

Crowmoor School



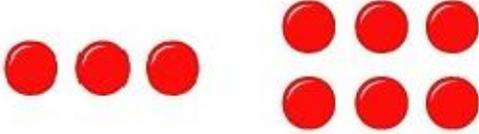
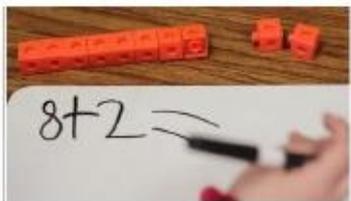
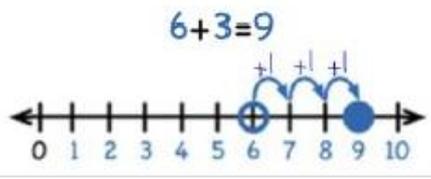
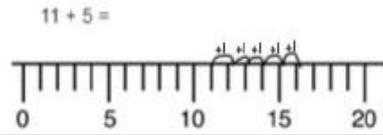
Y1 Calculations Policy

2017

Addition Year 1

Focus: Adding with 1 digit and 2 digit numbers to 20, including 0.

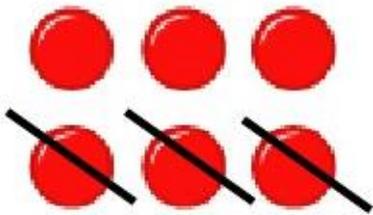
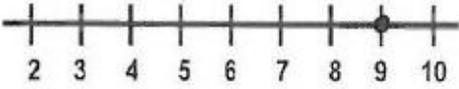
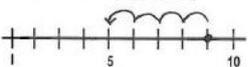
In year 1 the children will build on their knowledge of numbers to 20 from the Foundation Stage. They will begin by using simple strategies to add two group of objects together and move onto recording their number sentences orally and written.

<p>Before moving onto addition children need to be able to:</p> <ul style="list-style-type: none"> • Form numbers 0 – 10 (then to 20) • Say numbers in order (at least to 10) 																						
	<p>Children begin to add ones together using physical objects e.g. Maths makes sense cups, counters, Numicon shapes.</p> <p>They count each object to find how many altogether.</p> <p>Teacher models the language e.g. '3 cups add 6 cups equals 9 cups altogether'.</p> <p>They begin to record by drawing pictures/marks.</p>																					
	<p>The teacher models what the adding of two groups looks like in a number sentence.</p> <p>The children begin to copy these number sentences onto whiteboards whilst still using objects to add.</p>																					
<table border="1" style="margin: auto;"> <tr><td>2</td><td>+</td><td>3</td><td>=</td><td>5</td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td>6</td><td>+</td><td>2</td><td>=</td><td>8</td></tr> </table>	2	+	3	=	5						6	+	2	=	8	<p>The children become more independent and start to write number sentences into their maths books.</p> <p><i>Note: Leave a line after each number sentence for children to polish if needed.</i></p>						
2	+	3	=	5																		
6	+	2	=	8																		
<table border="1" style="margin: auto;"> <tr><td>6</td><td>+</td><td>5</td><td>=</td><td>1</td><td>1</td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td>9</td><td>+</td><td>4</td><td>=</td><td>1</td><td>3</td></tr> </table>	6	+	5	=	1	1							9	+	4	=	1	3	<p>Children begin to add numbers that bridge 10 using the same strategies.</p> <p>Introduce language of tens and units. Continue to use objects e.g. Numicon.</p>			
6	+	5	=	1	1																	
9	+	4	=	1	3																	
<table border="1" style="margin: auto;"> <tr><td>1</td><td>0</td><td>+</td><td>6</td><td>=</td><td>1</td><td>6</td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td>1</td><td>2</td><td>+</td><td>3</td><td>=</td><td>1</td><td>5</td></tr> </table>	1	0	+	6	=	1	6								1	2	+	3	=	1	5	<p>Children start to add a 1 digit number to a 2 digit number within 20.</p> <p>Objects are still used to help the addition process. Begin to bridge 20.</p>
1	0	+	6	=	1	6																
1	2	+	3	=	1	5																
	<p>Children are shown how to add using a number line.</p> <p>They record their findings orally to begin with before moving on to drawing the jumps themselves.</p> <p><i>Note: Each jump is one unit.</i></p>																					
	<p>Partial number lines are then used as a transition to open number lines.</p>																					
<p>Key Vocabulary</p> <p>Add, more, plus, make, altogether, equals, most, count on, number line, tens, ones, addition, number sentence</p>																						

Subtraction Year 1

Focus: Subtracting with 1 digit and 2 digit numbers to 20, including 0.

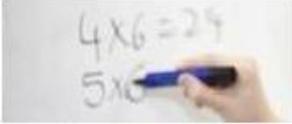
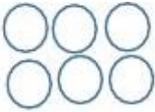
In year 1 the children will build on their knowledge of numbers to 20 from the Foundation Stage. They will begin by using simple strategies to subtract from a group of objects and move onto recording

	<p>Children begin to subtract units from a large group using physical objects e.g. counters, Numicon shapes.</p> <p>They count each object to find how many left.</p> <p>Teacher models the language e.g. '6 cups take away 3 cups equals 3 cups'.</p> <p>They begin to record by drawing pictures/marks.</p>																		
	<p>The teacher models what the subtraction looks like in a number sentence.</p> <p>The children begin to copy these number sentences onto whiteboards whilst still using objects to help them subtract</p>																		
<table border="1" style="width: 100%; text-align: center;"> <tr> <td style="width: 20px;">8</td> <td style="width: 20px;">-</td> <td style="width: 20px;">6</td> <td style="width: 20px;">=</td> <td style="width: 20px;">2</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td>4</td> <td>-</td> <td>1</td> <td>=</td> <td>3</td> </tr> </table>	8	-	6	=	2						4	-	1	=	3	<p>The children become more independent and start to write number sentences into their maths books (squared maths paper) ensuring one digit in each box.</p> <p><i>Note: Leave a line after each number sentence for children to polish if needed.</i></p>			
8	-	6	=	2															
4	-	1	=	3															
<table border="1" style="width: 100%; text-align: center;"> <tr> <td style="width: 20px;">1</td> <td style="width: 20px;">0</td> <td style="width: 20px;">-</td> <td style="width: 20px;">3</td> <td style="width: 20px;">=</td> <td style="width: 20px;">7</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td>1</td> <td>2</td> <td>-</td> <td>5</td> <td>=</td> <td>7</td> </tr> </table>	1	0	-	3	=	7							1	2	-	5	=	7	<p>Children begin to subtract numbers that bridge 10 using the same strategies. A 1- digit number is subtracted from a 2 digit number.</p> <p>Introduce language of tens and units.</p> <p>Continue to use objects e.g. Numicon.</p>
1	0	-	3	=	7														
1	2	-	5	=	7														
<p style="text-align: center;">$9 - 4 = 5$ -1 -1 -1 -1</p> 	<p>Children are now shown how to subtract using a number line. They record their findings orally to begin with before moving on to drawing the jumps themselves.</p> <p><i>Note: Biggest number is circled and children jump back along the number line to find the answer. Jumps are one unit each.</i></p>																		
<p style="text-align: center;">$9 - 4 = 5$ -1 -1 -1 -1</p> 	<p>Partial number lines are then used as a transition to open number lines.</p>																		
<p>Key Vocabulary Take away, less, minus, subtract, how many more, how many fewer/less than, most, least, how many left, partition, tens, ones, <i>digit</i></p>																			

Multiplication Year 1

Focus: Solving one step multiplication problems.

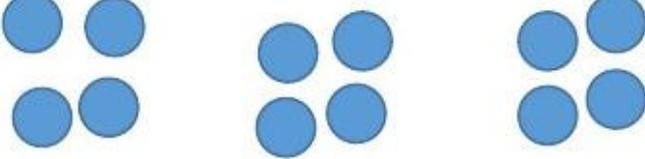
In year 1 children will begin to learn how to multiply. They will work on simple multiplication problems using tangible objects and pictorial recording.

	<p>The teacher gives verbal instructions showing children how to 'multiply' the same amount of objects e.g. I give out 3 sweets and I do the same thing 4 times'.</p>
	<p>The children record pictorially. The written multiplication sentence will be modelled by the teacher and the children will start to copy onto whiteboards/into their books.</p>
<div style="display: flex; align-items: center; gap: 20px;"> <div style="border: 1px solid black; padding: 5px;">3x2=</div>  <div style="border: 1px solid black; padding: 5px;">Group size x number of groups = product</div> </div>	<p>Children record each number sentence by drawing the array e.g. put '3 cups on the maths table, do it two times'</p>
<p>3X2=6</p>	<p>Once children have shown a basic understanding of multiplication they will start to record numbers, not pictorially anymore. They write each number sentence in their maths books. 3x2=6</p> <p><i>Note: Objects to aid working out are available at all times until children begin to use mental recall strategies.</i></p>
<p>Key Vocabulary Times, lots of times, array, altogether, multiply, count, <i>tens, ones,</i></p>	

Division Year 1

Focus: Solve one step division problems.

Children in year 1 will begin to learn how to divide. They will work on simple division problems using tangible objects and pictorial recording.

	<p>The children will start by sharing objects between set groups e.g. 12 sweets shared between 3 children. They will discuss how to share equally so no group has more or less.</p>
	<p>The written division sentence will be modelled by the teacher and the children will start to copy onto whiteboards/into their books.</p>
	<p>Children will begin to use arrays to work out division sentences by drawing rings around each 'group'.</p>
<p>Key Vocabulary Share, share equally, groups of, lots of, array, divide, divided by,</p>	