and pictorial representations including the number line</li> </ul> <p>WALT put groups of objects into size order WALT put numbers into size order WALT count along a numberline WALT use a numberline to find one more and one less WALT use a numberline to compare numbers</p>	<ul style="list-style-type: none"> <li>Order objects and numbers</li> <li>The number line</li> </ul>	<p>Numicon, cubes, ten-frame, printed/partly-printed numberlines</p> <p><i>Same, different ,count(ing), forwards, backwards, more (than), less (than), total, fewer (than), equal (to), most, least, sum, amount, value, size, number, order, part, whole</i></p>	<p><b>NRICH Eightness of Eight</b></p>	
7	<p><b>Number</b> <b>Calculation: Addition and subtraction within 10 (1)</b></p>				
	<ul style="list-style-type: none"> <li>read, write and interpret mathematical statements involving addition (+) and equals (=) signs</li> <li>solve one-step problems that involve addition</li> </ul> <p>WALT what is a part and what is a whole WALT represent numbers with a part-whole model WALT use the addition sign in an equation WALT use the part-whole model to write an equation WALT use the part-whole model to find fact families</p>	<ul style="list-style-type: none"> <li>Introduce parts and wholes</li> <li>Part-whole model</li> <li>Write number sentences</li> <li>Fact families – addition facts</li> </ul>	<p>Double-sided counters, cubes, bead-string <b>Introduce</b> Part-whole model</p> <p><i>Same, different ,count(ing), forwards, backwards, more (than), less (than), total, fewer (than), equal (to), most, least, sum, amount, value, size, number, order, part, whole</i></p>	<p><b>Prove it</b> Convince me that if <math>a + b = c</math> then <math>b + a = c</math> <b>Spot the mistake</b> in a part-whole model (then explain it) <b>What's the same, what's different</b> (fact families) <b>NRICH Number Balance</b></p>	
8	<ul style="list-style-type: none"> <li>represent and use number bonds within [10]</li> <li>solve one-step problems that involve addition</li> </ul>	<ul style="list-style-type: none"> <li>Number bonds within 10</li> </ul>	<p>Double-sided counters, cubes, part-whole model, ten-frame</p>	<p><b>Continue the pattern</b> <math>0 + 5 = 5</math>, <math>1 + 4 = 5</math> ... <b>Explain the pattern</b></p>	

	WALT find number bonds to 1, 2, 3, etc. WALT find all the bonds for a number up to 10 WALT find all the number bonds for 10 WAP number bonds to 10 using... WAP number bonds to 10 using...	<ul style="list-style-type: none"><li>• Systematic number bonds within 10</li><li>• Number bonds to 10</li></ul>	<b>Introduce</b> Rekenrek, bar model  <i>Same, different ,count(ing), forwards, backwards, more (than), less (than), total, fewer (than), equal (to), most, least, sum, amount, value, size, number, order, part, whole</i>	<b>NRICH One Big Triangle</b> <b>NRICH Domino Sorting</b>	
--	---	--	---	--	--

## Autumn 2: Celebrations





Week	Unit	National Curriculum objectives Possible lesson objectives	White Rose Maths (WRM) 'small steps'	Models and images representing number Key vocabulary	Reasoning (in addition to WRM questions)	Fluency
1	<b>Number</b> <b>Calculation: Addition and subtraction within 10 (2)</b>					
	<ul style="list-style-type: none"><li>add one-digit numbers to [10], including zero</li><li>solve one-step problems that involve addition</li><li>solve missing number problems</li></ul> WALT add by combining amounts WALT add by adding more to an existing amount WALT represent addition in different ways WALT find a missing number in a part-whole model WALT find a missing number in an equation	<ul style="list-style-type: none"><li>Addition – add together</li><li>Addition – add more</li><li>Addition problems</li></ul>	Cubes, part-whole model, ten-frame, Rekenrek, number line  <i>Count(ing), forwards, backwards, more (than), less (than), total, fewer (than), equal (to), most, least, sum, amount, value, size, number, order, part, whole, first, plus, add(ition), ones,</i>  <i>Not statutory, but desirable: minuend, subtrahend</i>	<b>Working backwards</b> Through practical games on number tracks and lines ask questions e.g. “what numbers would you need to throw to land on a given numbers?” <b>NRICH Domino Sorting</b> <b>NRICH Number Lines</b> <b>NRICH Number Balance</b>	Mastering Number	
2	<ul style="list-style-type: none"><li>read, write and interpret mathematical statements involving subtraction and equals signs</li><li>subtract one-digit numbers to [10], including zero</li><li>represent and use related subtraction facts within [10]</li><li>solve one-step problems that involve subtraction, and missing number problems</li></ul> WALT find a part of a whole WALT understand subtraction as finding a part of a whole WALT use the subtraction sign WALT use the part-whole model to find subtraction equations WALT find all the equations in a fact family	<ul style="list-style-type: none"><li>Find a part</li><li>Subtraction – find a part</li><li>Fact families – the eight facts</li></ul>	Counters, part-whole model, digit cards, cubes  <i>Count(ing), forwards, backwards, more (than), less (than), total, fewer (than), equal (to), most, least, sum, amount, value, size, number, order, part, whole, first, plus, add(ition), ones, subtract(ion), minus</i>  <i>Not statutory, but desirable: minuend, subtrahend, difference</i>	<b>What do you notice?</b> $10 - 1 = 9$ , $10 - 9 = 1$ Can you show me other pairs of equations like this? <b>What’s the same, what’s different</b> (fact families) <b>NRICH Number Lines</b> <b>NRICH How Do You See it?</b>	Mastering Number	

3	<ul style="list-style-type: none"> <li>• read, write and interpret mathematical statements involving addition, subtraction and equals signs</li> <li>• add and subtract one-digit numbers to [10], including zero</li> <li>• solve one-step problems that involve subtraction</li> </ul> <p>WALT understand subtraction as finding how many are left WALT calculate subtraction by taking away WALT use a number line to subtract WAP using a number line to subtract WALT quickly add or subtract 1 or 2</p>	<ul style="list-style-type: none"> <li>• Subtraction - take away, cross out (How many left?)</li> <li>• Take away (How many left?)</li> <li>• Subtraction on a number line</li> <li>• Add or subtract 1 or 2</li> </ul>	<p>Leaves and other objects, counters, part-whole model, printed numberline</p> <p><i>Count(ing), forwards, backwards, more (than), less (than), total, fewer (than), equal (to), most, least, sum, amount, value, size, number, order, part, whole, first, plus, add(ition), ones, subtract(ion), minus</i></p> <p><i>Not statutory, but desirable: minuend, subtrahend, difference</i></p>	<p><b>Working backwards</b> <b>Missing symbols</b> Write the missing symbols ( + - =) in these equations: 17 ___ 3 ___ 20 18 ___ 20 ___ 2</p> <p><b>NRICH Number Lines</b> <b>NRICH 2, 4, 6, 8</b></p>	Mastering Number
4	<p><b>Geometry</b> <b>Properties of shape</b></p>				
	<ul style="list-style-type: none"> <li>• recognise and name common 3-D shapes, including cuboids (including cubes), pyramids and spheres</li> </ul> <p>WALT find and name 3-d shapes WALT construct 3-d shapes WALT make 2-d drawings of 3-d shapes WALT sort 3-d shapes</p>	<ul style="list-style-type: none"> <li>• Recognise and name 3-d shapes</li> <li>• Sort 3-d shapes</li> </ul>	<p>3-d shapes</p> <p>Pattern, 2-D, rectangle/oblong, circle, square, triangle 3-D, cube, cuboid, pyramid, sphere, side(s), right, top, middle, bottom, in front of, behind, between, above, below, around, near, close, far, up, down, forwards, backwards, inside, outside</p> <p>Not statutory, but desirable: clockwise</p>	<p><b>Visualising</b> Put some shapes in a bag. Find me a shape that has more than three edges. <b>What's the same, what's different...</b> ...between these 2 shapes? <b>Working backwards</b> How have I sorted these shapes into 2 groups?</p>	Mastering Number
5	<ul style="list-style-type: none"> <li>• recognise and name common 2-D shapes. including rectangles (including squares), circles and triangles</li> </ul> <p>WALT find and name 2-d shapes WALT draw 2-d shapes in different ways WALT sort 2-d shapes according to their properties WALT create and recognise patterns with 2-d shapes WALT create and recognise patterns with 3-shapes</p>	<ul style="list-style-type: none"> <li>• Recognise and name 2-d shapes</li> <li>• Sort 2-d shapes</li> <li>• Patterns with 3-d and 2-d shapes</li> </ul>	<p>2-d and 3-d shapes</p> <p>Pattern, 2-D, rectangle/oblong, circle, square, triangle 3-D, cube, cuboid, pyramid, sphere, side(s), right, top, middle, bottom, in front of, behind, between, above, below, around, near, close,</p>	<p><b>What's the same, what's different?</b> Find a rectangle and a triangle. Tell me one thing that's the same about them. Tell me one thing that is different about them. <b>Spot the mistake</b> Which shape(s) in this sequence is in the wrong place? <b>NRICH Jig Shapes</b> <b>NRICH Always, Sometimes or Never? KSI</b> <b>NRICH Repeating Patterns</b> <b>NRICH Overlaps</b></p>	Mastering Number







			far, up, down, forwards, backwards, inside, outside		
			Not statutory, but desirable: clockwise		
6 and 7	<b>Warm-Down Weeks</b> <b>Consolidation of previous learning</b>				Mastering Number

## Spring 1: Whatever the Weather

Week	Unit	National Curriculum objectives Possible lesson objectives	White Rose Maths (WRM) 'small steps'	Models and images representing number Key vocabulary	Reasoning (in addition to WRM questions)	Fluency
1	<b>Place Value Numbers to 20</b>					
1		<ul style="list-style-type: none"> <li>count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number</li> <li>count, read and write numbers to 100 in numerals; count in multiples of 2s, 5s and 10s</li> <li>given a number, identify one more and one less</li> <li>identify and represent numbers using objects and pictorial representations</li> <li>read and write numbers from 1 to 20 in numerals and words</li> </ul> <p>WALT count numbers greater than 10 WALT write numbers greater than 10 WALT make numbers greater than 10 WALT use tens and ones to make numbers greater than ten WALT find and make one more and one less</p>	<ul style="list-style-type: none"> <li>Count within 20</li> <li>Understand 10</li> <li>Understand 11, 12 and 13</li> <li>Understand 14, 15, 16</li> <li>Understand 17, 18, 19</li> </ul>	<p>Numicon, 10-frame, number track, part-whole model</p> <p><b>Introduce</b> Base-10 equipment</p> <p><i>Same, different, count(ing), forwards, backwards, more (than), less (than), total, fewer (than), equal (to), most, least, sum, amount, value, size, number, order, part, whole</i></p>	<p><b>Do, then explain</b> Use equipment to make a number less than 10. Add 10 to it. What number do you have now? Explain how it is connected to the number you started with.</p> <p><b>NRICH Writing Digits</b> <b>NRICH Eightness of Eight</b></p>	Mastering Number
2		<ul style="list-style-type: none"> <li>Given a number, identify 1 more and 1 less</li> <li>Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least</li> <li>Count, read and write numbers to 100 in numerals; count in multiples of 2s, 5s and 10s</li> </ul>	<ul style="list-style-type: none"> <li>Understand 20</li> <li>1 more and 1 less</li> <li>The number line to 20</li> <li>Use a number line to 20</li> </ul>	<p>Numicon, 10-frame, number track, part-whole model</p> <p><b>Introduce</b> Base-10 equipment</p> <p><i>Same, different, count(ing), forwards, backwards, more (than), less (than), total, fewer (than), equal (to), most, least, sum, amount, value, size, number, order, part, whole</i></p>	<p><b>Do, then explain</b> Look at the objects. (in a collection). Are there more of one type than another? How can you find out?</p>	Mastering Number
3		<ul style="list-style-type: none"> <li>Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least</li> </ul>	<ul style="list-style-type: none"> <li>Estimate on a number line to 20</li> <li>Compare numbers to 20</li> </ul>	<p>Counters, cubes, Numicon, ten-frame, number track, base-10 equipment</p>	<p><b>Spot the Mistake</b> Which number(s) is/are in the wrong place? 6 8 10 12 16 14 18 20 <b>Find all the possibilities</b></p>	Mastering Number

	<p>WALT compare the size of groups of objects</p> <p>WALT compare the size of numbers</p> <p>WALT arrange groups of objects in size order</p> <p>WALT arrange numbers in size order</p>	<ul style="list-style-type: none"> <li>Order numbers to 20</li> </ul>	<p>Same, different ,count(ing), forwards, backwards, more (than), less (than), total, fewer (than), equal (to), most, least, sum, amount, value, size, number, order, part, whole</p>	<p>I have 2 numbers. Both my numbers are more than 10 and less than 20. One of my numbers is 3 fewer than my other number. What could my numbers be?</p> <p><b>NRICH Sweetie Box</b></p>	
4	<p><b>Number</b></p> <p><b>Calculation: Addition and subtraction within 20</b></p>				
4	<ul style="list-style-type: none"> <li>read, write and interpret mathematical statements involving addition (+) and equals (=) signs</li> <li>represent and use number bonds within 20</li> <li>add one-digit and two-digit numbers to 20, including zero</li> <li>solve one-step problems that involve addition, using concrete objects and pictorial representations</li> </ul> <p>WALT add by counting on from a starting number</p> <p>WALT find and make number bonds</p> <p>WALT add by making 10 using a 10-frame</p> <p>WALT add by making 10 using a numberline</p> <p>WALT choose how to add by making 10</p>	<ul style="list-style-type: none"> <li>Add by counting on within 20</li> <li>Add ones using number bonds</li> <li>Find and make number bonds to 20</li> <li>Doubles</li> <li>Near doubles</li> </ul>	<p>Ten-frame, bar model, printed numberline, counters, part-whole model</p> <p>Count(ing), forwards, backwards, more (than), less (than), total, fewer (than), equal (to), most, least, sum, amount, value, size, number, order, part, whole, first, plus, add(ition), ones, subtract(ion), minus</p>	<p><b>NRICH Butterfly Flowers</b></p> <p><b>NRICH Ladybirds in the Garden</b></p> <p><b>NRICH Pairs of Numbers</b></p> <p><b>NRICH What Could it Be?</b></p>	Mastering Number
5	<ul style="list-style-type: none"> <li>read, write and interpret mathematical statements involving subtraction (−) and equals (=) signs</li> <li>subtract one-digit and two-digit numbers to 20, including zero</li> <li>solve one-step problems that involve subtraction, using concrete objects and pictorial representations</li> </ul> <p>WALT take away from numbers below 10</p> <p>WALT use a 10-frame to take away by crossing 10</p> <p>WALT use a numberline to take away by crossing 10</p> <p>WALT subtract by finding the difference between numbers up to 10</p> <p>WALT subtract by finding the difference between numbers up to 20</p>	<ul style="list-style-type: none"> <li>Subtract ones using number bonds</li> <li>Subtraction - counting back</li> <li>Subtraction - finding the difference</li> </ul>	<p>Ten-frame, counters, part-whole model, Numicon, printed numberline, bar model</p> <p>Count(ing), forwards, backwards, more (than), less (than), total, fewer (than), equal (to), most, least, sum, amount, value, size, number, order, part, whole, first, plus, add(ition), ones, subtract(ion), minus</p>	<p><b>What do you notice?</b></p> <p><math>11 - 1 = 10</math></p> <p><math>11 - 10 = 1</math></p> <p>Can you make up some other number sentences like this involving 3 different numbers?</p> <p><b>Convince me</b></p> <p>In my head I have two odd numbers with a difference of 2. What could they be?</p> <p>Convince me.</p> <p><b>Other possibilities</b></p> <p>How many ways can you complete these equations?</p> <p>10 -  = </p> <p>20 -  = </p>	Mastering Number



6	<ul style="list-style-type: none"><li>• read, write and interpret mathematical statements involving addition (+), subtraction (−) and equals (=) signs</li><li>• represent and use number bonds and related subtraction facts within 20</li><li>• add and subtract one-digit and two-digit numbers to 20, including zero</li><li>• solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as <math>7 = \square - 9</math></li></ul> <p>WALT find related number facts WALT identify fact families WALT compare addition and subtraction equations</p>	<ul style="list-style-type: none"><li>• Related facts</li><li>• Missing number problems</li></ul>	<p>Ten-frame, part-whole model, base-10, Numicon, bar model</p> <p><i>Count(ing), forwards, backwards, more (than), less (than), total, fewer (than), equal (to), most, least, sum, amount, value, size, number, order, part, whole, first, plus, add(ition), ones, subtract(ion), minus</i></p>	<p><b>Continue the pattern</b> <math>10 + 8 = 18</math> <math>11 + 7 = 18</math></p> <p>Can you make up a similar pattern for the number 17? How would this pattern look if it included subtraction?</p> <p><b>Missing symbols</b> Write the missing symbols ( + - =) in these number sentences:</p> <table><tr><td> 17</td><td>3</td><td>20</td></tr><tr><td> 18</td><td>20</td><td>2</td></tr></table> <p><b>NRICH Sort Them Out</b></p>	 17	3	20	 18	20	2	Mastering Number
 17	3	20									
 18	20	2									

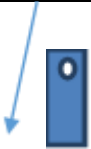
## Spring 2: Toys

Week	Unit	National Curriculum objectives Possible lesson objectives	White Rose Maths (WRM) ‘small steps’	Models and images representing number Key vocabulary	Reasoning (in addition to WRM questions)	Fluency
1	<b>Place Value (Within 50)</b>					
	<ul style="list-style-type: none"><li>count to and across [50], forwards and backwards, beginning with 0 or 1, or from any given number</li><li>count, read and write numbers to [50] in numerals</li><li>identify and represent numbers using objects and pictorial representations including the number line</li></ul> <p>WALT count to 50 and back WALT group in tens to count WALT partition numbers into 10s and 1s WALT represent numbers to 50 WALT represent numbers to 50 in many different ways</p>	<ul style="list-style-type: none"><li>Count from 20 to 50</li><li>20, 30, 40 and 50</li><li>Count by making groups of tens</li><li>Groups of tens and ones</li></ul>	Printed numberline, counters, ten-frame, part-whole model, base-10, Numicon, straws/sticks, number tracks  <i>Ones, tens, grouping</i>	<b>Do, then explain</b> Use concrete apparatus to make the number 31. Then make the number 29. Which was easiest to make, and why? <b>Spot the mistake</b> Use base-10. Four 1s and two 10s make the number 42 <b>And another, and another</b> Find me a number that has more tens than ones. And another. And another... <b>NRICH Biscuit Decorations</b> <b>NRICH Grouping Goodies</b> (hard)	Mastering Number	
2	<ul style="list-style-type: none"><li>given a number, identify one more and one less</li><li>identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least</li></ul> <p>WALT find one more and one less than a given number WALT compare the size of groups of objects WALT compare numbers using the greater than and fewer than signs WALT place numbers in size order</p>	<ul style="list-style-type: none"><li>Partition into tens and ones</li><li>The number line to 50</li><li>Estimate on a number line to 50</li><li>1 more, 1 less</li></ul>	Base-10, bead string, number track, 100 square, printed numberline, Numicon, cubes, number track, dominoes, ten-frame, counters <b>Introduce</b> Spike abacus  <i>Partition, ones, tens, part, whole, estimate, one more, one less</i>	<b>What comes next?</b> $36 + 1 = 37$ $32 - 1 = 31$ $37 + 1 = 38$ $31 - 1 = 30$ $38 + 1 = 39$ .      .... .... <b>Convince me...</b> ... that 49 is smaller than 50 <b>Do, then explain</b> Place these groups of objects in order of size: 22 blue whales 44 mice 33 dogs (!)	Mastering Number	
3	<b>Measurement Length and height</b>					
	<ul style="list-style-type: none"><li>compare, describe and solve practical problems for lengths and heights [for example, long/short, longer/shorter, tall/short, double/half]</li><li>measure and begin to record lengths and heights</li></ul>	<ul style="list-style-type: none"><li>Compare lengths and heights</li><li>Measure lengths using objects</li></ul>	Longer, shorter, <i>taller, far, distance, measure, compare</i>	<b>Convince me</b> Are you taller than you are long? <b>Odd one out</b> A worm, a whale, a stingray, a seahorse	Mastering Number	

	<p>WAL the difference between length and height</p> <p>WALT use the language of length and height</p> <p>WALT compare length and height</p> <p>WALT measure lengths using non-standard measures</p> <p>WAL the importance of accuracy when measuring</p>			<p>Explain your choice</p> <p><b>NRICH How Tall?</b></p> <p><b>NRICH Can You Do It Too?</b></p>	
4	<ul style="list-style-type: none"> <li>compare, describe and solve practical problems for lengths and heights [for example, long/short, longer/shorter, tall/short, double/half]</li> <li>measure and begin to record lengths and heights</li> </ul> <p>WALT understand centimetres</p> <p>WALT use a ruler accurately</p> <p>WALT use a ruler to compare lengths</p> <p>WALT compare lengths by finding a difference (<i>not WRM</i>)</p>	<ul style="list-style-type: none"> <li>Measure lengths using centimetres</li> </ul>	<p>Ruler</p> <p><i>Use as a context to reinforce previous learning on number and calculation</i></p> <p><i>Longer, shorter, centimetre(cm), far, distance, measure, compare</i></p>	<p><b>Working backwards</b></p> <p>My sister is 5 cm taller than me. She is 45 cm tall (we're both tiny!) How tall am I?</p> <p><b>What's the same, what's different?</b></p> <p>My piece of paper is 24 cm long. I cut 4 cm off the end of it</p> <p>My other piece of paper is 16 cm long. I stick an extra 4 cm on to the end of it</p>	Mastering Number
5	<p><b>Measurement</b></p> <p><b>Weight and volume</b></p>				
	<ul style="list-style-type: none"> <li>compare, describe and solve practical problems for mass/weight [for example, heavy/light, heavier than, lighter than]</li> <li>measure and begin to record mass / weight</li> </ul> <p>WALT understand weight and mass</p> <p>WALT describe heavier and lighter objects</p> <p>WALT measure mass using non-standard units</p> <p>WALT use non-standard units to compare the mass of objects</p> <p>WALT calculate with mass (<i>not WRM</i>)</p>	<ul style="list-style-type: none"> <li>Heavier and lighter</li> <li>Measure mass</li> <li>Compare mass</li> </ul>	<p>Scales,</p> <p><i>Weigh, weight, heavy heavier (than) heaviest, light, lighter (than) lightest balance, (weighing) scales,</i></p>	<p><b>Top tips</b></p> <p>How do you know that this (object) is heavier than this one? Explain.</p> <p><b>Always, sometimes, never?</b> Large objects are heavier than small objects.</p> <p><b>Possibilities</b> Put an object on one side of the balance. How many ways can you find to make the balance balance? <b>NRICH Seesaw Shenanigans</b></p>	Mastering Number
6	<ul style="list-style-type: none"> <li>compare, describe and solve practical problems for capacity and volume [for example, full/empty, more than, less than, half, half full, quarter]</li> <li>measure and begin to record capacity and volume</li> </ul> <p>WALT understand capacity and volume</p> <p>WALT describe the volume of liquid [or sand, etc] in a container</p> <p>WALT measure capacity using non-standard units</p> <p>WALT use non-standard units to compare the capacity of containers</p> <p>WALT calculate with capacity (<i>not WRM</i>)</p>	<ul style="list-style-type: none"> <li>Full and empty</li> <li>Compare volume</li> <li>Measure capacity</li> <li>Compare capacity</li> </ul>	<p>Scales, measuring jugs</p> <p><i>Weigh, weight, heavy heavier (than) heaviest, light, lighter (than) lightest balance, (weighing) scales,</i></p>	<p><b>Testing conditions</b> A container has 2 cupfuls of water in it. How can you find out which cup (of a range of different cups) I used to put the water in the container?</p> <p><b>NRICH Thirsty?</b></p> <p><b>NRICH Bottles (1) and (2)</b></p>	Mastering Number

## Summer 1: Amazing Architects

Week	Unit	National Curriculum objectives Possible lesson objectives	White Rose Maths (WRM) 'small steps'	Models and images representing number Key vocabulary	Reasoning (in addition to WRM questions)	Fluency
1	<b>Number</b> <b>Calculation: Multiplication and division</b>					
	<ul style="list-style-type: none"><li>count in multiples of twos, fives and tens</li><li>solve one-step problems involving multiplication, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher</li></ul> WAP counting in 2s WAP counting in 5s WALT count in 10s WALT use a 100-square to count in tens WALT put objects into equal groups	<ul style="list-style-type: none"><li>Count in 2s</li><li>Count in 10s</li><li>Count in 5s</li><li>Recognise equal groups</li></ul>	100 square, number track, Numicon, empty numberline, ten-frame, counters, bead string  <i>Total, multiples, amount, together, altogether, zero, how much, how many, number</i>	<b>Making links</b> If one teddy has two apples, how many apples will three teddies have? <b>Practical</b> (or following week) If we put two pencils in each pencil pot how many pencils will we need? <b>Spot the mistake</b> Use a puppet to count but make some deliberate mistakes, e.g. 5 10 20 15 30 <b>Making links</b> Tell me some numbers that you say when you count in 2s and in 10s? 2s and 5s? 2s 5s and 10s? What do you notice?	Mastering Number	
2	<ul style="list-style-type: none"><li>solve one-step problems involving multiplication, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher</li></ul> WALT use equal groups to help us count WALT show equal groups in an array WALT use an array to multiply WALT make doubles	<ul style="list-style-type: none"><li>Add equal groups</li><li>Make arrays</li><li>Make doubles</li></ul>	Number track, counters, cubes, numberline, array, Numicon, ten-frame  <i>Total, multiples, amount, together, altogether, zero, how much, how many, number, arrays, doubles, equal</i>	<b>Always, sometime, never</b> An array can be triangular An array has more rows than columns An array has lots of dots <b>Convince me...</b> ... that 2 rows of 5 is the same value as 5 rows of 2 <b>Odd one out</b> 3 and 6      5 and 10 6 and 13      8 and 16 <b>NRICH Doubling Fives</b>	Mastering Number	
3	<ul style="list-style-type: none"><li>solve one-step problems involving division, by calculating the answer using concrete objects and pictorial representations</li></ul> WALT divide objects into equal groups WALT explore division into equal groups WALT share objects equally WALT explore dividing by equal sharing	<ul style="list-style-type: none"><li>Make equal groups – grouping</li><li>Make equal groups - sharing equally</li></ul>	Cubes, objects  <i>Total, multiples, amount, together, altogether, zero, how much, how many, number, arrays, doubles, equal</i>	<b>Making links</b> Here are 10 Lego people. If 2 people fit into the train carriage, how many carriages do we need? <b>Possibilities</b> Find all the ways of sharing 8 toys equally. Then 9 toys, 10 toys, 11 toys and 12 toys. Which has the most different ways of being shared equally? <b>NRICH Share Bears</b> <b>NRICH Lots of Biscuits</b>	Mastering Number	

4	<b>Number</b> <b>Fractions</b>				
5	<ul style="list-style-type: none"> <li>recognise, find and name a half as one of two equal parts of an object, shape or quantity</li> </ul> <p>WALT split objects in half WALT find half of a shape WALT find half by sharing equally WALT find half of an amount WALT link halving and doubling (<i>not WRM</i>)</p>	<ul style="list-style-type: none"> <li>Recognise a half of an object or a shape</li> <li>Find a half of an object or a shape</li> <li>Recognise a half of a quantity</li> <li>Find a half of a quantity</li> <li></li> </ul>	<p>Array, cubes</p> <p><i>Half, quarter, share, sharing, groups, grouping, part, whole, equal parts, same size, bar</i></p>	<p><b>What do you notice?</b> Choose a number of counters. Place them onto 2 plates so that there is the same number on each half. When can you do this and when can't you? What do you notice? <b>NRICH Fair Feast</b> <b>NRICH Halving</b> <b>NRICH Happy Halving</b> (hard!)</p>	Mastering Number
6	<b>Geometry</b> <b>Position and direction</b>				
	<ul style="list-style-type: none"> <li>describe position, direction and movement, including whole, half, quarter and three-quarter turns</li> </ul> <p>WALT describe our own turns WALT describe the turns made by objects WALT use precise language to describe direction WALT use precise language to describe position</p>	<ul style="list-style-type: none"> <li>Describe turns</li> <li>Describe position – left and right</li> <li>Describe position – forwards and backwards</li> <li>Describe position – above and below</li> <li>Ordinal numbers</li> </ul>	 <p><i>Forwards, backwards, up, down, left, right, above, below, around, near, close, far, behind, between, in front of, top, middle, bottom</i></p>	<p><b>Working backwards</b> This shape was turned three quarter of a full turn and ended up looking like this. What did it look like when it started? (practical) <b>Working backwards</b> Make some turns and tell your partner what you did and where you ended up. Can they use this information to start where you end and end up where you started? <b>NRICH Turning</b> <b>NRICH Olympic Rings</b></p>	Mastering Number

## Summer 2: Flowers and Insects

Week	Unit	National Curriculum objectives Possible lesson objectives	White Rose Maths (WRM) 'small steps'	Models and images representing number Key vocabulary	Reasoning (in addition to WRM questions)	Fluency
1	<b>Number</b> <b>Numbers within 100</b>	<ul style="list-style-type: none"> <li>count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number</li> <li>count, read and write numbers to 100 in numerals; count in multiples of tens</li> <li>identify and represent numbers using objects and pictorial representations including the number line</li> </ul> <p>WALT count to 100 and back WALT use a 100 square to count WALT count using groups of 10 WALT partition numbers into 10s and 1s WALT use a place value grid</p>	<ul style="list-style-type: none"> <li>Count from 50 to 100</li> <li>Tens to 100</li> <li>Partition into tens and ones</li> <li>The number line to 100</li> </ul>	<p>Ten-frame, counters, straws, 100 square, Numicon, base-10, part-whole model</p> <p><b>Introduce</b> Place value chart</p> <p><i>Same, different, count(ing), forwards, backwards, more (than), less (than), total, fewer (than), equal (to), most, least, sum, amount, value, size, number, order, part, whole</i></p>	<p><b>Odd one out</b> 32 21 65 45 <b>Do, then explain</b> Show the value of the digit 2 in these numbers? 32 27 92 Explain how you know <b>Always, sometimes, never</b> A number with 8 ones is greater than a number with 5 ones <b>NRICH Snail One Hundred</b></p>	Mastering Number
2		<ul style="list-style-type: none"> <li>given a number, identify one more and one less</li> <li>identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least</li> </ul> <p>WALT compare two-digit numbers WALT write inequality statements WALT put two-digit numbers in order of size WALT find one more or one less with numbers up to 100</p>	<ul style="list-style-type: none"> <li>1 more, 1 less</li> <li>Compare numbers with the same number of tens</li> <li>Compare any two numbers</li> </ul>	<p>Base-10, place value chart, 100 square, Numicon, coins, empty numberline, counters, empty number track, ten-frame</p> <p><b>Introduce</b> Place value counters</p> <p><i>Same, different, count(ing), forwards, backwards, more (than), less (than), total, fewer (than), equal (to), most, least, sum, amount, value, size, number, order, part, whole</i></p>	<p><b>Make up an example</b> Create numbers where the units digit is one less than the tens digit. What is the largest/smallest number? <b>Do, then explain</b> Which of these numbers is smallest? Largest? Explain how you know. 13 33 31 3 <b>NRICH Two-digit Targets</b></p>	Mastering Number
3	<b>Measurement</b> <b>Money</b>					

	<ul style="list-style-type: none"> <li>recognise and know the value of different denominations of coins and notes</li> </ul> <p>WALT recognise coins WALT recognise notes WALT exchange coins and notes WALT use coins to count in 2s, 5s and 10s WALT make different amounts with coins</p>	<ul style="list-style-type: none"> <li>Unitising</li> <li>Recognising coins</li> <li>Recognising notes</li> <li>Count in coins</li> </ul>	<p>Coins and notes</p> <p><i>coin note amount, penny/pound/£, coin values: one pence, two pence, five pence, ten pence, twenty pence, fifty pence</i></p>	<p><b>Possibilities</b> Ella has two silver coins. How much money might she have? Are there other possible answers? <b>Spot the mistake</b> I want to buy a card for 25p so I give the shopkeeper a 2p and a 5p. What was my mistake and why did I make it? <b>Convince me...</b> ...that it's better to have seventy pennies than three 20 p coins. ...that it's better to have nine 5p coins than four 10p coins.</p>	Mastering Number
4	<b>Measurement Time</b>				
	<ul style="list-style-type: none"> <li>compare, describe and solve practical problems for time [for example, quicker, slower, earlier, later]</li> <li>sequence events in chronological order using language [for example, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening]</li> <li>recognise and use language relating to dates, including days of the week, weeks, months and years</li> <li>tell the time to the hour and draw the hands on a clock face</li> </ul> <p>WALT use the language of time WALT sequence events WALT the days of the week WALT the months of the year WALT read a clock (<i>not WRM?</i>)</p>	<ul style="list-style-type: none"> <li>Before and after</li> <li>Days of the week</li> <li>Months of the year</li> </ul>	<p><i>Year, month, week, weekend, day, days of the week, months of the year, night, morning, afternoon, evening, yesterday</i></p>	<p><b>Explain thinking</b> Ask pupils to reason and make statements about the order of daily routines in school e.g. daily timetable: we go to PE after we go to lunch. Is this true or false? What do we do before break time? etc. <b>NRICH Times of Day</b> <b>NRICH Snap</b> <b>NRICH Planet Plex Time</b> (or following week)</p>	Mastering Number
5	<ul style="list-style-type: none"> <li>compare, describe and solve practical problems for time [for example, quicker, slower, earlier, later]</li> <li>measure and begin to record time (hours, minutes, seconds)</li> <li>sequence events in chronological order using language [for example, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening]</li> </ul>	<ul style="list-style-type: none"> <li>Hours, minutes and seconds</li> <li>Tell the time to the hour</li> <li>Tell the time to the half hour</li> </ul>	<p><i>Year, month, week, weekend, day, days of the week, months of the year, night, hour, minute, second, morning, afternoon, evening, yesterday</i></p>	<p><b>The answer is...</b> ... 15 minutes. What is the question? ... 30 seconds. What is the question? <b>Always, sometimes, never</b> When it is an o'clock time, both hands point to the 12. When it is half past, the hour hand points to a number.</p>	

	<ul style="list-style-type: none"><li>• tell the time to the hour and half past the hour and draw the hands on a clock face to show these times</li></ul> <p>WALT read o'clock times WALT read half-hour times WAP telling the time WALT time events to see how long they take WALT compare times</p>				
6	<b>Warm-Down Week</b> <b>Consolidation of previous learning</b>				