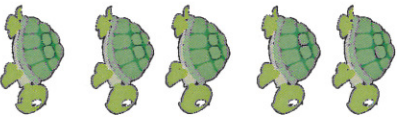
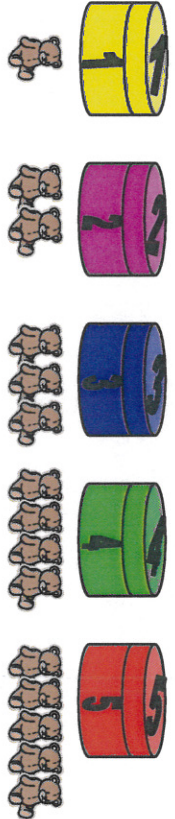
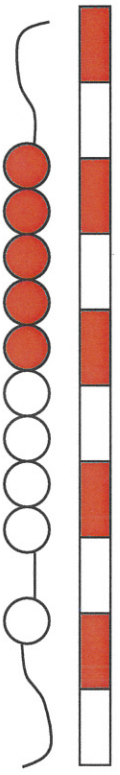
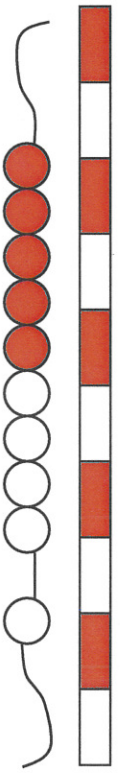

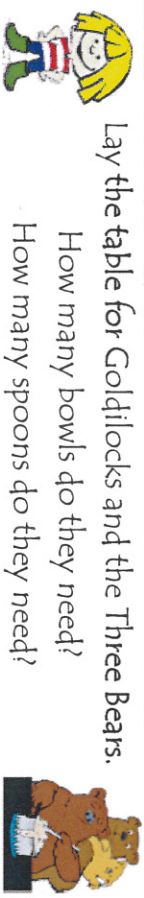

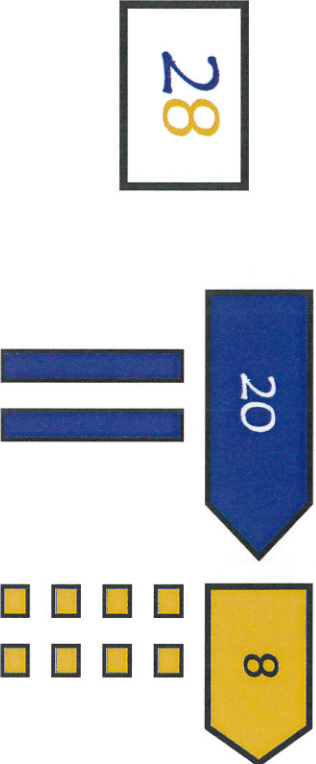
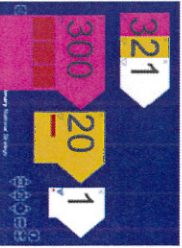



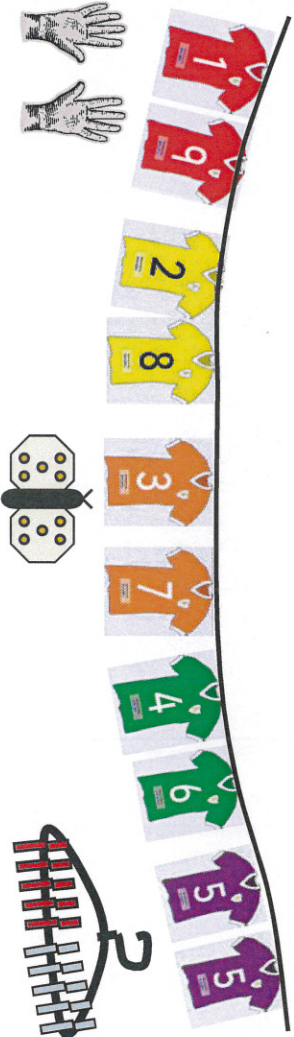
Addition

Objectives	Models and Images	Vocabulary
<p><u>Foundation Stage</u></p> <p>Say and use the number names in order in familiar contexts e.g. number rhymes</p>	 <p><u>Turtles</u> <i>Poem</i> One baby turtle alone and new. Finds a friend, and then there are two. Two baby turtles crawl down to the sea. They find another, and then there are three. Three baby turtles crawl along the shore. They find another, and then there are four. Four baby turtles go for a dive. Up swims another, and then there are five.</p>	<p>number names</p>
<p>Know that numbers identify how many objects are in a set Match sets of objects to numerals that represent that number of objects Count reliably up to ten objects</p>		<p>count on count back count in</p>
<p>Recognise numerals 1 - 9</p>	<p>Number things around the classroom and the school</p> 	
<p>Find one more than a number from 1 to 10</p>		<p>one more</p>
<p>Begin to relate addition to combining two groups of objects</p>		<p>add, more, and, sum, altogether, double</p>
<p>In practical activities and discussion begin to use the vocabulary involved in adding</p>	 <p>Lay the table for Goldilocks and the Three Bears. How many bowls do they need? How many spoons do they need?</p>	<p>How many more is ... than ... ?</p>

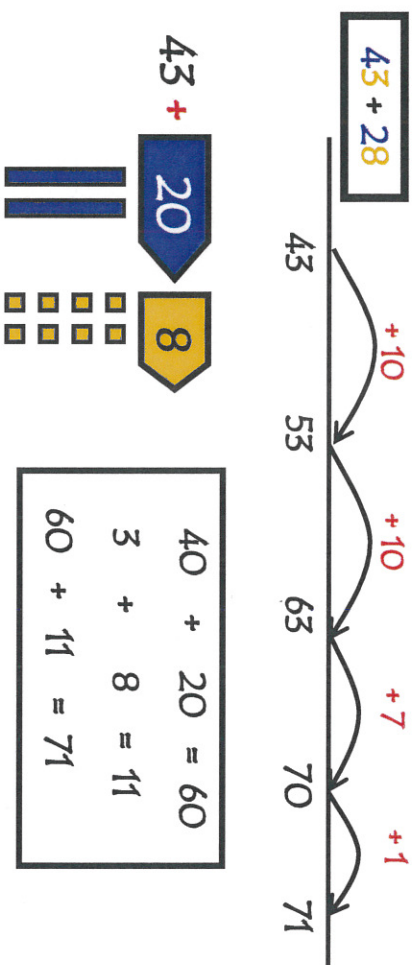
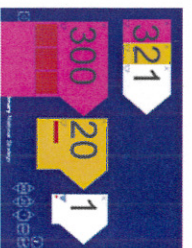


Addition

Addition		
Objectives	Models and Images/Recording	Vocabulary
Year 1 Count reliably at least 20 objects recognising that when they are rearranged the number stays the same Read and write numerals from 0 to at least 20 and the multiples of 10		units one tens digit 'teens' number
Relate addition to counting on Count on in ones, twos, fives and tens		threes, fours, fives and so on
Say the number that is one more than any given number and ten more for multiples of ten		
Derive and recall all pairs of numbers with a total of 10 and addition facts for totals to at least 5		Number facts
Recognise that addition can be done in any order Use a number line to add Use related vocabulary and use symbols to record addition number sentences Use the + and = signs		equal to sign number sentence
Apply addition strategies Solve problems involving adding in the context of numbers, measures or money working out calculations using a bead string or number line	<p>Harry has seven marbles and Hermione has three. How many do they have altogether?</p>	plus how much more is ... ?

Addition			
Objectives	Models and Images/Recording		Vocabulary/ICT
<u>Year 1 (continued)</u> Understand the structure of 'teens' numbers	thirteen 13 		eleven, twelve, thirteen ...
Begin to partition numbers using place value cards and place value apparatus Understand the structure of two-digit numbers			tens units/ones  Place value
Begin to find the value of an unknown in a number sentence	$14 + \square = 20$ $20 = \square + 14$		
Add 9 by adding on 10 and taking away 1			
Use the words greater than and equals to compare and order numbers Use the > and = signs	14 is greater than 6 $14 > 6$		greater than

Addition		
Objectives	Models and Images/Recording	Vocabulary
<p><u>Year 2</u></p> <p>Read and write two- and three-digit numbers in figures and words</p>	<p>twenty-three four hundred and ninety five</p> <p>23 495</p>  <div> $7 + 3 = 10$ $17 + 3 = 20$ $17 + 13 = 30$ etc </div> <div> $70 + 30 = 100$ $20 + 80 = 100$ $40 + 60 = 100$ etc </div>	<p>two hundred ... one-, two- or three digit number</p>
<p>Derive and recall all addition facts for each number to at least 10, all pairs with total to 20 and all pairs of multiples of 10 with totals up to 100</p>		<p>Number facts</p>








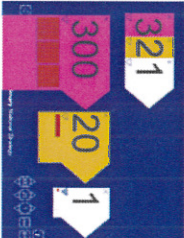

Addition

Objectives	Models and Images/Recording	Vocabulary
<p>Year 2 (continued)</p> <p>Use practical and informal written methods to support addition of two-digit numbers</p> <p>Number lines – marked and unmarked</p> <p>Partitioning – using place value cards and place value apparatus</p>		<p>addition</p> <p>tens boundary</p> <p>Jotting</p> <p>Place value</p> 
<p>Solve problems involving addition in contexts of numbers, measures, pounds or pence</p> <p>Use the symbols + and = to record and interpret number sentences</p>	<p>In a school there are 43 girls and 28 boys. What is the total number of children?</p> <p>Mel has 43cm of ribbon and Cal has 28cm. How much ribbon do they have altogether?</p> <p>$43 + 28$</p>	<p>calculate</p> <p>calculation</p>
<p>Understand that addition is the reverse of subtraction and use this to derive related addition and subtraction number sentences</p>	  <p> $14 + 6 = 20$ $20 - 6 = 14$ $20 - 14 = 6$ </p>	
<p>Calculate the value of an unknown in a number sentence</p>	<p> $14 + \square = 20$ $20 = \square + 14$ </p>	<p>symbol</p>

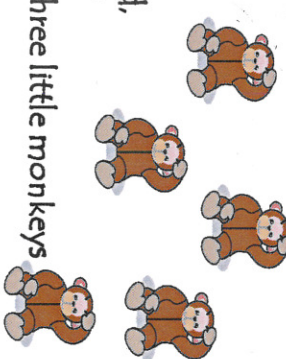
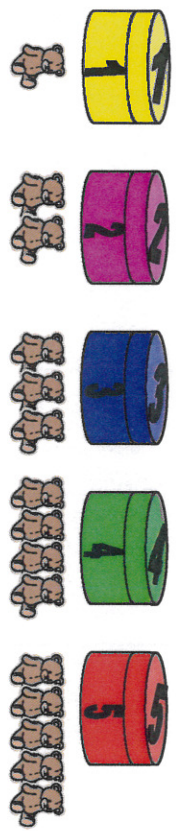
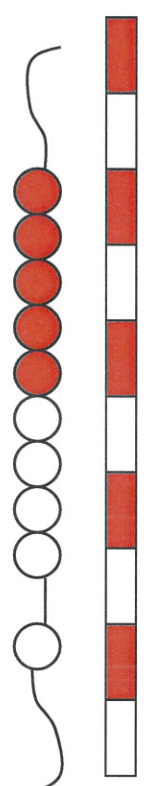


Addition

Addition		
Objectives	Models and Images/Recording	Vocabulary
<p>Year 3 (continued)</p> <p>Use practical and informal written methods to support addition of two-digit numbers</p> <p>Number lines - marked and unmarked</p> <p>Partitioning - using place value cards and place value apparatus</p> <p>TU + TU, HTU + TU, HTU + HTU</p>	<div><div>43 + 28</div><div><div><div>43</div><div>53</div><div>63</div><div>70</div><div>71</div></div><div><div>+10</div><div>+10</div><div>+7</div><div>+1</div></div></div></div> <div><div><div><div>40</div><div>3</div></div><div>+</div><div><div>20</div><div>8</div></div></div><div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div></div><div></div><div></div><div></div></div></div></div><div><div><div>40 + 3</div><div>20 + 8</div><div>60 + 11 = 71</div></div></div></div></div> <p>Jenny sent two parcels by post. One costs £2.70, and the other costs £1.90. What is the total cost of the two parcels?</p> <div><div>Use a number line for calculations involving time</div></div>	<p>tens boundary</p> <p>addition</p> <p>jotting</p> <p>Place value</p>

Subtraction

Objectives	Models and Images/Recording	Vocabulary
<p><u>Year 3</u></p> <p>Derive all subtraction facts for each number to 20 and differences of multiples of 10</p>	 <div> <div>- 14</div> <div>=</div> <div></div> </div> <div> <div>- 6</div> <div>=</div> <div></div> </div>	
<p>Develop and refine written methods to support, record or explain subtraction of two-digit and three-digit numbers</p> <p>Blank Number Lines</p> <p>Partitioning</p> <p>TU - TU, HTU - TU.</p> <p>HTU - HTU</p>	<p>Use practical apparatus to reinforce exchanging</p> <div> <div>54 - 27 =</div> <div></div> <div>54 - 20 =</div> <div></div> <div>34 - 7 = 27</div> <div></div> </div> <div> <div>48 50 60 70 80 84</div> <div>counting on OR counting back</div> <div> <div>40</div> <div>8</div> <div>30</div> <div>6</div> </div> <div></div> </div>	<p>hundreds boundary</p>  <p>Place value</p>
<p>Solve one and two-step problems involving numbers, money or measures including time</p>	 <p>An ice cream costs £1.10. Tom has £5. How many ice creams can he buy? How much change would he get?</p>	

Subtraction



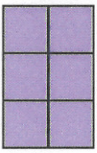
Objectives	Models and Images	Vocabulary
<p><u>Foundation Stage</u></p> <p>Say and use the number names in order in familiar context e.g. number rhymes</p>	<p><u>Five Little Monkeys</u></p> <p>Five little monkeys jumping on the bed One fell off and bumped his head Mama called the doctor and the doctor Said, "No more monkeys jumping on the bed!" Four little monkeys jumping on the bed, three little monkeys jumping on the bed, (and so on).</p> 	<p>number names</p>
<p>Know that numbers identify how many objects are in a set Match sets of objects to numerals that represent that number of objects Count reliably up to ten objects</p>		<p>count on count back count in</p>
<p>Recognise numerals 1 - 9</p>	<p>Number things around the classroom and the school</p>	
<p>Find one less than a number from 1 to 10</p>		<p>one less</p>
<p>Begin to relate subtraction to 'taking away'</p>		<p>take away, leave, difference between</p>
<p>In practical activities and discussion begin to use the vocabulary involved in subtracting</p>	 <p>Lay the table for breakfast for the Three Bears, How many bowls would we need if Daddy Bear had already left for work and therefore was not going to have breakfast?</p>	<p>How many are left? How many have gone?</p>

Subtraction

Objectives	Models and Images/Recording	Vocabulary
<p><u>Year 1</u></p> <p>Read and write numerals from 0 to at least 20 and the multiples of 10</p>	<p>0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20</p> <p>10 20 30 40 50 60 70 80 90 100</p>	<p>number names</p>
<p>Say the number that is one less than any given number and ten less for multiples of ten</p>		
<p>Count back in ones, twos, fives and tens</p>		
<p>Work out corresponding subtraction facts for totals to at least 5</p>	<p>$5 - 2 = 3$</p> <p>$2 - 1 = 1$</p>	<p>number facts</p>
<p>Subtract one-digit numbers from two-digit numbers and a multiple of 10 from a two-digit number</p>	<p>$12 - 4 = 8$</p>	
<p>Apply subtraction strategies e.g. counting on to find the difference</p> <p>Solve problems involving subtracting in the context of numbers, measures or money</p>	<p>$10 - 3 = 7$</p> <p>10</p> <p>The difference between 11 and 14 is 3.</p>	<p>difference</p>
<p>Understand subtraction as both 'take away' and 'difference' and use the related vocabulary and symbols to describe and record subtraction number sentences</p>	<p>Polly is ten years old and her sister Molly is three.</p> <p>What is the difference in their ages?</p> <p>$10 - 3 = 7$</p>	<p>subtract, minus</p> <p>How much less is ... than ... ?</p> <p>equal</p> <p>number sentence</p> <p>sign</p>

Subtraction		
Objectives	Models and Images/Recording	Vocabulary
<p><u>Year 2</u></p> <p>Read and write two- and three-digit numbers in figures and words</p>	<p>twenty-three four hundred and ninety five</p> <p>23 495</p>	<p>one-, two- three - digit number names</p>
<p>Derive and recall all subtraction facts for each number to at least 10</p>	<div> <div>10 - 2 = 8</div> <div> </div> <div>10 - 1 = 9</div> <div> </div> </div> <div> </div>	
<p>Use practical and informal written methods to support subtraction of two-digit numbers</p> <p>Number Lines & Partitioning with AND without crossing the tens boundary</p> <p>Choose whether to count on OR count back (know that the answer is the same)</p> <p>TU - U TU - TU</p>	<div> <div> <div>43 - 20</div> </div> <div> <div>43 - 27</div> </div> </div> <div> </div> <div> </div> <div> <p>54 - 27 =</p> <p>54 - 20 =</p> <p>34 - 7 = 27</p> </div> <div> <p>Use place value apparatus for exchanging</p> </div>	<p>place value exchange tens boundary one hundred less</p> <p>Place value</p>

Subtraction

Subtraction		
Objectives	Models and Images/Recording	Vocabulary
<u>Year 2 (continued)</u>		
Solve problems involving subtraction in contexts of numbers, measures, £ or p Use the symbols - and = to record and interpret number sentences	<p>Ellie had 43 marbles. She gave her friend Mel 27. How many did she have left?</p> 	jotting calculate
Understand that subtraction is the reverse of addition and use this to derive related addition and subtraction number sentences	<div style="display: flex; justify-content: space-around; align-items: center;">   </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> $14 + 6 = 20$ $20 - 6 = 14$ $20 - 14 = 6$ </div>	
Calculate the value of an unknown in a number sentence	$23 - \square = 13$ $\square - 13 = 16$	symbol