


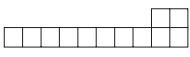
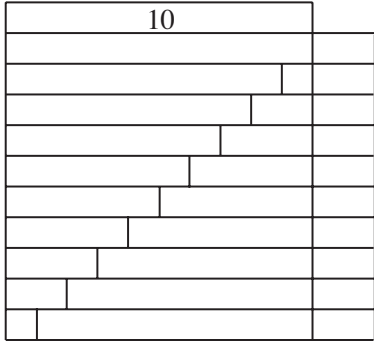
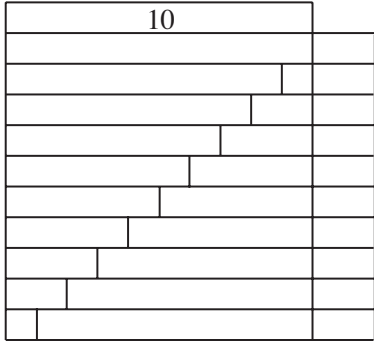
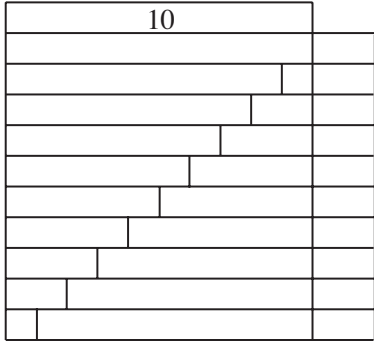
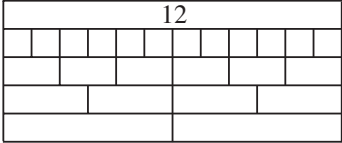


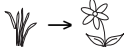
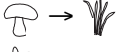
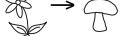
Bk1	<p>R: Mental counting C: Number bonds and sums to 12 E: <i>Number puzzles</i></p>	<p><i>Lesson Plan</i> 89</p>
Activity		Notes
1	<p>Mental Counting</p> <p>a) On these posters find things which make 12 altogether.</p> <p><i>Poster 2:</i> e.g. 2 adults, 2 children, 5 apples and 3 flowers</p> <p><i>Poster 5:</i> e.g. 5 ducks, 4 frogs, a stork and 2 tortoises</p> <p><i>Poster 6:</i> e.g. 4 flowers, 2 mushrooms, 3 butterflies, 2 leaves and 1 snail</p> <p>b) Find things in the classroom which make 12 altogether.</p> <p style="text-align: right;"><i>10 min</i></p>	<p>Whole class activity</p> <p>Counting, checking, e.g.</p> <p>BB: $2 + 2 + 5 + 3 = 12$ $5 + 4 + 1 + 2 = 12$ $4 + 2 + 3 + 2 + 1 = 12$</p> <p>Ask several Ps</p>
2	<p>Pictures of 12</p> <p>Look at the different pictures of 12. (T talks about each one.)</p> <p>BB:</p> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 10px auto;"> <p>12   twelve</p> <p>XII  </p> </div> <p>How many digits does it have? (2 digits: 1 ten and 2 units)</p> <ul style="list-style-type: none"> • A, raise your arms 12 times. (Class keeps count). Was A correct? • B, stamp your right foot 12 times. (Class keeps count) etc. • 12 Ps stand up one after another, starting from C. • 12 boys (girls) put your hands on your heads (touch your nose) one after another, starting from D (E). • T asks 12 Ps by name to come to front of class. Who can tell me a 2-part addition for 12? (e.g. $5 + 7 = 12$) Ps join hands to show it. • T whispers to Ps at front to join hands in a certain way. Class shouts out the addition. P writes addition on BB. <p style="text-align: right;"><i>20 min</i></p>	<p>Drawn on BB or use enlarged copy master or OHP</p> <p>Involve several Ps</p> <p>Talk about birthdays, ages, house numbers, anything involving 12</p> <p>Whole class discussion about 12 as a 2-digit number</p> <p>T nores who is having problems</p> <p>Praising only</p> <p>Checking, agreement</p> <p>T writes additions on BB</p> <p>Checking, agreement</p>
3	<p>Interlude</p> <p>Song or rhyme</p> <p style="text-align: right;"><i>22 min</i></p>	<p>Whole class in unison</p>
4	<p>Book 1, page 89</p> <p>Q.1 Read: <i>Colour the shapes as shown.</i></p> <p>T explains task. Review orally with whole class.</p> <p>How many did you colour red (blue, green)? (6, 4, 5)</p> <p>How many are left uncoloured? (3)</p> <p>Describe to me where they are (e.g. top row, 3rd from right), etc.</p> <p style="text-align: right;"><i>28 min</i></p>	<p>Individual work, monitored</p> <p>Discussion, checking</p> <p>Agreement, self-correcting</p> <p>Oral practice</p>
5	<p>Book 1, page 89, Q.2</p> <p>Look at the first picture. How many cabbages (flowers) are there? How many of each kind of flower? How many rows? etc.</p> <p>Y, come and write an addition about it. Is he/she correct? Who thinks something else? etc.</p> <p>Z, come and write a subtraction about it. Is he/she correct? Who thinks something else? etc.</p> <p>Repeat for other picture. Encourage creativity.</p> <p>(Or done as individual work, reviewed with whole class)</p> <p style="text-align: right;"><i>34 min</i></p>	<p>Whole class activity</p> <p>Drawn on BB or use enlarged copy master or OHP</p> <p>Discussion, checking</p> <p>e.g. BB:</p> <p>a) $6 + 2 + 4 = 12$ $12 - 6 = 4 + 2$ etc.</p> <p>b) $4 + 4 + 4 = 12$ $12 - 6 = 3 + 3$ etc.</p>

<h1>Bk1</h1>		<p><i>Lesson Plan 89</i></p>																																																																																																																							
<p>Activity</p> <p>6</p>	<p>Book 1, page 89</p> <p>Q.3 Read: <i>Find the shapes in the grids. Fill in the missing numbers which sum to 12.</i></p> <p>T explains task. You can choose part a) or part b).</p> <p>Review with whole class. T writes additions on BB.</p> <p>Or can be done as a whole class activity, with the shapes cut out from coloured card as templates. Ps stick them over enlarged grid on BB.</p> <p>Class reads out the additions. 'e.g. 3 + 3 + 3 + 3 = 12', etc.</p> <p><i>Possible solutions:</i></p> <p>a)</p> <table border="1" style="display: inline-table; margin-right: 20px;"> <tr><td>3</td><td>3</td><td>1</td><td>5</td></tr> <tr><td>3</td><td>4</td><td>2</td><td>5</td></tr> <tr><td>3</td><td>4</td><td>3</td><td>1</td></tr> <tr><td>2</td><td>2</td><td>4</td><td>3</td></tr> </table> <table border="1" style="display: inline-table; margin-right: 20px;"> <tr><td>3</td><td>3</td></tr> <tr><td>3</td><td></td></tr> <tr><td>3</td><td>4</td></tr> <tr><td></td><td>4</td></tr> <tr><td>2</td><td>2</td></tr> </table> <table border="1" style="display: inline-table; margin-right: 20px;"> <tr><td>1</td><td>5</td></tr> <tr><td></td><td>5</td></tr> <tr><td>2</td><td>1</td></tr> <tr><td></td><td>3</td></tr> <tr><td>4</td><td>3</td></tr> </table> <p style="text-align: center;">= 12</p> <p>b)</p> <table border="1" style="display: inline-table; margin-right: 20px;"> <tr><td>8</td><td>3</td><td>4</td><td>7</td><td>9</td><td>4</td><td>8</td><td>2</td><td>6</td><td>0</td></tr> <tr><td>7</td><td>2</td><td>3</td><td>2</td><td>4</td><td>0</td><td>5</td><td>1</td><td>6</td><td>1</td></tr> <tr><td>0</td><td>6</td><td>1</td><td>2</td><td>1</td><td>0</td><td>8</td><td>5</td><td>9</td><td>1</td></tr> <tr><td>6</td><td>8</td><td>5</td><td>8</td><td>7</td><td>8</td><td>3</td><td>2</td><td>0</td><td>1</td></tr> <tr><td>3</td><td>5</td><td>0</td><td>0</td><td>9</td><td>8</td><td>3</td><td>3</td><td>3</td><td>0</td></tr> <tr><td>0</td><td>5</td><td>2</td><td>6</td><td>5</td><td>3</td><td>0</td><td>4</td><td>1</td><td>2</td></tr> </table> <table border="1" style="display: inline-table; margin-right: 20px;"> <tr><td>3</td></tr> <tr><td>2</td><td>3</td><td>2</td></tr> <tr><td></td><td></td><td>2</td></tr> <tr><td>3</td></tr> <tr><td>3</td><td>3</td><td>3</td></tr> </table> <table border="1" style="display: inline-table; margin-right: 20px;"> <tr><td>5</td></tr> <tr><td>5</td><td>2</td></tr> <tr><td></td><td>4</td><td>8</td></tr> <tr><td></td><td></td><td>6</td></tr> <tr><td></td><td></td><td>6</td></tr> </table> <p style="text-align: center;">= 12</p> <p style="text-align: right;">42 min</p>	3	3	1	5	3	4	2	5	3	4	3	1	2	2	4	3	3	3	3		3	4		4	2	2	1	5		5	2	1		3	4	3	8	3	4	7	9	4	8	2	6	0	7	2	3	2	4	0	5	1	6	1	0	6	1	2	1	0	8	5	9	1	6	8	5	8	7	8	3	2	0	1	3	5	0	0	9	8	3	3	3	0	0	5	2	6	5	3	0	4	1	2	3	2	3	2			2	3	3	3	3	5	5	2		4	8			6			6	<p>Notes</p> <p>Individual work Differentiated Drawn on BB or use enlarged copy master or OHP Discussion, checking</p> <p>or</p> <p>Whole class activity</p> <p>Discussion, checking, agreement</p>
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<p>7</p>	<p>Book 1, page 89</p> <p>Q.4 Read: <i>Fill in the missing numbers.</i></p> <p>Review orally with whole class. Mistakes corrected at number line</p> <p style="text-align: right;">45 min</p>	<p>Individual work, monitored Discussion, checking Agreement, self-correcting</p>																																																																																																																							

Bk1	<p>R: Money C: Number bonds and sums to 12 E: Even, odd, 1-digit, 2-digit</p>	<i>Lesson Plan</i> 90		
<i>Activity</i>		<i>Notes</i>		
1	<p>Shopping Ps come to front in pairs. A is the shopkeeper, B is the customer. B buys e.g. a picture @ 7p each and a pencil @ 5p each Role play: e.g. A: How can I help you? B: Please could I have this picture and a pencil. A: That will be 12p altogether. B: Opens purse and takes out 12pennies (or 1 ten + 2 '1's) A: Puts items in bag and says 'Here you are.' B: Thank you. Goodbye!</p> <p>Who can come and write an addition about the story? Repeat for other pairs of Ps and different items (to make 12p).</p> <p style="text-align: right;"><i>10 min</i></p>	<p>Whole class (paired) activity T helping, encouraging</p> <p>Praising</p> <p>Use real purse and real or play money.</p> <p>BB: $7 + 5 = 12$ Encourage creativity</p>		
2	<p>Book 1, page 90 Q. 1 Read: <i>Continue drawing the number strips to make 12.</i> Write down the additions</p> <p>Ps can make first on desks with number strips (or Cuisenaire rods or plastic cubes stuck together).</p> <p style="text-align: center;">BB:</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: center;">  </td> <td style="width: 50%; vertical-align: top;"> $10 + 2 = 12$ $9 + 1 + 2 = 9 + 3 = 12$ $8 + 2 + 2 = 8 + 4 = 12$ $7 + 3 + 2 = 7 + 5 = 12$ $6 + 4 + 2 = 6 + 6 = 12$ $5 + 5 + 2 = 5 + 7 = 12$ $4 + 6 + 2 = 4 + 8 = 12$ $3 + 7 + 2 = 3 + 9 = 12$ $2 + 8 + 2 = 2 + 10 = 12$ $1 + 9 + 2 = 1 + 11 = 12$ </td> </tr> </table> <p style="text-align: right;"><i>20 min</i></p>		$10 + 2 = 12$ $9 + 1 + 2 = 9 + 3 = 12$ $8 + 2 + 2 = 8 + 4 = 12$ $7 + 3 + 2 = 7 + 5 = 12$ $6 + 4 + 2 = 6 + 6 = 12$ $5 + 5 + 2 = 5 + 7 = 12$ $4 + 6 + 2 = 4 + 8 = 12$ $3 + 7 + 2 = 3 + 9 = 12$ $2 + 8 + 2 = 2 + 10 = 12$ $1 + 9 + 2 = 1 + 11 = 12$	<p>Start as whole class activity, changing to individual work when T thinks Ps understand</p> <p>Drawn on BB or use enlarged copy master or OHP.</p> <p>T monitoring helping Discussion Checking, agreement</p> <p>Class reads out equations together.</p>
	$10 + 2 = 12$ $9 + 1 + 2 = 9 + 3 = 12$ $8 + 2 + 2 = 8 + 4 = 12$ $7 + 3 + 2 = 7 + 5 = 12$ $6 + 4 + 2 = 6 + 6 = 12$ $5 + 5 + 2 = 5 + 7 = 12$ $4 + 6 + 2 = 4 + 8 = 12$ $3 + 7 + 2 = 3 + 9 = 12$ $2 + 8 + 2 = 2 + 10 = 12$ $1 + 9 + 2 = 1 + 11 = 12$			
3	<p>Interlude Relaxation</p> <p style="text-align: right;"><i>22 min</i></p>	Whole class resting		
4	<p>Book 1, page 90, Q.2 There were 12 sticks on each of the tables. Look at Peggy's table. A, come and count how many sticks are left. (6) So how many sticks has Peggy taken? (6) B, come and write an equation about the story. Repeat for other tables. Who took the most (least) number of sticks? (Sue, Peggy) Look at the sticks left on the tables. Let's compare them. C, come and write in the correct signs. Is C correct? ($6 > 5 > 4 < 5$)</p> <p>Or can be done for real, with 4 Ps and 4 tables each with 12 sticks. Ps can take as many sticks as they want and equations would need to be changed accordingly.</p> <p style="text-align: right;"><i>32 min</i></p>	<p>Whole class activity Drawn on BB or use enlarged copy master or OHP. Discussion BB: <i>Peggy:</i> $12 - 6 = 6$ <i>Anne:</i> $12 - 5 = 7$ <i>Sue:</i> $12 - 4 = 8$ <i>Sarah:</i> $12 - 5 = 7$ Checking, agreement</p> <p>Demonstration if necessary to aid understanding.</p>		

Bk1		<i>Lesson Plan 90</i>
<p>Activity</p> <p>6</p>	<p>Book 1, page 90</p> <p>Q.3 Read: <i>Fill in the missing numbers.</i></p> <p>a) What have the circles to do with the numbers? (12 circles altogether; 10 in top row, 2 in bottom row; 4 white circles and 8 grey circles)</p> <p>Use these circles to help you fill in the missing numbers. Review with whole class. Use counters if there are difficulties.</p> <p>Show that: a) $4 + 8 = 4 + (6 + 2) = 10 + 2 = 12$ $8 + 4 = 8 + (2 + 2) = 10 + 2 = 12$ $12 - 4 = (12 - 2) - 2 = 10 - 2 = 8$ $12 - 8 = (12 - 2) - 6 = 10 - 6 = 4$</p> <p>Repeat for part b): $7 + 5 = 7 + (3 + 2) = 10 + 2 = 12$ $5 + 7 = 5 + (5 + 2) = 10 + 2 = 12$ $12 - 7 = (12 - 2) - 5 = 10 - 5 = 5$ $12 - 5 = (12 - 2) - 3 = 10 - 3 = 7$</p> <p style="text-align: right;"><i>40 min</i></p>	<p>Notes</p> <p>Individual work Monitored, helped</p> <p>Discussion</p> <p>Checking, agreement</p> <p>Demonstrate with Ps at front of class, grouping them in different ways</p> <p>(e.g. 7 girls and 5 boys)</p>
<p>7</p>	<p>Book 1, page 90</p> <p>Q.4 Read: <i>Continue the pattern.</i></p> <p>How many 2-digit numbers ('11's, '12's, words) did you write?</p> <p style="text-align: right;"><i>45 min</i></p>	<p>Individual work Monitored Praising</p>

Bk1	R: Mental operations C: Operations, equations to 12 E: Sequences, length	<i>Lesson Plan</i> 91
<i>Activity</i>		<i>Notes</i>
1	<p>Counting relay (with soft ball)</p> <p>T throws ball to P₁ saying, e.g. '2 + 3', P throws ball back to T saying '5'. T throws ball to P₂ saying '+ 2'. P throws ball back to T saying '7'.</p> <p>e.g. T: 2 + 3 + 2 + 3 + 4 Ps: 5, 7, 10, 14 T: 7 + 2 + 1 + 2 Ps: 9, 10, 12 T: 2 + 4 + 5 + 1 Ps: 6, 11, 12 etc.</p> <p>(With and without crossing over 10.)</p> <p style="text-align: right;"><i>5 min</i></p>	<p style="text-align: center;"><i>Notes</i></p> <p>Whole class activity</p> <p>At speed</p> <p>Involve as many Ps as possible</p>
2	<p>Sequences (relay)</p> <p>Continue these sequences. e.g.</p> <p>T: 0, 2, 4, ... Ps: ... , 6, 8, 10, 12, 14, 16, 18, 20, (...)</p> <p>0, 3, 6, , 9, 12, 15, 18, (21, ...)</p> <p>0, 4, 8, , 12, 16, 20, (24, ...)</p> <p>0, 5, 10, , 15, 20, (25, ...)</p> <p>19, 17, 15, , 13, 11, 9, 7, 5, 3, 1, (-1, ...)</p> <p style="text-align: right;"><i>10 min</i></p>	<p>Whole class activity</p> <p>At speed</p> <p>Involve as many Ps as possible</p> <p>Preparation for multiplication</p> <p>Preparation for division</p>
3	<p>Making 12</p> <p>Show me on your desks different ways to make 12 using equal strips.</p> <p>How many '1's, '2's, '3's, '4's, '6's did you use?</p> <div style="text-align: center;">  </div> <p>Write additions about it in the back page of your <i>books</i>.</p> <p>BB: 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 = 12 2 + 2 + 2 + 2 + 2 + 2 = 12 3 + 3 + 3 + 3 = 12 4 + 4 + 4 = 12 6 + 6 = 12</p> <p>(Preparation for: $12 \times 1 = 6 \times 2 = 4 \times 3 = 3 \times 4 = 2 \times 6 = 12$)</p> <p>Let's all read out the additions.</p> <p style="text-align: right;"><i>20 min</i></p>	<p>Paired work, monitored (Can use Cuisenaire rods or plastic cubes stuck together)</p> <p>Discussion on number of strips</p> <p>Individual work, monitored Reviewed at BB with whole class.</p> <p>Use large number strips stuck to BB or enlarged copy master in which Ps write the numbers. In unison</p>
4	<p>Interlude</p> <p>Action song</p> <p style="text-align: right;"><i>22 min</i></p>	<p>Whole class in unison</p>
5	<p>Book 1, page 91, Q.1</p> <p>Everyone look at the first number line. A, come and draw a cross where you think the number '12' should be. Is A correct?</p> <p>B, is the first missing number smaller or bigger than 12? (smaller) How many smaller? (4) A, put your finger on the 12 and count back four. What number did you land on? (8)</p> <p>Mark '8' with a green dot and write in the missing number on the grid.</p> <p>Is the next missing number bigger or smaller than 12? (bigger) How many bigger? (4) C put your finger on '12' and count on 4. What number did you land on? (16)</p> <p>Mark '16' with a red dot and write in the missing number.</p>	<p>Whole class activity</p> <p>Drawn on BB or use enlarged copy master or OHP</p> <p>Discussion, agreement</p> <p>Ps copy in books too</p> <p>Discussion, agreement</p> <p>Ps copy in their books too</p>

Bk1		<i>Lesson Plan 91</i>
Activity	<p>Let's read out the inequality from left to right, (right to left): 'eight is four less than twelve, twelve is four less than sixteen' . . .</p> <p>Now we know where all the numbers are on the number line, fill in the rest of the missing numbers in your books, using the number line to help you.</p> <p>Review at BB with whole class.</p> <p>Deal with the 2nd part in similar way.</p> <p>(Or all done as individual work, reviewed at BB with whole class.)</p> <p style="text-align: right;">30min</p>	<p style="text-align: center;">Notes</p> <p>In unison</p> <p>Individual work</p> <p>Monitored, helped</p> <p>Discussion, agreement, self-correction</p>
6	<p>Book 1, page 91</p> <p>Q.2 Read: <i>Measure how far away:</i> . . .</p> <p>Talk about the picture first. What could the story be? (e.g. ladybird lived beside the flower, went to visit a friend who lived beside the mushroom, etc.)</p> <p>Talk about 'cm' as unit of measurement. Show how to use rulers accurately (on BB with large BB ruler if possible)</p> <p>Review with whole class, writing results on BB.</p> <p>Which is the shortest (longest) distance? (5 cm, 10 cm)</p> <p style="text-align: right;">37 min</p>	<p>Individual work</p> <p>Monitored, helped</p> <p>BB:  : 5 cm</p> <p> : 10 cm</p> <p> : 7 cm</p> <p>(or use G, F, M)</p>
7	<p>Book 1, page 91</p> <p>Q.3 Read: <i>Fill in the missing numbers.</i></p> <p>See how many you can do in 4 minutes. (You may use your number lines to help you.)</p> <p>Review orally with whole class. Mistakes corrected at number line.</p> <p style="text-align: right;">42 min</p>	<p>Individual work</p> <p>Monitored</p> <p>Discussion, agreement</p> <p>Self-correction</p>
8	<p>Book 1, page 91, Q.4</p> <p>Can be done at speed round the class. T is <i>a</i>, Ps are <i>b</i>, e.g T says '0', P₁ says '12'; T says '1', P₂ says '11'; etc.</p> <p>Repeat with girls as <i>a</i>, boys as <i>b</i> and numbers mixed up, e.g. G₁ says '5', B₁ says '7'; G₂ says '3', B₂ says '9'; etc.</p> <p>(Or done as individual work, reviewed with whole class.)</p> <p style="text-align: right;">45 min</p>	<p>Whole class activity</p> <p>At speed</p> <p>Involve all Ps</p> <p>(Can be differentiated, with weak Ps as <i>a</i>)</p>

Bk1	R: Mental operations C: Operations, equations with 12 E: <i>Length, area;</i>	<i>Lesson Plan</i> 92
<i>Activity</i>		<i>Notes</i>
1	Secret numbers I am thinking of a number less than 13. You have to guess what it is by asking me questions. I will answer only 'Yes' or 'No'. (e.g. Ps: 'Does it have 1 digit?' T: 'Yes'. Ps: 'Is odd?' T: 'No' Ps: 'Is it less than 6?' T: 'Yes'. Ps: 'Is it more than 2?' T: 'No'. Ps: 'Is it 2?' T: 'Yes') <div style="text-align: right;"><i>5 min</i></div>	Whole class activity Involve several pupils Encourage Ps to ask logical questions, keeping in mind the clues already given.
2	Oral work Let's see how many different ways you can think of to describe the number '12'. (e.g. $10 + 2$, $15 - 3$, $4 + 4 + 4$, the 2nd even 2-digit number, the next number after 11, the number before 13, etc.) <div style="text-align: right;"><i>10 min</i></div>	Whole class activity Involve several pupils Reasoning, checking, agreement
3	Book 1, page 92 Q.1 Read: <i>Continue the colouring pattern.</i> Talk about the shapes and the colours used first. Review at BB. <ul style="list-style-type: none"> • What is the colouring pattern? (Red, Blue, Yellow, Green – 4 colours) • How many complete patterns did you colour? (4) + 1 red • What other pattern can you see? (Shape pattern: triangle, circle, square – 3 shapes) • How many complete shape patterns can you see? (7) • In what position from the left are: <ul style="list-style-type: none"> a) the red triangles (1st, 13th, ...) b) the yellow squares (3rd, 15th, ...) c) the red shapes (1st, 5th, 9th, 13th, 17th, ...) d) the triangles? (1st, 4th, 7th, 10th, 13th, 16th, ...) <div style="text-align: right;"><i>18 min</i></div>	Individual work, monitored Discussion at BB with whole class Demonstrate with large coloured shapes stuck on BB in correct sequence (copy master enlarged on coloured card and cut out) BB: 1, 13, ... 3, 15, ... 1, 5, 9, 13, 17, 21, ... 1, 4, 7, 10, 13, 16, 19, ...
4	Interlude Relaxation <div style="text-align: right;"><i>20 min</i></div>	Whole class resting
5	Book 1, page 92 Q.2 Read: <i>Write down the number of sticks you need to enclose each shape.</i> <i>Write down the number of squares you need to cover each shape.</i> Explain what 'enclose' means. Demonstrate on BB with simple drawing. Talk about the units being used to measure the shapes. Does the stick have anything to do with the square? (The stick is the same length as each side of the square.) (If possible, let Ps have sticks (straws, rods) of unit length and cut-out unit squares to make shapes on desk first.) Review at BB with whole class. What can you notice? (Shapes in b) and d) have same number of sticks but different number of squares, i.e. same length round outside (perimeter) but cover more space (area). <div style="text-align: right;"><i>27 min</i></div>	Paired work Monitored, helped Drawn on BB or use enlarged copy master or OHP BB: b) 12 sticks, 8 squares c) 10 sticks, 4 squares d) 12 sticks, 6 squares e) 16 sticks, 7 squares Discussion

Bk1		<i>Lesson Plan 92</i>
Activity		Notes
6	<p>Book 1, page 92</p> <p>Q.3 Read: <i>Fill in the missing numbers.</i> (Ps can use number lines to help them.) Review with whole class. Mistakes corrected at number line.</p> <p style="text-align: right;">32 min</p>	<p>Individual work, monitored (or Cuisenaire rods or counters) Discussion, agreement</p>
7	<p>Book 1, page 92, Q.4</p> <p>Read: <i>Fill in the missing numbers.</i> Look at part a). Let's read what it says: 'five plus six is one less than five plus something'. X, come and write in the missing number. (7) Who agrees with X? Who thinks something else? Why? Let's check by adding each side of the inequality.</p> <p>Y, come and write in the answer on the LHS and Z, come and write in the answer on the RHS. Are they correct? (Yes, 11 is one less than 12.) Repeat in similar way for b), c) and d). (or done as individual work, monitored and reviewed at BB)</p> <p>Extension Did we need to work out '5 + 6' before we can find out what the 'something' is? (No, the '5's are the same so the 'something' must be one more than the '6'.</p> <p style="text-align: right;">40 min</p>	<p>Whole class activity Drawn on BB or use enlarged copy master or OHP. Discussion, agreement BB:</p> <p>a) $5 + 6 <_1 5 + 7$ $11 <_1 12$</p> <p>b) $12 - 9 >_2 10 - 9$ $3 >_2 1$</p> <p>c) $4 + 8 >_3 1 + 8$ $12 >_3 9$</p> <p>d) $11 - 3 <_1 12 - 3$ $8 <_1 9$</p>
8	<p>Book 1, page 92</p> <p>Q.5 Read: <i>Kate invited 12 friends to her party.</i> <i>Three could not come. How many children came?</i> Think carefully about how to find the answer. Show me the answer with your number cards when I say. Show me . . . now! (9) R, come and explain to us how you got your answer. Who agrees with R? Who did it another way? etc. Everyone write it as an equation in your books.</p> <p style="text-align: right;">45 min</p>	<p>Individual work T repeats several times In unison Discussion, agreement BB: $12 - 3 = 9$</p>

<h1>Bk1</h1>	<p>R: Mental counting C: Number bonds and sums to 13 E: Roman numerals</p>	<h2 style="text-align: center;">Lesson Plan 93</h2>
<p>Activity</p> <p style="text-align: center;">1</p>	<p>Mental Counting</p> <p>a) On these posters find things which make 13 altogether.</p> <p>Poster 3: e.g. 5 hedgehogs, 3 frogs, 4 rabbits and 1 tortoise Poster 4: e.g. 3 girls, 2 beds, 6 slippers, 1 carpet and 1 ball Poster 7: e.g. 4 people, 6 strips on zebra crossing and 3 cars</p> <p>b) Find things in the classroom which make 13 altogether.</p> <p style="text-align: right;">8 min</p>	<p style="text-align: center;">Notes</p> <p>Whole class activity Counting, checking, e.g. BB: $5 + 3 + 4 + 1 = 13$ $3 + 2 + 6 + 1 + 1 = 13$ $4 + 6 + 3 = 13$</p> <p>Ask several Ps</p>
<p style="text-align: center;">2</p>	<p>Pictures of 13</p> <p>Look at the different pictures of 13. (T talks about each one.)</p> <p>BB:</p> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 10px auto;"> <p style="text-align: center;"> </p> </div> <p>How many digits does it have? (2 digits: 1 ten and 3 units)</p> <ul style="list-style-type: none"> • A, stick out your tongue 13 times. (Class keeps count) Was A correct? • B, punch the air 13 times with your left fist.. (Class keeps count) etc. • 13 Ps blow a kiss one after another, starting from C. • 13 Ps hold hands one after another, starting from D. • E, come and drop 13 marbles into this box. Was E correct? • T writes a big '13' on the BB. Who else can come and do it? <p style="text-align: right;">16 min</p>	<p>Drawn on BB or use enlarged copy master or OHP</p> <p>Involve several Ps</p> <p>Talk about 13 as an 'unlucky' number. Who agrees?</p> <p>Whole class discussion about what number 13 means to Ps</p> <p>T checking who is having problems</p> <p>Praising only</p> <p>Checking, agreement</p>
<p style="text-align: center;">3</p>	<p>Book 1, page 93</p> <p>Q.1 Read: <i>Continue the pattern.</i></p> <p>How many times did you write each pattern?</p> <p style="text-align: right;">20 min</p>	<p>Individual work, monitored</p> <p>Corrected</p> <p>Praising only</p>
<p style="text-align: center;">4</p>	<p>Interlude</p> <p>Song or rhyme</p> <p style="text-align: right;">22 min</p>	<p>Whole class in unison</p>
<p style="text-align: center;">5</p>	<p>Book 1, page 93, Q.2</p> <p>Ps each have a square of paper or tissue on desks. T demonstrates with larger square.</p> <p>What shape is it? (square) How many sides (corners) does it have? (4) Which side is longest? (All the same length)</p> <p>T shows how to fold it in half so that diagonally opposite corners meet and Ps copy. What shape have you made? (triangle) Ps hold them up.</p> <p>What can you say about it? (3 sides and 3 corners, 1 side longer than the other 2 sides, which are equal in length, etc.) </p> <p>This is what the children in the book had to do.</p> <p>Read: <i>Julie, Susan, Tony and Peter have to fold 13 napkins each.</i> <i>Write equations about the picture.</i></p> <p>Deal with one part at a time, with Ps coming to BB to fill in numbers.</p> <p style="text-align: center;"><i>Who has fewest napkins left to fold? (Tony has only 5 left)</i></p> <p>(Or done as individual work, monitored and reviewed at BB)</p> <p style="text-align: right;">30 min</p>	<p>Whole class activity</p> <p>BB:</p> <p><i>Julie:</i> $5 + 8 = 13$ <i>Susan:</i> $7 + 6 = 13$ $13 - 5 = 8$ $13 - 7 = 6$ $13 - 8 = 5$ $13 - 6 = 7$</p> <p><i>Tony:</i> $8 + 5 = 13$ <i>Peter:</i> $6 + 7 = 13$ $13 - 8 = 5$ $13 - 6 = 7$ $13 - 5 = 8$ $13 - 7 = 6$</p> <p>Drawn on BB or use enlarged copy master or OHP</p> <p>Discussion, agreement, (Demonstrate with Ps' folded paper or tissue.)</p>

Bk1		<i>Lesson Plan 93</i>																																																																								
Activity 6	<p>Book 1, page 93</p> <p>Q. 3 Read: <i>Write down the answers in Roman numerals.</i></p> <p>Remind Ps how the numbers 5 (V) and ten (X) are written, and that VI means '5 + 1 = 6' and IX means '10 - 1 = 9', etc.</p> <p>Review at BB with whole class. Ps write solutions then class reads out equations (with T's help).</p> <p style="text-align: right;"><i>35 min</i></p>	<p style="text-align: center;">Notes</p> <p>Individual work, monitored</p> <p>Discussion</p> <p>Agreement, checking</p> <p>Self-correction</p> <p>In unison</p>																																																																								
7	<p>Book 1, page 93, Q.4</p> <p>Look at this number grid. T asks P to come to BB, choose a template and lay it over the grid so that the numbers enclosed add up to 13.</p> <p>J, come and try. Is J correct? Let's check. (T writes addition, class agreement or correction) Who thinks something different from J?</p> <p>Continue in similar way with other templates and other Ps.</p> <p>(Or done as individual work, monitored and reviewed at BB with whole class.)</p> <p><i>Possible solution:</i></p> <table style="margin-left: auto; margin-right: auto;"> <tbody> <tr><td>1</td><td>9</td><td>0</td><td>6</td><td>2</td><td>4</td><td>5</td><td>5</td><td>8</td><td>2</td></tr> <tr><td>8</td><td>4</td><td>6</td><td>3</td><td>1</td><td>3</td><td>5</td><td>1</td><td>2</td><td>0</td></tr> <tr><td>6</td><td>4</td><td>0</td><td>2</td><td>5</td><td>1</td><td>0</td><td>1</td><td>9</td><td>7</td></tr> <tr><td>9</td><td>0</td><td>3</td><td>4</td><td>0</td><td>8</td><td>3</td><td>0</td><td>9</td><td>8</td></tr> <tr><td>3</td><td>3</td><td>3</td><td>3</td><td>2</td><td>5</td><td>0</td><td>7</td><td>6</td><td>6</td></tr> <tr><td>9</td><td>6</td><td>0</td><td>1</td><td>1</td><td>0</td><td>5</td><td>7</td><td>4</td><td>0</td></tr> </tbody> </table> <div style="margin-left: 200px;"> <table style="border-collapse: collapse;"> <tr><td style="border: 1px solid black; padding: 2px;">0</td><td style="border: 1px solid black; padding: 2px;">8</td></tr> <tr><td style="border: 1px solid black; padding: 2px;">5</td><td></td></tr> </table> <table style="margin-left: 100px; border-collapse: collapse;"> <tr><td style="border: 1px solid black; padding: 2px;">9</td></tr> <tr><td style="border: 1px solid black; padding: 2px;">4</td></tr> </table> <table style="margin-left: 100px; border-collapse: collapse;"> <tr><td style="border: 1px solid black; padding: 2px;">6</td></tr> <tr><td style="border: 1px solid black; padding: 2px;">3</td><td style="border: 1px solid black; padding: 2px;">1</td><td style="border: 1px solid black; padding: 2px;">3</td></tr> </table> <table style="margin-left: 100px; border-collapse: collapse;"> <tr><td style="border: 1px solid black; padding: 2px;">7</td><td style="border: 1px solid black; padding: 2px;">6</td></tr> </table> <p style="text-align: center;">= 13</p> </div> <p style="text-align: right;"><i>42 min</i></p>	1	9	0	6	2	4	5	5	8	2	8	4	6	3	1	3	5	1	2	0	6	4	0	2	5	1	0	1	9	7	9	0	3	4	0	8	3	0	9	8	3	3	3	3	2	5	0	7	6	6	9	6	0	1	1	0	5	7	4	0	0	8	5		9	4	6	3	1	3	7	6	<p>Whole class activity</p> <p>Drawn on BB or use enlarged copy master or OHP, with templates cut out of coloured card and stuck to side of BB</p> <p>Ps choose which template they want to use.</p> <p>Discussion about different solutions</p> <p>If Ps working individually in their books, each shape could be coloured in a different colour.</p>
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8	<p>Book 1, page 93</p> <p>Q.4 Read: <i>Fill in the table.</i></p> <p>T explains task. Review orally with whole class.</p> <p>Mistakes corrected at number line.</p> <p style="text-align: right;"><i>45 min</i></p>	<p>Individual work, monitored</p> <p>Discussion</p> <p>Agreement, checking</p> <p>(Or done orally round class)</p>																																																																								


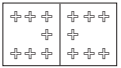

Bk1		<i>Lesson Plan 94</i>
<p>Activity</p> <p>6</p>	<p>Book 1, page 94</p> <p>Q.3 Read: <i>Fill in the missing numbers.</i></p> <p>a) What have the circles to do with the numbers? (13 circles altogether; 10 in top row, 3 in bottom row; 5 white circles and 8 grey circles)</p> <p>Use these circles to help you fill in the missing numbers. Review with whole class. Use counters if there are difficulties.</p> <p>Show that: a) $5 + 8 = 5 + (5 + 3) = 10 + 3 = 13$ $8 + 5 = 8 + (2 + 3) = 10 + 3 = 13$ $13 - 5 = (13 - 3) - 2 = 10 - 2 = 8$ $13 - 8 = (13 - 3) - 5 = 10 - 5 = 5$</p> <p>Repeat for part b): $6 + 7 = 6 + (4 + 3) = 10 + 3 = 13$ $7 + 6 = 7 + (3 + 3) = 10 + 3 = 13$ $13 - 6 = (13 - 3) - 3 = 10 - 3 = 7$ $13 - 7 = (13 - 3) - 4 = 10 - 4 = 6$</p> <p style="text-align: right;"><i>40 min</i></p>	<p>Notes</p> <p>Individual work Monitored, helped</p> <p>Discussion</p> <p>Checking, agreement</p> <p>Demonstrate with Ps at front of class, grouping them in different ways</p> <p>(e.g. 5 girls and 8 boys)</p>
<p>7</p>	<p>Book 1, page 94</p> <p>Q.4 Read: <i>Find routes through the maze.</i> <i>The sum of the numbers used must be 13</i></p> <p>T explains task. Ps may choose which maze they want to do. Review at BB with whole class, with Ps showing different ways. T writes additions on BB and class read aloud: e.g. '1 + 2 + 2 + 1 + 3 + 2 + 2 = 13', etc.</p> <p style="text-align: right;"><i>45 min</i></p>	<p>Individual work, monitored (or differentiated groups)</p> <p>Discussion, checking</p> <p>Drawn on BB or use enlarged copy master or OHP</p> <p>In unison</p>

Bk1	<p>R: Mental operations C: Operations, equations to 13 E: Problems in context</p>	<p style="text-align: center;"><i>Lesson Plan</i> 95</p>
Activity		Notes
<p style="text-align: center;">1</p>	<p>Oral work</p> <p>Let's see how many different ways you can think of to describe the number '13'. (e.g. $10 + 3$, $15 - 2$, $4 + 4 + 5$, the 2nd odd 2-digit number, the next number after 12, the number before 14, etc.)</p> <p style="text-align: right;"><i>5 min</i></p>	<p>Whole class activity Involve several pupils Reasoning, checking, agreement</p>
<p style="text-align: center;">2</p>	<p>Sequences (relay)</p> <p>Continue these sequences (to and from 13). e.g.</p> <p>T: 13, 10, 7, ... Ps: ... , 4, 1, (-2, ...) 1, 3, 5, , 7, 9, 11, 13 1, 5, , 9, 13 0, 1, 3, 4, 6, , 7, 9, 10, 12, 13</p> <p style="text-align: right;"><i>10 min</i></p>	<p>Whole class activity At speed Involve as many Ps as possible</p>
<p style="text-align: center;">3</p>	<p>Book 1, page 95</p> <p>Q.1 Read: <i>Draw a tulip 7 cm to the left of the butterfly. Draw a daisy 6 cm to the right of the butterfly. How far away is the daisy from the tulip?</i></p> <p>Revise 'cm' as a unit of measurement. Explain how to measure accurately using rulers. Ask Ps to make mark (dot or small line-stroke) on the line first and then draw picture beneath it.</p> <p>Talk about the two ways of obtaining the answer:</p> <p>a) measuring b) addition.</p> <p>Which do you think is more accurate? Why? Who can come and write another equation about it?</p> <p style="text-align: right;"><i>15 min</i></p>	<p>Individual work All Ps have rulers</p> <p>Discussion Monitored, helped, corrected Discussion BB: $7 + 6 = 13$ $13 - 6 = 7$ $13 - 7 = 6$</p> <p>Discussion, agreement, checking</p>
<p style="text-align: center;">4</p>	<p>Book 1, page 95, Q.2</p> <p>a) A, come and draw a cross where you think the number '13' should be. Is A correct? B, is the first missing number smaller or bigger than 13? (smaller) How many smaller? (5) B, put your finger on the 13 and count back five. What number did you land on? (8) Mark '8' with a green dot and write in the missing number on the grid. C, is the next missing number bigger or smaller than 13? (bigger) How many bigger? (5) C, put your finger on '13' and count on five. What number did you land on? (18) Mark '18' with a red dot and write in the missing number. Let's read out the inequality from left to right, (right to left): 'eight is five less than thirteen, thirteen is five less than eighteen' ... Who can come and write an equation about it? Who agrees? Who can write another equation?</p> <p>b) Deal in similar way to part a). (Or done as individual work, reviewed at BB with whole class.)</p> <p style="text-align: right;"><i>23 min</i></p>	<p>Whole class activity Drawn on BB or use enlarged copy master or OHP Discussion, agreement Ps copy in their books too</p> <p>Discussion, agreement BB: a) $8 < 5 13 < 5 18$</p> <p>In unison e.g. $8 + 5 = 13$ $18 - 5 = 13$</p> <p>BB: b) $6 < 7 13 < 7 20$ $6 + 7 = 13$ $20 - 7 = 13$ etc.</p>

Bk1		<i>Lesson Plan 95</i>
Activity		Notes
5	Interlude Song, rhyme, exercises _____ 25 min _____	Whole class activity
6	Book 1, page 95 Q.3 Read: <i>Fill in the missing numbers</i> (Ps may use their number lines to help them.) Review orally round class. Mistakes corrected at number line. _____ 30 min _____	Individual work Monitored Discussion, checking, self-correction
7	Problem Listen carefully and try to picture the story in your head. You can use what you like to help you. Show me the answer with a number card when I say. <i>Hedgehog collected 13 apples. He gave 3 to his brother and 3 to his sister. How many apples did he have left?</i> Show me with a number card . . . now! (7) E , come and explain to us how you worked out the answer. Is he/she correct? Who thinks something different? etc. Discuss strategy for solution. (BB) <i>Answer:</i> Hedgehog had 7 apples left. (Get Ps into habit of answering contextual questions with a complete sentence.) _____ 36 min _____	Whole class activity (e.g. counters, number lines) Repeat a few times. Give Ps time to think Discussion, agreement BB: $13 - 3 - 3 = \square$ $(13 - 3) - 3 = \square$ $10 - 3 = \underline{7}$
8	Book 1, page 95 Q.4 Read: <i>Divide 13 into 3 numbers. $a + b + c = 13$</i> <i>Complete the table.</i> T explains task. Review at BB with whole class. Mistakes corrected at number line. (Or can be done orally round the class, with T being row <i>a</i> numbers, boys being row <i>b</i> numbers and girls being row <i>c</i> numbers.) _____ 41 min _____	Individual work Monitored, helped Discussion, checking, agreement Drawn on BB or use enlarged copy master or OHP
9	Book 1, page 95 Q.5 Read: <i>Write additions about the picture.</i> Talk about the picture first: <ul style="list-style-type: none"> • How many items are in the picture? (13) • How many rows (columns)? (3, 5) • How many drinks (ice-creams, pieces of cake)? (2, 5, 6) Review orally round the class, with T writing additions on BB. (Or done as whole class activity with picture drawn on BB or use enlarged copy master or OHP.) _____ 45 min _____	Individual work Monitored, helped Discussion, agreement, checking e.g. BB: $2 + 5 + 6 = 13$ $3 + 5 + 5 = 13$ $3 + 3 + 3 + 2 + 2 = 13$







Bk1	<p>R: Mental counting C: Operations, equations to 13 E: <i>Inequalities, number line</i></p>	<p><i>Lesson Plan</i> 96</p>
<i>Activity</i>		<i>Notes</i>
1	<p>Mental practice</p> <p>a) T says a number, e.g. '6'. P completes it to make 13, e.g. 7. b) T says a number, e.g. '5'. P completes it to make 12, e.g. 7. (with and without crossing 10)</p> <p style="text-align: right;"><i>5 min</i></p>	<p>Whole class activity At speed Involve all Ps</p>
2	<p>Number line practice</p> <p>T says an addition/subtraction/inequality. P points to solution on class number line. e.g. T: $9 + 1$, $15 - 2$, $6 + 6$, $2 + 3 + 4$, $5 > 8$, etc. Ps point to 10, 13, 12, 9, 13, etc. Class shouts 'Yes' or 'No'.</p> <p style="text-align: right;"><i>12 min</i></p>	<p>Whole class activity At speed Involve several Ps</p>
3	<p>Book 1, page 96</p> <p>Q.1 Read: <i>Colour the sums as shown.</i> T explains task. Review orally round the class, dealing with one column at a time.</p> <ul style="list-style-type: none"> • How many did you colour blue (yellow, green, red)? • How many did you <u>not</u> colour? <p>Discuss mistakes at number line.</p> <p style="text-align: right;"><i>22 min</i></p>	<p>Individual work Monitored, helped</p> <p>Discussion, checking agreement</p>
4	<p>Interlude</p> <p>Song, rhyme, exercises</p> <p style="text-align: right;"><i>24 min</i></p>	<p>Whole class in unison</p>
5	<p>Book 1, page 96</p> <p>Q.2 Read: <i>Fill in the missing numbers and signs</i> Deal with one part at a time.</p> <p>a) Everyone put your finger on '8' on your number line. Follow what the signs tell you and fill in the missing numbers. Then start everyone off together at parts b), c) and d). Review at BB with whole class. Mistakes corrected.</p> <p style="text-align: right;"><i>30 min</i></p>	<p>Individual work, but kept together Monitored Discussion, checking agreement Drawn on BB or use enlarged copy master or OHP</p>
6 Extension	<p>Book 1, page 96, Q. 3</p> <p>Read: <i>Fill in the missing numbers.</i> Look at part a). Let's read what it says: 'six plus six is one less than six plus something'. X, come and write in the missing number. (7) Who agrees with X? Who thinks something else? Let's check by adding each side of the inequality.</p> <p>Y, come and write in the answer on the LHS and Z, come and write in the answer on the RHS. Are they correct? (Yes, 12 is one less than 13.) Repeat in similar way for other parts. (or done as individual work, monitored and reviewed at BB)</p> <p>Do we need to work out '6 + 6' before we can find out what the 'something' is? (No, the '6's are the same so the 'something' must be one more than the '6'.</p>	<p>Whole class activity Drawn on BB or use enlarged copy master or OHP. Discussion, agreement</p> <p>BB:</p> <p>a) $6 + 6 < 16 + 7$ $12 < 13$</p> <p>b) $12 - 5 < 13 - 5$ $7 < 8$</p> <p>c) $4 + 7 < 24 + 9$ $11 < 213$</p> <p>d) $13 - 8 > 13 - 9$ $5 > 4$</p>

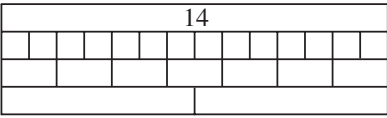
Bk1		<i>Lesson Plan 96</i>
Activity		<p style="text-align: center;">Notes</p> <p>e) $20 - 7 = 6 + 7$ $13 = 13$</p> <p>f) $13 - 9 > 10 - 9$ $4 > 1$</p>
7	<p style="text-align: right;"><i>40 min</i></p> <p>Book 1, page 96</p> <p>Q.4 Read: <i>Make this statement correct by moving the place of one stick.</i></p> <p>Make the statement on your desk using sticks (straws, pencils) X, read out the statement. Is it correct? Why not?</p> <p>Correct it on your desks first, then write the correction in the box.</p> <p>Y, come and show us what you wrote. Who agrees? Who wrote something else? etc.</p> <p style="text-align: right;"><i>45 min</i></p>	<p>Individual work T monitoring, praising Discussion, agreement BB: $X + I = XI$ or $IX + I = X$ or $X + I \neq X$, etc.</p>

Bk1	<p>R: Mental counting C: Number bonds and sums to 14 E: <i>Roman numerals</i></p>	<p><i>Lesson Plan</i> 97</p>
Activity		Notes
1	<p>Mental Counting</p> <p>a) On these posters find things which make 14 altogether.</p> <p>Poster 2: e.g. 4 people, 5 apples, 3 flowers and 2 insects</p> <p>Poster 3: e.g. 3 trees, 4 bushes, 3 frogs and 4 rabbits</p> <p>Poster 5: e.g. 9 flying birds, 1 fox and 4 frogs</p> <p>b) Find things in the classroom which make 14 altogether.</p> <p style="text-align: right;">_____ 5 min _____</p>	<p>Whole class activity Counting, checking, e.g.</p> <p>BB: $4 + 5 + 3 + 2 = 14$ $3 + 4 + 3 + 4 = 14$ $9 + 1 + 4 = 14$</p> <p>Ask several Ps</p>
2	<p>Addition/subtraction Practice</p> <p>T says an addition/subtraction, P gives answer.</p> <p>e.g. T: $10 + 3$, $4 + 7^*$, $14 - 3$, etc.. P: 13, 11, 11, . . .</p> <p>*Quick method if fact not known: $4 + 7 = (4 + 6) + 1 = 10 + 1 = 11$</p> <p style="text-align: right;">_____ 10 min _____</p>	<p>Whole class activity At speed round class</p> <p>Involve all Ps</p>
3	<p>Pictures of 14</p> <p>Look at the different pictures of 14. (T talks about each one.)</p> <p>BB:</p> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 10px auto;"> <p>14 $\textcircled{10}$ $\begin{matrix} \textcircled{1} \\ \textcircled{1} \\ \textcircled{1} \\ \textcircled{1} \end{matrix}$  fourteen</p> <p>XIV  </p> </div> <p>How many digits does it have? (2 digits: 1 ten and 4 units)</p> <ul style="list-style-type: none"> Say 'choo' ('tick-tock', 'yum-yum') 14 times in relay round class Knock on your desk (clap your hands, stamp your right foot) 14 times in relay round class. (Ps can knock, etc. more than once but must keep a mental count so that they know when to change the activity.) Let's all stand up and write a big '14' in the air (on your neighbour's back) <p style="text-align: right;">_____ 17 min _____</p>	<p>Drawn on BB or use enlarged copy master or OHP</p> <p>Involve several Ps</p> <p>Whole class discussion about what number 14 means to Ps</p> <p>T checking who is having problems</p> <p>Praising only</p> <p>Checking, agreement</p>
4	<p>Book 1, page 97</p> <p>Q.1 Read: <i>Continue the pattern.</i></p> <p>Ps can practise on lined paper first if necessary.</p> <p style="text-align: right;">_____ 22 min _____</p>	<p>Individual work, monitored</p> <p>Corrected</p> <p>Praising only</p>
5	<p>Interlude</p> <p>Song or rhyme</p> <p style="text-align: right;">_____ 24 min _____</p>	<p>Whole class in unison</p>
6	<p>Book 1, page 97</p> <p>Q.2 Read: <i>Complete the table.</i> <i>Write down the rules in different ways.</i></p> <p>T explains task. Review at BB with whole class.</p> <p>Demonstrate with Ps at front of class if necessary. (Girls could be <i>a</i> numbers, boys <i>b</i> numbers.)</p> <p>Mistakes corrected by demonstration (as above) or at number line.</p> <p style="text-align: right;">_____ 30 min _____</p>	<p>Individual work, monitored</p> <p>Discussion, agreement, checking</p> <p>Drawn on BB or use enlarged copy master or OHP</p> <p>BB: $a + b = 14$ $a = 14 - b$ $b = 14 - a$</p>

Bk1		<i>Lesson Plan 97</i>
<p>Activity</p> <p>7</p>	<p>Book 1, page 97, Q.3</p> <p>T holds up 3 large dice (each a different colour). T throws them so that Ps cannot see and says that the 3 numbers showing add up to 14. What could the numbers be? Let's colour the dice in the table to match mine. (e.g. yellow, blue, red)</p> <p>Look at the first column of the table. If the the yellow dice landed 4 up and the blue dice landed 6 up, what number do you think the red dice showed?</p> <p>A, come and write it in the table. Who agrees with A? Who thinks another number? Let's check. T writes addition on BB.</p> <p>Repeat for 2nd column.</p> <p>B, come and show us another way the dice might have landed.</p> <p>Is B correct? Let's check by counting the dots. B, write your numbers in the table. T writes addition on BB.</p> <p>Who can think of another way? Is it different from those already in the table?</p> <p>Which additions have the same numbers?</p> <p>How many completely different ones are there? (4)</p> <p style="text-align: right;">36 min</p>	<p>Notes</p> <p>Whole class activity</p> <p>Drawn on BB or use enlarged copy master or OHP</p> <p>Discussion, demonstration, checking, agreement</p> <p>T writes (in logical order):</p> <p>BB: $6 + 6 + 2 = 14$ $6 + 5 + 3 = 14$ $6 + 4 + 4 = 14$ $5 + 5 + 4 = 14$</p> <p>(Table shows variations of above)</p> <p>Discussion, agreement</p>
<p>8</p>	<p>Book 1, page 97</p> <p>Q.4 Read: <i>Write down what you think the answers might be?</i></p> <p>T revises Roman numerals for V, X, $IV = V - I$, $VI = V + I$.</p> <p>Review at BB with whole class, Ps writing, explaining their answers.</p> <p style="text-align: right;">41 min</p>	<p>Individual work</p> <p>Monitored, helped</p> <p>Discussion, agreement</p>
<p>9</p>	<p>Book 1, page 97, Q.5</p> <p>Listen carefully and show me the answer with a number card when I say. Look at the picture in your books to help you.</p> <p><i>Sam and Nora have 14p altogether. How much do they each have if they both have the same?</i></p> <p>Show me how many pennies they each have . . . now! (7)</p> <p>X, tell us how you got your answer. Who did it a different way?</p> <p>Colour in Sam's pennies.</p> <p style="text-align: right;">45min</p>	<p>Whole class activity</p> <p>T repeats slowly</p> <p>In unison</p> <p>Discussion, agreement</p> <p>BB: $7 + 7 = 14$</p>

Bk1	R: Mntal operations C: Number bonds and sums to 14 E: <i>Problem in context</i>	<i>Lesson Plan</i> 98																						
<i>Activity</i> 1	Shopping Ps come to front in pairs. A is the shopkeeper, B is the customer. B buys e.g. a ball @ 9 p and a ruler @ 5 p. Role play: e.g. A: How can I help you? B: Please could I have this ball and a ruler. A: That will be 14 p altogether. B: Opens purse and takes out 14 pennies (or 1 ten + 4 '1's, or 2 '5's + 2 '2's, etc.) A: Puts items in bag and says 'Here you are.' B: Thank you. Goodbye! Who can come and write an addition about the story? Repeat for other pairs of Ps and different items (to make 14 p). <div style="text-align: right;">_____ 5 min _____</div>	<i>Notes</i> Whole class (paired) activity T helping, encouraging Praising Use real purse and real or play money. e.g. BB: $9 + 5 = 14$ Encourage creativity																						
2	Additions/subtractions relay T says, e.g. '5 + 4', P ₁ says '9'. T says '- 3'; P ₂ says '6'. T says '+ 8'; P ₃ says '14', etc. (0 to 14) (With and without crossing over 10.) <div style="text-align: right;">_____ 10 min _____</div>	Whole class activity At speed Involve many Ps																						
3	Book 1, page 98 Q.1 Read: <i>Continue drawing the number strips to make 14.</i> <i>Write down the additions</i> Ps can make first on desks with number strips (or Cuisenaire rods or plastic cubes stuck together). <div style="display: flex; align-items: flex-start;"> <table border="1" style="margin-right: 20px;"> <tr><td style="text-align: center;">10</td></tr> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> </table> <div> BB: $10 + 4 = 14$ $9 + 1 + 4 = 9 + 5 = 14$ $8 + 2 + 4 = 8 + 6 = 14$ $7 + 3 + 4 = 7 + 7 = 14$ $6 + 4 + 4 = 6 + 8 = 14$ $5 + 5 + 4 = 5 + 9 = 14$ $4 + 6 + 4 = 4 + 10 = 14$ $3 + 7 + 4 = 3 + 11 = 14$ $2 + 8 + 4 = 2 + 12 = 14$ $1 + 9 + 4 = 1 + 13 = 14$ </div> </div> <div style="text-align: right;">_____ 20 min _____</div>	10																						Start as whole class activity, changing to individual work when T thinks Ps understand Drawn on BB or use enlarged copy master or OHP. T monitoring helping Discussion Checking, agreement Class reads out equations together.
10																								
4	Interlude Relaxation <div style="text-align: right;">_____ 22 min _____</div>	Resting and listening to music																						

Bk1		<i>Lesson Plan 98</i>															
<p>Activity</p> <p>5</p>	<p>Book 1, page 98, Q.2</p> <p>T reads question.</p> <p><i>Some ducks and tortoises are in the garden. Altogether there are 5 heads. How many legs could there be in total?</i></p> <p>How many heads (legs) has a chicken (tortoise)?</p> <p>Which row in the table shows the number of chickens (tortoises)?</p> <p>What does the bottom row show? (total number of legs)</p> <p>A, come and write in how many tortoises (legs) there would be if there were 4 chickens in the garden. Is A correct? Who thinks something else? Let/s check. (T could have toy animals to demonstrate.)</p> <p>T writes it as an addition on the BB: $(2 + 2 + 2 + 2) + 4 = 8 + 4 = 12$</p> <p>Deal with rest of table in similar and logical way:</p> <p>BB: $(2 + 2 + 2) + (4 + 4) = 6 + 8 = 14$</p> <p>$(2 + 2) + (4 + 4 + 4) = 4 + 12 = 16$</p> <p>$2 + (4 + 4 + 4 + 4) = 2 + 16 = 18$</p> <p>Could there be any more columns, e.g. 0 chickens + 5 tortoises? (No)</p> <p>Who can explain why? Who agrees? etc.</p> <p style="text-align: right;">30 min</p>	<p style="text-align: center;">Notes</p> <p>Whole class activity</p> <p>Discussion</p> <p>BB:</p> <table border="1" style="display: inline-table; vertical-align: middle;"> <tr> <td style="text-align: center;"></td> <td style="text-align: center;">4</td> <td style="text-align: center;">3</td> <td style="text-align: center;">2</td> <td style="text-align: center;">1</td> </tr> <tr> <td style="text-align: center;"></td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td style="text-align: center;">3</td> <td style="text-align: center;">4</td> </tr> <tr> <td style="text-align: center;">Number of legs</td> <td style="text-align: center;">12</td> <td style="text-align: center;">14</td> <td style="text-align: center;">16</td> <td style="text-align: center;">18</td> </tr> </table> <p>Drawn on BB or use enlarged copy master or OHP.</p> <p>Agreement, checking</p> <p>Ps can write in books too.</p> <p>Discussion</p>		4	3	2	1		1	2	3	4	Number of legs	12	14	16	18
	4	3	2	1													
	1	2	3	4													
Number of legs	12	14	16	18													
<p>6</p>	<p>Book 1, page 98</p> <p>Q.3 Read: <i>Fill in the missing numbers.</i></p> <p>a) What have the circles to do with the numbers? (14 circles altogether; 10 in top row, 4 in bottom row; 5 white circles and 9 grey circles)</p> <p>Use these circles to help you fill in the missing numbers.</p> <p>Review with whole class. Use counters if there are difficulties.</p> <p>BB: $5 + 9 = 5 + (5 + 4) = 10 + 4 = 14$, etc.</p> <p>b) Repeat as above.</p> <p>BB: $8 + 6 = 8 + (2 + 4) = 10 + 4 = 14$, etc.</p> <p style="text-align: right;">40 min</p>	<p>Individual work</p> <p>Monitored, helped</p> <p>Discussion</p> <p>Checking, agreement</p> <p>Demonstrate with Ps at front of class or with white and blue circles stuck to BB, grouping them in different ways</p>															
<p>7</p>	<p>Book 1, page 98</p> <p>Q.5 Read: <i>Fourteen apples are divided equally between the 2 plates. Draw the apples and write an equation about it.</i></p> <p>Review with whole class.</p> <p>R, come and explain to us how you got your answer.</p> <p>Who agrees with R? Who did it another way? etc.</p> <p style="text-align: right;">45 min</p>	<p>Individual work, monitored</p> <p>Use enlarged copy master, coloured and cut out.</p> <p>Discussion, agreement</p> <p>BB: $7 + 7 = 14$</p>															



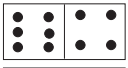

Bk1	R: Mental operations C: Operations, equations to 14 E: <i>Rules</i>	<i>Lesson Plan</i> 99
<i>Activity</i>		<i>Notes</i>
1	Oral work Tell me different ways to describe the number '14'. (e.g. $10 + 4$, $17 - 3$, $7 + 7$, the 3rd even 2-digit number, the next number after 13, the number before 15, etc.) <div style="text-align: right;"><i>5 min</i></div>	Whole class activity Involve several pupils (or done as relay round class) Reasoning, checking, agreement
2	Chain operations T says, e.g. '2 plus 5', P ₁ says '7'; T says 'minus 3', P ₂ says '4'; T says 'plus 10', P ₃ says '14', etc. Or T says ' $2 + 5 - 3 + 10$ ' and Ps show answer with number cards. (14) <div style="text-align: right;"><i>10 min</i></div>	Whole class activity Involve several pupils At speed
3	Making 14 Show me on your desks different ways to make 14 using equal number strips.  How many '1's, '2's, '7's did you use? Write additions about it in the back page of your <i>books</i> . BB: $1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 = 14$ $2 + 2 + 2 + 2 + 2 + 2 + 2 = 14$ $7 + 7 = 14$ (Preparation for: $1 \times 14 = 14 \times 1 = 7 \times 2 = 2 \times 7 = 14$) Let's all read out the additions. <div style="text-align: right;"><i>18 min</i></div>	Paired work, monitored (Can use Cuisenaire rods or plastic cubes stuck together) Discussion on number of strips Individual work, monitored Reviewed at BB with whole class. Use large number strips stuck to BB or enlarged copy master in which Ps write the numbers. In unison
4	Book 1, page 99 Q.1 Read: <i>Fill in the missing numbers</i> Review orally round class. Mistakes corrected at number line. BB: $6 + 6 = 6 + (4 + 2) = 10 + 2 = 12$, $14 - 10 = (14 - 4) - 6 = 10 - 6 = 4$, etc. <div style="text-align: right;"><i>23 min</i></div>	Individual work, monitored Ps may use their number lines to help them if required. Discussion, agreement checking
5	Interlude Physical exercises <div style="text-align: right;"><i>25 min</i></div>	Whole class in unison
6	Book 1, page 99 Q.2 Read: <i>Divide 14 into 3 numbers. $a + b + c = 14$</i> <i>Complete the table.</i> T explains task. Review at BB with whole class. Mistakes corrected at number line. (Or done as whole class activity.) <div style="text-align: right;"><i>30 min</i></div>	Individual work, monitored, helped Discussion, agreement, checking Drawn on BB or use enlarged copy master or OHP

Bk1		<i>Lesson Plan 99</i>
<p>Activity</p> <p>7</p>	<p>Book 1, page 99, Q.3</p> <p>a) Look at this number line. What number is shown by the dot? (14) Is the first missing number smaller or bigger than 14? (smaller) How many smaller? (6) A, put your finger on the 14 and count back six. What number did you land on? (8) Mark '8' with a green dot on the number line and write the missing number on the grid. Is the next missing number bigger or smaller than 14? (bigger) How many bigger? (6) B put your finger on '14' and count on 6. What number did you land on? (20) Mark '20' with a red dot on the number line and write the missing number on the grid. Let's read out the inequality from left to right, (right to left): 'eight is six less than fourteen, fourteen is six less than twenty' Now we know where all the numbers are on the number line, fill in the rest of the missing numbers in your books, using the number line to help you. Review at BB with whole class.</p> <p>b) As for (a). (Or all done as individual work, reviewed at BB with whole class.)</p> <p><i>Solutions:</i></p> <p>a) $8 < 6$ $14 < 6$ 20 b) $9 < 5$ $14 < 5$ 19 $14 + 6 = 20$ $14 + 5 = 19$ $20 - 6 = 14$ $19 - 5 = 14$ $14 - 6 = 8$ $14 - 5 = 9$ $8 + 6 = 14$ $9 + 5 = 14$</p> <p style="text-align: right;"><i>38 min</i></p>	<p>Notes</p> <p>Whole class activity Drawn on BB or use enlarged copy master or OHP Discussion, agreement Ps copy in their books too</p> <p>Discussion, agreement Ps copy in their books too</p> <p>In unison</p> <p>Individual work Monitored, helped Discussion, agreement, self-correction</p>
<p>8</p>	<p>Book 1, page 99</p> <p>Q.4 Read: <i>Fill in the missing numbers.</i> See how many you can do in 2 minutes! Review orally round the class.. Discuss, e.g. $12 - 9 = (12 - 2) - 7 = 3$, etc.</p> <p style="text-align: right;"><i>42 min</i></p>	<p>Individual work Monitored, helped Discussion, agreement, self-correction</p>
<p>9 Extension</p>	<p>Book 1, page 99, Q.5</p> <p>T explains task. Colour Sue's pennies blue and Bill's pennies red. How many pennies did Sue (Bill) have? Class shouts 8 (6). X, tell us how you got the answer.. Who agrees? Who did it another way? etc. (e.g. Colour Sue's 2 extra pennies first, then colour the rest equally blue and red.)</p> <p><i>Solution:</i> Sue has 8 p and Bill has 6 p.</p> <p style="text-align: right;"><i>45 min</i></p>	<p>Individual work Monitored, helped Discussion, agreement, BB: $(2 + 6) + 6 = 14$ $8 + 6 = 14$</p>

Bk1	R: Mental operations C: Operations, equations to 14 E: <i>Capacity</i>	<i>Lesson Plan 100</i>
<i>Activity</i>		<i>Notes</i>
1	Mental practice T says a number, e.g. '6'. P completes it to make 14, e.g. '8'. _____ 5 min _____	Whole class activity At speed, round class
2	Measurement T holds up various items (e.g. bottle of lemonade, ruler, long pole, bag of potatoes, etc.) and asks Ps to come front and choose a suitable unit of measurement from the words on the BB. (litre, metre, cm, kg) Is he/she correct? What else could we measure in this unit? _____ 10 min _____	Whole class activity Discussion, agreement Involve several Ps
3	Book 1, page 100 Q.1 Read: <i>Continue the pattern.</i> On which line did you write about metres? On which line did you write a unit for measuring capacity? What does the unit on the bottom line measure? _____ 15 min _____	Individual work Monitored, helped, corrected Praising only Discussion
4	Number cards T says an addition or subtraction: e.g. a) Tim had 7 sweets and Sue had 5 sweets. How many sweets did they have altogether? (12) b) Tony had 12 marbles. He won another 2 marbles from his sister but then lost 9 marbles to his big brother. How many marbles did Tony have left? (5) Ps show answers with number cards. T (Ps) writes operations on BB. _____ 23 min _____	Whole class activity T repeats slowly several times (deal with one part at a time) Ps may use items to help them. BB: a) $7 + 5 = 12$ b) $12 + 2 - 9 = 5$
5	Interlude Action song/rhyme _____ 25 min _____	Whole class in unison
6	Book 1, Page 100 Q.2 Read: Fill in the missing numbers and signs Deal with one part at a time. a) Everyone put your finger on '8' on your number line. Follow what the signs tell you and fill in the missing numbers. Then start everyone off together at parts b), c) and d). Review at BB with whole class. Mistakes corrected. _____ 30 min _____	Individual work, but kept together Monitored Discussion, checking agreement Drawn on BB or use enlarged copy master or OHP
7	Book 1, Page 100 Q.3 Read: <i>Fill in the missing numbers.</i> Do parts a) and b) with the whole class and let Ps do the rest as individual (or paired) work. Review at BB with whole class. _____ 40min _____	Parts a) and b) as whole class activity, parts c) to f) as individual work, monitored Discussion, checking agreement Drawn on BB or use enlarged copy master or OHP

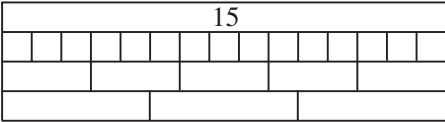
Bk1		<i>Lesson Plan 100</i>																
<p>Activity</p> <p>8</p>	<p>Book 1, Page 100, Q.4</p> <p>T explains task, making sure Ps know what 'row', 'column', 'diagonal' means. Ps come to BB to point to, e.g. 2nd row from top, 3rd column from left, diagonal from top left-hand corner, etc.</p> <p>Where do you think would be the best place to start? (e.g. top row) Why? (only one number missing)</p> <p>Ps come to front to write in missing numbers.</p> <p>T writes additions on BB.</p> <p><i>Solution</i></p> <table border="1" data-bbox="451 680 584 813"> <tbody> <tr> <td>3</td> <td>5</td> <td>5</td> <td>1</td> </tr> <tr> <td>1</td> <td>4</td> <td>3</td> <td>6</td> </tr> <tr> <td>2</td> <td>2</td> <td>5</td> <td>5</td> </tr> <tr> <td>8</td> <td>3</td> <td>1</td> <td>2</td> </tr> </tbody> </table>	3	5	5	1	1	4	3	6	2	2	5	5	8	3	1	2	<p>Notes</p> <p>Whole class activity</p> <p>Drawn on BB or use enlarged copy master or OHP</p> <p>Discussion, agreement, checking</p> <p>BB:</p> <p><i>Rows</i> $3 + 5 + 5 + 1 = 14$ $1 + 4 + 3 + 6 = 14$ $2 + 2 + 5 + 5 = 14$ $8 + 3 + 1 + 2 = 14$</p> <p><i>Columns</i> $3 + 1 + 2 + 8 = 14$ $5 + 4 + 2 + 3 = 14$ $5 + 3 + 5 + 1 = 14$ $1 + 6 + 5 + 2 = 14$</p> <p><i>Diagonals</i> $3 + 4 + 5 + 2 = 14$ $8 + 2 + 3 + 1 = 14$</p>
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1	4	3	6															
2	2	5	5															
8	3	1	2															

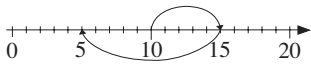
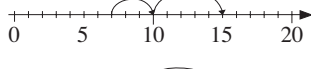
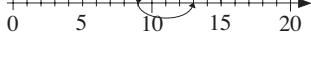
45 min

Bk1	<p>R: Mental counting C: Number bonds and sums to 15 E: <i>Logic problem</i></p>	<i>Lesson Plan</i> 101
<p>Activity</p> <p>1</p>	<p>Mental Counting</p> <p>a) Find things on the posters to make 15 altogether. e.g.</p> <p><i>Poster 2:</i> 4 people, 5 apples, 3 flowers and 3 animals</p> <p><i>Poster 3:</i> 5 hedgehogs, 3 trees, 2 squirrels, 1 tortoise and 4 rabbits</p> <p><i>Poster 5:</i> 9 flying birds, 4 trees, one lizard and one stork</p> <p style="text-align: right;"><i>5 min</i></p>	<p style="text-align: center;">Notes</p> <p>Whole class activity Counting, checking, e.g.</p> <p>BB: $4 + 5 + 3 + 3 = 15$ $5 + 3 + 2 + 1 + 4 = 15$ $9 + 4 + 1 + 1 = 15$</p> <p>Ask several Ps</p>
<p>2</p>	<p>Addition/subtraction Practice</p> <p>T says an addition/subtraction, P gives answer. (0 to 14) (In relay round class)</p> <p style="text-align: right;"><i>10 min</i></p>	<p>Whole class activity At speed</p>
<p>3</p>	<p>Pictures of 14</p> <p>Look at the different pictures of 14. (T talks about each one.)</p> <p>BB:</p> <div style="border: 1px solid black; padding: 10px; width: fit-content; margin: 10px auto;"> <p style="text-align: center;">15 fifteen </p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  </div> <div style="text-align: center;">  </div> <div style="text-align: center;"> <p>XV</p>  </div> </div> </div> <p>How many digits does it have? (2 digits: 1 ten and 5 units)</p> <ul style="list-style-type: none"> Ps come to front in 3's (5's) to clap their hands (jump in the air, wave, nod their heads) 15 times in turn. Rest of class keeps count mentally for each action. Were they correct? T shows how to write a large '15' on BB. Let's all stand up and write a big '15' in the air (on your desks). Draw 15 dots down the side of a page of your book. <p style="text-align: right;"><i>16 min</i></p>	<p>Drawn on BB or use enlarged copy master or OHP</p> <p>Involve several Ps</p> <p>Whole class discussion about what number 15 means to Ps</p> <p>T checking who is having problems</p> <p>Must be well monitored!</p> <p>Checking, praising</p>
<p>4</p>	<p>Book 1, page 101</p> <p>Q.1 Read: <i>Continue the pattern.</i> How many '5's (2-digit numbers) did you write?</p> <p style="text-align: right;"><i>21 min</i></p>	<p>Individual work Monitored, helped Discussion, checking</p>
<p>5</p>	<p>Interlude</p> <p>Song, rhyme, relaxation</p> <p style="text-align: right;"><i>23 min</i></p>	<p>Whole class in unison</p>
<p>6</p>	<p>Book 1, page 101</p> <p>Q.2 Read: <i>Complete the table.</i> Write down the rules in different ways. <i>If a column has 1 odd and 1 even number, colour it green.</i></p> <p>T explains task. Review at BB with whole class. Mistakes corrected by demonstration or at number line.</p> <p>C, how many columns did you colour green? (All of them)</p> <p>Is it possible to make 15 with 2 even (odd) numbers? (No, because 15 is an odd number; odd + odd = even, and even + even = even).</p>	<p>Individual work Monitored, helped Draw on BB or use enlarged picture or OHP or use model or real clock</p> <p>Discussion, checking, agreement</p> <p>BB: $a + b = 15$ $a = 15 - b$ $b = 15 - a$</p>

Bk1		<i>Lesson Plan 101</i>
<p>Activity</p> <p>7</p>	<p>Book 1, page 101, Q.3</p> <p>a) What can you tell me about the picture? (e.g. 3 rows, 5 columns; 3 shapes: triangles, squares, circles; two colours: black and white; 6 triangles, 4 squares and 5 circles, 15 shapes altogether)</p> <p>X, come and write an addition. Explain what the numbers mean.</p> <p>Who can come and write something different? etc.</p> <p>e.g. $3 + 3 + 3 + 3 + 3 = 15$ $5 + 5 + 5 = 15$, etc.</p> <p>b) See how many additions you can write about this picture.</p> <p>Review at BB with whole class, with Ps explaining their additions.</p> <p>e.g. $6 + 2 + 3 + 2 + 2 = 15$ $10 + 5 = 15$, etc.</p> <p style="text-align: right;"><i>40 min</i></p>	<p>Notes</p> <p>Whole class activity Draw on BB or use enlarged picture or OHP Discussion Agreement, checking Ps copy in books too</p> <p>Individual work Monitored, helped Discussion Agreement, checking</p>
<p>8</p>	<p>Book 1, page 101</p> <p>Q.4 Read: <i>Divide these number cards into 2 groups so that the sums of the numbers are equal.</i></p> <p>Let Ps think about it for a while.</p> <p>Who can do it? (It is impossible!)</p> <p>Why? (Because the numbers add up to 15, which is an odd number and cannot be divided into 2 equal groups.)</p> <p style="text-align: right;"><i>45 min</i></p>	<p>Individual (or paired) work with real number cards</p> <p>Discussion Agreement, checking</p>

Bk1		<i>Lesson Plan 102</i>
Activity 5	<p>Book 1, page 102</p> <p>Q.2 Read: <i>Draw a red dot on the even numbers and a green dot on the odd numbers on the number line.</i> <i>A sparrow starts at 0 and jumps twice.</i> <i>Both jumps are the same distance.</i> <i>Where does he get to? Complete the table.</i></p> <p>Make sure Ps know what 'even' and 'odd' mean. Review solution of table orally or at BB with whole class. Ps can show jumps on class number line if there are problems.</p> <p>Read: <i>Can he get to 15?</i> Encourage Ps to give a reason for their answer. (No, because 15 is an odd number and cannot be divided up into 2 equal parts.)</p> <p style="text-align: right;">35 min</p>	<p style="text-align: center;">Notes</p> <p>Individual work Monitored, helped Discussion, checking, self-correction</p>
6	<p>Problem</p> <p>Listen carefully and try to picture the story in your head. You can use what you like to help you. Show me your answer with number cards when I say.</p> <p><i>The number of books on the top shelf of a bookcase was 4 less than the number of books on the bottom shelf. There were 11 books on the top shelf. How many books were on the bottom shelf?</i></p> <p>Show me with number cards . . . now! (15) A, come and explain to us how you worked out the answer. Is he/she correct? Who thinks something different? etc. Discuss strategy for solution. (BB) <i>Answer:</i> There were 15 books on the bottom shelf.</p> <p style="text-align: right;">40 min</p>	<p>Whole class activity (e.g. counters, number lines, drawing dots, etc.)</p> <p>Repeat a few times. Give Ps time to think</p> <p>In unison Discussion, agreement</p> <p>BB: $\square - 4 = 11$ $15 - 4 = 11$ $11 + 4 = 15$</p>
7	<p>Book 1, page 102</p> <p>Q.3 Read: <i>Fill in the missing numbers.</i> See how many you can do in 4 minutes! Review orally round class. Mistakes corrected at number line.</p> <p style="text-align: right;">45 min</p>	<p>Individual work, monitored Discussion, checking Agreement, self-correcting</p>

Bk1	<p>R: Mental operations C: Operations and equations to 15 E: Number lines</p>	<i>Lesson Plan</i> 103
<i>Activity</i>		<i>Notes</i>
1	<p>Oral work</p> <p>Let's see how many different ways we can think of to describe the number 15.</p> <p>(e.g. $10 + 5$, $5 + 5 + 5$, $17 - 2$, the next number greater than 14, the next odd number after 13, the 3rd odd 2-digit number, etc.)</p> <p style="text-align: right;"><i>5 min</i></p>	<p>Whole class activity Class checks each response T writes all cases on BB Praise creativity</p>
2	<p>Chain operations</p> <p>a) Relay: T says, e.g. '6 + 5', P₁ says '11'. T says '− 2'; P₂ says '9' etc.</p> <p>b) Close your eyes and try to keep the numbers in your head. Nod your head when you know the answer to each part. Show me the final number with number cards when I say.</p> <p>T says, e.g. '4 . . . + 10 . . . − 3 . . . + 4'</p> <p>Show me the answer with number cards . . . now! (15)</p> <p style="text-align: right;"><i>10 min</i></p>	<p>Whole class activity</p> <p>a) At speed Involve several Ps</p> <p>b) Give Ps time to think Checking, agreement</p> <p>In unison</p>
3	<p>Making 15</p> <p>Show me on your desks different ways to make 15 using equal number strips.</p> <div style="text-align: center;">  </div> <p>What strips did you use and how many of each? (1's, 3's, 5's) Write additions about it in your books.</p> <p>BB: $1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 = 15$ $3 + 3 + 3 + 3 + 3 = 15$ $5 + 5 + 5 = 15$</p> <p>(Preparation for: $1 \times 15 = 15 \times 1 = 5 \times 3 = 3 \times 5 = 15$)</p> <p style="text-align: right;"><i>18 min</i></p>	<p>Paired work, monitored (Can use Cuisenaire rods or plastic cubes stuck together)</p> <p>Discussion, checking</p> <p>Individual work, monitored, helped</p> <p>Reviewed at BB with whole class. Use large number strips stuck to BB or enlarged copy master in which Ps write the numbers.</p>
4	<p>Interlude</p> <p>Physical exercises</p> <p style="text-align: right;"><i>20 min</i></p>	Whole class in unison
5	<p>Book 1, page 103</p> <p>Q.1 Read: <i>Divide 15 into 3 numbers. $a + b + c = 15$ Complete the table.</i></p> <p>T explains task. Review at BB with whole class. Mistakes corrected at number line. (Or done as whole class activity.) Colour blue the columns in which all the numbers are the same.</p> <p style="text-align: right;"><i>25 min</i></p>	<p>Individual work, monitored, helped</p> <p>Discussion, agreement, checking</p> <p>Drawn on BB or use enlarged copy master or OHP</p>
6	<p>Book 1, page 103</p> <p>Q.2 Read: <i>Sam and Pam Squirrel have 15 acorns altogether.</i></p> <p>a) <i>If Sam has 6 acorns, how many does Pam have?</i> b) <i>Who has more acorns?</i> c) <i>How many more?</i></p> <p>Colour in Sam's acorns first to help you. Deal with one part at a time. A, come and show us what you wrote. Who agrees? etc. c) Compare their acorns by writing an inequality too.</p> <p style="text-align: right;"><i>32 min</i></p>	<p>Individual work Monitored, helped</p> <p>BB: a) $15 - 6 = 9$ b) Pam c) $9 - 6 = 3$ $9 > 6$ or $6 < 9$</p>

Bk1		<i>Lesson Plan 103</i>
<p>Activity</p> <p>7</p>	<p><i>Book 1, page 103, Q.3</i></p> <p>T has equations on card stuck to side of BB. Each number line is also drawn or photocopied onto card stuck to the other side of BB.</p> <p>B, come and choose an equation. Fill in the missing number and read it out to the class. Is B correct? Who thinks something else?</p> <p>Is there a number line which shows it?</p> <p>C, come and stick it beside the equation and explain why you think it matches. Who agrees? Who thinks something else?</p> <p>Continue in similar way until all equations are dealt with.</p> <p>BB: $15 - 10 + 5 = 10$</p> <p>$10 + 5 - 10 = 5$ ————— </p> <p>$7 + 3 + 5 = 15$ ————— </p> <p>$15 - 6 + 4 = 13$ ————— </p> <p>$7 + 8 = 15$</p> <p>$9 + 4 - 6 = 7$</p> <p>(Or done as individual work, reviewed at BB with whole class.)</p> <p>Extension</p> <p>Who can come and draw number lines for the missing equations?</p> <p style="text-align: right;">40 min</p>	<p>Notes</p> <p>Whole class activity</p> <p>Copy masters enlarged or drawn onto card and cut out or</p> <p>Draw on BB and Ps draw lines to join up.</p> <p>Discussion, agreement, checking</p> <p>Point out that equation must match the direction of the arrows.</p> <p>Discuss why 3 equations do not match any of the number lines shown.</p> <p>Ps copy in books too</p> <p>Copy master of blank number line (<i>LP 81/4</i>) or drawn on BB</p>
<p>8</p>	<p><i>Book 1, page 103</i></p> <p>Q.4 Read: <i>Fill in the missing numbers.</i></p> <p>See how many you can do in 4 minutes!</p> <p>Review orally with class. Mistakes corrected at number line.</p> <p>(Or whole activity done orally round class.)</p> <p style="text-align: right;">45 min</p>	<p>Individual work, monitored</p> <p>Discussion, checking</p> <p>Agreement, self-correcting</p>

Bk1		<i>Lesson Plan 104</i>
<p>Activity</p> <p>7</p>	<p>Book 1, page 104, Q.3</p> <p>Read: <i>Fill in the missing numbers.</i></p> <p>Look at part a). Let's read what it says: 'seven plus something is one less than seven plus eight.</p> <p>Let's do the RHS first.</p> <p>X, come and write in what '7 + 8' make. (15)</p> <p>Who agrees with X? Who thinks something else?</p> <p>So what must the LHS equal? (14)</p> <p>Y, come and write in the missing number. (7) Who agrees? Who thinks something else?</p> <p>Let's check on the number line. (Yes, 14 is one less than 15.)</p> <p>Repeat in similar way for other parts.</p> <p>(Or done as individual work, monitored and reviewed at BB.)</p> <p>Extension</p> <p>Do we need to work out '7 + 8' before we can find out what the 'something' is?</p> <p>(No, the '7's are the same so the 'something' must be one less than the '8' .)</p> <p style="text-align: right;">40 min</p>	<p>Notes</p> <p>Whole class activity</p> <p>Drawn on BB or use enlarged copy master or OHP.</p> <p>Discussion, agreement</p> <p>BB:</p> <p>a) $7 + 7 < 17 + 8$ $14 < 15$</p> <p>b) $10 - 5 < 5$ $15 - 5$ $5 < 10$</p> <p>c) $9 + 6 = 7 + 8$ $15 = 15$</p> <p>d) $15 - 7 > 15 - 9$ $8 > 6$</p>
<p>8</p>	<p>Book 1, page 104</p> <p>Q.4 Read: <i>Fill in the missing numbers.</i></p> <p>See how many you can do in 4 minutes!</p> <p>Review orally with class. Mistakes corrected at number line.</p> <p style="text-align: right;">45 min</p>	<p>Individual work</p> <p>Monitored, helped</p> <p>Ps may use number lines to help them</p> <p>Discussion, agreement, checking, self-correction</p>

<h1>Bk1</h1>	<p>R: Mental operations C: Revision and Practice (0 to 15) E: <i>Problem solving</i></p>	<h2 style="text-align: right;">Lesson Plan 105</h2>
Activity 1	<p>Numbers T writes the numbers, 1, 2, 3, 4, 5, 6, 7, 8, 9 randomly on BB. From these numbers choose 2 numbers which add up to: a) a 1-digit even number (e.g. $1 + 7 = 8$, $4 + 2 = 6$, etc.) b) a 1-digit odd number (e.g. $1 + 2 = 3$, $5 + 4 = 9$, etc.) c) a 2-digit even number (e.g. $6 + 8 = 14$, $9 + 3 = 12$, etc.) d) a 2-digit odd number (e.g. $6 + 7 = 13$, $7 + 8 = 15$)</p> <p style="text-align: right;">10 min</p>	<p style="text-align: center;">Notes</p> <p>Whole class activity Involve several Ps</p> <p>Discussion, agreement, checking</p> <p>Extension: choose 3 numbers (T writes cases on BB)</p>
2	<p>Problem Listen carefully and try to picture the story in your head. You can use what you like to help you. Show me your answer with number cards when I say.</p> <p><i>I am thinking of a number. When I take 4 away from it, I get 3 more than 8. What was the number I first thought of?</i></p> <p>Show me with number cards . . . now! (15)</p> <p>A, come and explain to us how you worked out the answer. Is he/she correct? Who thinks something different? etc.</p> <p>Discuss strategy for solution. (BB)</p> <p><i>Answer:</i> The number teacher first thought of was 15.</p> <p style="text-align: right;">15 min</p>	<p>Whole class activity (e.g. counters, number lines, drawing dots, etc.)</p> <p>Repeat a few times. Give Ps time to think</p> <p>In unison Discussion, agreement</p> <p>BB: $\square - 4 = \underbrace{8 + 3}_{11}$</p> <p>$\square = 11 + 4 = 15$</p>
3	<p>Book 1, page 105 Q.1 Read: <i>Mother is making pancakes.</i> How many did she make? ($5 + 4 + 3 = 12$ from picture) <i>Alice has eaten three of them.</i> <i>Tim has eaten two more than Alice.</i></p> <p>a) <i>How many has Tim eaten?</i> b) <i>How many pancakes are left for John?</i></p> <p>Review at BB with whole class, Ps explaining their solutions.</p> <p style="text-align: right;">20 min</p>	<p>Individual work, monitored Discussion, agreement, checking</p> <p>BB: Pancakes made: 12 Alison ate: 3 Tim ate: $3 + 2 = 5$ Pancakes left: $12 - 3 - 5 = 4$</p>
4	<p>Interlude Song or rhyme</p> <p style="text-align: right;">22 min</p>	<p>Whole class in unison</p>
5	<p>Book 1, page 105 Q.2 Read: <i>Fill in the missing numbers.</i> Deal with horizontal equations first and then vertical ones. Review orally with whole class. Mistakes corrected at number line.</p> <p style="text-align: right;">30 min</p>	<p>Individual work, monitored, Ps may use number lines to help them if necessary. Discussion, agreement, checking</p>
6	<p>Sequences T writes sequences on BB. Ps come out to BB to continue the terms.</p> <p>a) BB: 0, 5, 1, 6, 2, . . . Ps: 7, 3, 8, 4, 9, 5, 10, 6, 11, . . . Who can explain the rule for this sequence? (+ 5, then - 4)</p> <p>b) 0, 1, 3, 6, . . . Ps: 10, 15, (21, 28, . . .) Who can explain the rule for this sequence? (+1, +2, +3, +4, etc.)</p> <p style="text-align: right;">38 min</p>	<p>Whole class activity Discussion, agreement, checking</p> <p>Part b) can be done as individual work in books.</p>

Bk1*Lesson Plan 105***Activity****7****Book 1, page 105**

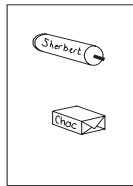
Q.3 T explains task, emphasising that all the 13 p is spent on sweets but no child bought exactly the same.

Ps draw sweets in boxes in books.

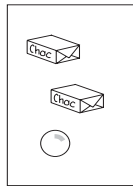
Review at BB with whole class, with T writing additions on BB

Possible solution: (there are many others)

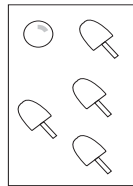
$$\text{Sherbet} = 7\text{p} \quad \text{Choc} = 6\text{p} \quad \text{Ice cream} = 3\text{p} \quad \text{Candy} = 2\text{p} \quad \text{Lolly} = 1\text{p}$$



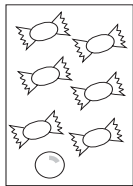
Patrick



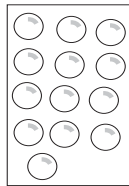
John



Tom



Gordon



Bill

Or can be done as a whole class activity, with 5 Ps called out by name, and allowed to choose sweets (coloured and cut out from copy master) from side of BB to value of 13 p to stick in their rectangles.

Ps explain reasons for choice and write additions on BB.

Class agrees/disagrees.

Notes

Individual work, monitored

Discussion, agreement, checking

Drawn on BB or use enlarged copy master or OHP

e.g. BB:

$$\text{Patrick: } 7 + 6 = 13 \\ \text{(2 sweets)}$$

$$\text{John: } 6 + 6 + 1 = 13 \\ \text{(3 sweets)}$$

$$\text{Tom: } 3 + 3 + 3 + 3 + 1 = 13 \\ \text{(5 sweets)}$$

$$\text{Gordon:} \\ 2 + 2 + 2 + 2 + 2 + 2 + 1 = 13 \\ \text{(7 sweets)}$$

$$\text{Bill: } 1 + 1 + 1 + 1 + 1 + 1 + 1 + \\ 1 + 1 + 1 + 1 + 1 + 1 + 1 = 13 \\ \text{(13 sweets)}$$

Or names changed to suit Ps called out.

45 min

Bk1	R: Mental operations C: Revision and practice (0 to 15) E: <i>Problem solvng. Measuring</i>	<i>Lesson Plan</i> 106																																																																
Activity		Notes																																																																
1	Addition/subtraction relay T says, e.g. '4 + 5', P ₁ says '9'. T says '+ 6'; P ₂ says '15'. T says '- 7'; P ₃ says '8', etc. (0 to 15) <div style="text-align: right;">5 min</div>	Whole class activity At speed Involve many Ps																																																																
2	Oral work Let's see how many different ways we can think of to describe the number 7 (10, 13, 14, 15). <div style="text-align: right;">10 min</div>	Whole class activity Class checks each response Praise creativity																																																																
3	Book 1, page 106 Q.1 Read: <i>Fill in the missing numbers.</i> Deal with one column at a time. Review orally round the class. <div style="text-align: right;">20 min</div>	Individual work, monitored Discussion, checking Self-correction																																																																
4	Interlude Exercises or action song <div style="text-align: right;">22 min</div>	Whole class in unison																																																																
5	Addition grids Look at the first number grid. Who can tell us why '11' is in this box? (5 + 6 = 11) T explains about adding numbers in LHS colom to numbers in bottom row. Who can come and fill in this box? Why did you write that number? P explains. Who agrees? etc. BB: a) <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td>5</td><td>11</td><td></td><td></td></tr><tr><td>6</td><td></td><td></td><td></td></tr><tr><td>7</td><td></td><td></td><td></td></tr><tr><td>+</td><td>6</td><td>7</td><td>8</td></tr></table> b) <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td>3</td><td></td><td></td><td>8</td></tr><tr><td>4</td><td></td><td>14</td><td></td></tr><tr><td>5</td><td>12</td><td></td><td></td></tr><tr><td>+</td><td>7</td><td></td><td></td></tr></table> Look carefully at the rows and columns. Do you see a connection? Repeat in similar way for part b). Find numbers on bottom row first. <div style="text-align: right;">30 min</div>	5	11			6				7				+	6	7	8	3			8	4		14		5	12			+	7			Whole class activity Drawn on BB or use enlarged copy master or OHP Involve several Ps Discussion, agreement, checking <i>Solutions:</i> a) <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td>5</td><td>11</td><td>12</td><td>13</td></tr><tr><td>6</td><td>12</td><td>13</td><td>14</td></tr><tr><td>7</td><td>13</td><td>14</td><td>15</td></tr><tr><td>+</td><td>6</td><td>7</td><td>8</td></tr></table> b) <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td>3</td><td>10</td><td>13</td><td>8</td></tr><tr><td>4</td><td>11</td><td>14</td><td>9</td></tr><tr><td>5</td><td>12</td><td>15</td><td>10</td></tr><tr><td>+</td><td>7</td><td>10</td><td>5</td></tr></table>	5	11	12	13	6	12	13	14	7	13	14	15	+	6	7	8	3	10	13	8	4	11	14	9	5	12	15	10	+	7	10	5
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6	Book 1, page 106 Q. 2 Read: <i>Julie and Ann want to weigh the fruit.</i> <i>Draw plums on the left-hand side of the scales to make them balance.</i> How many plums weigh the same as a pear (apple, banana)? Ps write values in the pieces of fruit first, then draw the plums. Review at BB with whole class, writing additions on BB. Would plums always be a good unit for measuring weight? (No, because all plums do not weigh exactly the same.) <div style="text-align: right;">38 min</div>	Individual work, monitored Discussion, checking agreement Drawn on BB or use enlarged copy master or OHP BB: pear = 5 plums apple = 5 + 2 = 7 plums banana = 7 + 1 = 8 plums																																																																
7	Book 1, page 106 Q. 3 Read: <i>Join up the measuring tools which use the same kind of units.</i> Review at BB with whole class. Discuss units of measurement and kinds of things which might be measured. Do these units ever change like the plums? (No, always exactly the same.) Which weighs more? 2 kg of salt or 2 kg of whipped cream? (same) <div style="text-align: right;">45 min</div>	Individual work, monitored Enlarged copy master or OHP BB: time: hours, minutes mass: grams, kilograms capacity: ml, litres length: cm, metres Discussion																																																																

Bk1	<p>R: Mental operations C: Revision practice (0 to 15) E: <i>Problem solving</i></p>	Lesson Plan 107
Activity 1	<p>Sequences Continue these sequences (0 to 15) e.g. T: 2 m, 4 m, 6 m, . . . Ps: . . ., 8 m, 10 m, 12 m, 14 m, . . . 15 litres, 12 litres,, 9 litres, 6 litres, 3 litres, 0 litres 1 kg, 3 kg, 5, kg,, 7 kg, 9 kg, 11 kg, 13 kg, 15 kg, . . .</p> <p style="text-align: right;">10 min</p>	<p style="text-align: center;">Notes</p> <p>Whole class activity In chorus or in relay At speed Ps must say units too. (Ps may choose the units.)</p>
2	<p>Number line practice T describes a number (<i>a</i>, <i>b</i> and <i>c</i> on cards at side of BB). P puts letter in correct place on class number line, saying the equation, e.g. T: 'Number <i>a</i> is 8 less than 15' P: '<i>a</i> = 7' 'Number <i>b</i> is greater than 14 but not greater than 15. P: '<i>b</i> = 15' 'Number <i>c</i> is the next nearest odd number greater than 11. P: '<i>c</i> = 13'</p> <p style="text-align: right;">15 min</p>	<p>Whole class activity Discussion, agreement, checking (Ps can describe their own numbers and choose a P to mark it on the number line.)</p>
3	<p>Book 1, page 107 Q.1 Read: <i>Five dogs live next to each other in houses with consecutive odd numbers.</i> T explains what 'consecutive' means. Ps fill in the house numbers. Write the first letter of the dog's name in the correct house as the clues are read out. (Ps can read aloud too.) Clue 1: <i>Bob lives in the house with the smallest number.</i> Clue 2: <i>The number of Fred's house is greater than 12 but not greater than 13.</i> Clue 3: <i>Pluto lives between Cesar and Fred.</i> Clue 4: <i>Max lives next to Fred.</i> Review at BB with whole class. Ps explain their reasoning.</p> <p style="text-align: right;">20 min</p>	<p>Individual work but kept together as a class. BB: 7, 9, 11, 13, 15 B: 7 F: 13 C: 9 P: 11 M: 15 Discussion, agreement, using enlarged copy master</p>
4	<p>Interlude Relaxation</p> <p style="text-align: right;">22 min</p>	<p>Whole class resting</p>
5	<p>Book 1, page 107, Q.2 Listen carefully and show me the answer with a number card when I say. You may use counters or items from your collection to be Fox and Rabbit. <i>Rabbit and Fox had a running race to a clearing 15 trees away. They ran at the same speed.</i> Put your counters on Rabbit and Fox. Rabbit ran steadily without stopping. Fox stopped for a rest after every 4 trees, while Rabbit moved one more tree ahead every time Fox stopped. Move your counters to where Rabbit and Fox would be the first time Fox stops for a rest, then the second time, etc. <i>How many trees away was Fox from the last tree when Rabbit reached the clearing?</i> Show me the answer with number cards . . . now! (3) A, explain how you got your answer. Who agrees? Who did it a different way?</p> <p style="text-align: right;">32 min</p>	<p>Individual work but class kept together Repeat slowly a few times. Give Ps time to think T demonstrates with enlarged photocopy or OHP In unison Discussion, agreement BB: F: 4, 8, 12 R: 5, 10, 15</p>

Bk1		<i>Lesson Plan 107</i>
Activity 6	<p><i>Book 1, page107</i></p> <p>Q.3 Read: <i>Fill in the missing numbers.</i></p> <p>Deal with horizontal equations first and then vertical ones.</p> <p>Review orally with whole class. Mistakes corrected at number line.</p> <p style="text-align: right;"><i>40min</i></p>	<p style="text-align: center;">Notes</p> <p>Individual work, monitored, Ps may use number lines to help them if necessary.</p> <p>Discussion, agreement, checking</p>
7	<p>Finding the rule</p> <p>a) T asks 5 boys and 5 girls to come to front of class. T puts them in pairs (B–G)</p> <p>T gives:</p> <p>1st pair: Boy '3' number card to hold and Girl '9' number card. 2nd pair: Boy '2' number card to hold and Girl '6' number card. 3rd pair: B '5' number card to hold and Girl '15' number cards. 4th pair: B: '1' number card. What should the Girl be? (3) 5th pair: G: '12' number card to hold. What should the Boy be? (4)</p> <p>Who can tell us the rule? Who agrees? Who thinks something else?</p> <p style="text-align: right;"><i>45 min</i></p>	<p>Whole class activity</p> <p>Ps hold hands to show pairs</p> <p>Class shouts out in unison Class shouts out in unison</p> <p>Discussion, agreement</p> <p>BB: $B + B + B = G$</p>

Bk1	R: C: Trial test E:	<i>Lesson Plan</i> 108
<i>Activity</i>	<i>Notes</i>	
<p>1</p> <p><i>Book 1, page 108</i></p> <p>Q.1 Read: <i>Fill in the missing numbers.</i></p> <p style="text-align: right;">1st column: (7) 2nd column: (7) 3rd column: (7)</p> <p style="text-align: right;"><i>12 min</i></p>	<p>Individual work (10 min) Checking (2 min)</p> <div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">21 marks</div>	
<p>2</p> <p><i>Book 1, page 108</i></p> <p>Q.2 Read: <i>Fill in the missing numbers.</i> (8)</p> <p style="text-align: right;"><i>22 min</i></p>	<p>Individual work (8 min) Checking (2 min)</p> <div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">8 marks</div>	
<p>3</p> <p><i>Book 1, page 108</i></p> <p>Q.3 Read: <i>Fill in the missing numbers</i></p> <p style="text-align: right;">1st row: (5) 2nd row: (5)</p> <p style="text-align: right;"><i>32 min</i></p>	<p>Individual work (8 min) Checking (2 min)</p> <p>Ps may use number lines</p> <div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">10 marks</div>	
<p>4</p> <p>Sequences</p> <p>Continue these sequences to 15:</p> <p>a) 1, 3, 5, 7, 9, ... Ps: 11, 13, 15 (3)</p> <p>b) 0, 4, 5, 9, 10, ... Ps: 14, 15 (2)</p> <p style="text-align: right;"><i>35 min</i></p>	<p>Individual work (2 min) Checking (1 min)</p> <p>(Ps write in books.)</p> <div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">5 marks</div>	
<p>5</p> <p><i>Book 1, page 108</i></p> <p>Q.4 Read: <i>Underline which of the numbers, 10 or 20, is closer to the middle number.</i> (4)</p> <p style="text-align: right;"><i>40 min</i></p>	<p>Individual work (3 min) Checking (2 min)</p> <div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">4 marks</div>	
<p>6</p> <p><i>Book 1, page 108</i></p> <p>Q.5 Read: <i>On the ribbon measure 16 cm.</i> (2)</p> <p style="text-align: right;"><i>45 min</i></p>	<p>Individual work (3 min) Checking (2 min)</p> <div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">2 marks</div>	

TOTAL: 50 marks

<h1 style="margin: 0;">Bk1</h1>	<p>R: Mental counting C: Number bonds and sums to 16 E: <i>Roman numerals</i></p>	<h2 style="margin: 0;">Lesson Plan</h2> <h1 style="margin: 0;">109</h1>														
<p>Activity</p> <p style="text-align: center;">1</p>	<p>Making 16</p> <p>Look at the posters and find things which together make 16.</p> <p><i>Poster 12</i> e.g. RHS: 10 children sledging downhill, 2 fallen off and 4 just arriving) (8 pairs) LHS: 10 children in circle, 5 children watching and 1 snowman</p> <p><i>Poster 2</i> e.g. 4 people, 4 rolls, 5 apples and 3 flowers</p> <p>Look around the classroom and find things which make 16.</p> <p style="text-align: right;"><i>5 min</i></p>	<p style="text-align: center;">Notes</p> <p>Whole class activity Involve several Ps BB: $10 + 2 + 4 = 16$ $10 + 5 + 1 = 16$ $4 + 4 + 5 + 3 = 16$ Discussion, agreement, checking</p>														
<p style="text-align: center;">2</p>	<p>Pictures of 16</p> <p>Look at the different pictures of 16. (T talks about each one.)</p> <p>BB:</p> <div style="border: 1px solid black; padding: 5px; display: inline-block;"> </div> <p>How many digits does it have? (2 digits: 1 ten and 6 units) In relay (one P after another):</p> <ul style="list-style-type: none"> • Knock on your desk 16 times. • 16 pupils stand up <p>A, come and point to 16 on the number line. Is he/she correct? What is the number before (after) 16? (15, 17)</p> <p style="text-align: right;"><i>15 min</i></p>	<p>Enlarged copy master</p> <p>Involve several Ps Talk about birthdays, ages, lottery numbers, anything involving 16</p> <p>Ps come to front to write '16' on BB, explaining which digit is ten and which is units</p> <p>At speed, class counting aloud</p> <p>Checking, agreement</p>														
<p style="text-align: center;">3</p>	<p>Book 1, page 109</p> <p>Q.1 Read: <i>Continue drawing the number strips for 16. Write down the additions.</i></p> <p>Ps can make first on desks with number strips (or Cuisenaire rods or plastic cubes stuck together).</p> <div style="display: flex; align-items: flex-start;"> <table border="1" style="margin-right: 20px;"> <tr><td style="width: 100px; text-align: center;">10</td><td style="width: 100px;"></td></tr> <tr><td style="text-align: center;">6</td><td></td></tr> <tr><td style="text-align: center;">5</td><td></td></tr> <tr><td style="text-align: center;">4</td><td></td></tr> <tr><td style="text-align: center;">3</td><td></td></tr> <tr><td style="text-align: center;">2</td><td></td></tr> <tr><td style="text-align: center;">1</td><td></td></tr> </table> <div> <p>BB:</p> <p>$10 + 6 = 16$ $9 + 1 + 6 = 9 + 7 = 16$ $8 + 2 + 6 = 8 + 8 = 16$ $7 + 3 + 6 = 7 + 9 = 16$ $6 + 4 + 6 = 6 + 10 = 16$ $5 + 5 + 6 = 5 + 11 = 16$ $4 + 6 + 6 = 4 + 12 = 16$ $3 + 7 + 6 = 3 + 13 = 16$ $2 + 8 + 6 = 2 + 14 = 16$ $1 + 9 + 6 = 1 + 15 = 16$</p> </div> </div> <p style="text-align: right;"><i>23 min</i></p>	10		6		5		4		3		2		1		<p>Start as whole class activity, changing to individual work when T thinks Ps understand</p> <p>Drawn on BB or use enlarged copy master or OHP.</p> <p>T monitoring helping Discussion Checking, agreement</p> <p>Class reads out equations together.</p>
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<p style="text-align: center;">4</p>	<p>Interlude</p> <p>Relaxation</p> <p style="text-align: right;"><i>25 min</i></p>	<p>Whole class resting, with music playing</p>														

Bk1		<i>Lesson Plan 109</i>																											
Activity 5	<p>Book 1, page 109</p> <p>Q.2 Read: <i>Alan knows that the number of books on each shelf is even. He counted 16 books in total on the 3 shelves. How many books could there be on the bottom two shelves?</i></p> <p>T explains task. Drawings can be rough (vertical lines). Review with whole class.</p> <p>X, how many books did you draw on the middle (bottom) shelf of one of your book cases? T draws in what X says.</p> <p>Come and write an equation about it. Is he/she correct? Who did the same? Who did something different? etc.</p> <p>Continue until all cases covered.</p> <p style="text-align: right;">32 min</p>	<p style="text-align: center;">Notes</p> <p>Individual work, monitored</p> <p>BB: $2 + 12 + 2 = 16$ $2 + 10 + 4 = 16$ $2 + 8 + 6 = 16$ $4 + 8 + 4 = 16$</p> <p>(or similar: $2 + 2 + 12$, etc.)</p> <p>Discussion, checking, agreement</p> <p>Draw on BB or use enlarged copy master or OHP</p>																											
6	<p>Book 1, page 109, Q.3</p> <p>T explains problem. Ps come out in 3's to fill in each column.</p> <p>Discuss strategy for logical solution. What is the smallest number of meatballs that Jeremy could have eaten? (0) If Jeremy ate no meatballs, how many did Rachel eat? ($0 + 2 = 2$) So how many would be left for Father? ($16 - 0 - 2 = 14$).</p> <p>Ps continue filling in columns until J: 7, R: 9, F: 0</p> <p>Could Jeremy have eaten 8 meatballs? (No, because Rachel would have eaten 10 and there are not enough meatballs.)</p> <p style="text-align: right;">40 min</p>	<p>Whole class activity</p> <p>Drawn on BB or use enlarged copy master or OHP</p> <p>Discussion, checking</p> <p>BB:</p> <table style="border-collapse: collapse; margin-left: 20px;"> <tr> <td style="padding-right: 5px;">J</td> <td>0</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td> </tr> <tr> <td>R</td> <td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td> </tr> <tr> <td>F</td> <td>14</td><td>12</td><td>10</td><td>8</td><td>6</td><td>4</td><td>2</td><td>0</td> </tr> </table> <p>Discussion, checking, agreement</p>	J	0	1	2	3	4	5	6	7	R	2	3	4	5	6	7	8	9	F	14	12	10	8	6	4	2	0
J	0	1	2	3	4	5	6	7																					
R	2	3	4	5	6	7	8	9																					
F	14	12	10	8	6	4	2	0																					
7 Extension	<p>Book 1, page 109</p> <p>Q.4 Read: <i>Write down what you think the answers might be.</i></p> <p>T revises Roman numerals for V, X, $IV = V - I$, $VI = V + I$.</p> <p>Review at BB with whole class, Ps writing, explaining their answers.</p> <p style="text-align: right;">45 min</p>	<p>Individual work, monitored, helped</p> <p>Discussion, agreement</p> <p>NB: $XIV = X + (V - I)$</p>																											

Bk1	R: Mental operations C: Operations and equations to 16 E: Rules, problems	<i>Lesson Plan</i> 110
<i>Activity</i>		<i>Notes</i>
1	Paying 16 p How many different ways can you think of to pay 16 p? T has box of play (or real) money on desk. Ps choose coins to make 16 p. T writes additions on BB. <div style="text-align: right;">5 min</div>	Whole class activity Involve several Ps Discussion, checking (Or paired work)
2	Oral work a) Tell me different ways to describe the number '16'. (e.g. $10 + 6$, $18 - 2$, $8 + 8$, the 4th even 2-digit number, the next number after 15, the number before 17, etc.) b) T says correct/incorrect statements for 16. Ps agree (thumbs up) or disagree (thumbs down). If incorrect, Ps give reason. <div style="text-align: right;">10 min</div>	Whole class activity Involve several pupils Reasoning, checking, agreement In unison
3	Book 1, page 110, Q.1 a) Read: <i>Write the correct numbers in the number strips and boxes.</i> What is special about the number strips shown in the picture? (Only equal strips used in each row.) What strips did you use and how many of each? (1's, 2's, 4's, 8's) Write additions about it in your books. BB: $1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 = 16$ $2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 = 16$ $4 + 4 + 4 + 4 = 16$ $8 + 8 = 16$ (Preparation for: $1 \times 16 = 16 \times 1 = 8 \times 2 = 4 \times 4 = 2 \times 8 = 16$) b) Make sure that Ps know what 'twice' and 'half of' means. Ps read the statements forwards and backwards: '16 is twice 8, 8 is half of 16'; etc. <div style="text-align: right;">20 min</div>	Individual work, monitored Discussion, checking Individual work, monitored, helped Reviewed at BB with whole class. Use large number strips stuck to BB or enlarged copy master in which Ps write the numbers. Whole class activity In unison
4	Interlude Action song <div style="text-align: right;">22 min</div>	Whole class in unison
5	Book 1, page 110 Read: <i>Alice has a strip of paper 16 cm long. She paints 2 cm yellow, 5 cm green and the rest red. Colour in the paper.</i> You must measure carefully along each line and mark with a dot, then join up the dots before colouring in. Measure how much of the strip you have coloured in red and show me the number of cm with a number card when I say. Show me . . . now! (9) Who can tell me an addition about it? Read: <i>Underline the equation which describes the story.</i> What do you think the <i>r</i> represents in these equations? (<i>rest</i> or <i>red</i>) A , which equation did you underline? ($5 + 2 + r = 16$) Why? Who agrees? Who thinks another? Discuss why two of the equations do not describe the story. <div style="text-align: right;">32 min</div>	NB: Ps have rulers on desks Individual work, monitored, helped Praising only In unison BB: $2 + 5 + 9 = 16$ Discussion, agreement Checking Checking

Bk1		<i>Lesson Plan 110</i>
Activity 6	<p>Book 1, page110</p> <p>Q.3 Read: <i>Fill in the missing numbers.</i></p> <p>a) What have the circles to do with the numbers? (16 circles altogether; 10 in top row, 6 in bottom row; 9 white circles and 7 grey circles)</p> <p>Use these circles to help you fill in the missing numbers. Review with whole class. Use counters if there are difficulties.</p> <p>BB: $9 + 7 = 16$ $16 - 7 = 9$ $7 + 9 = 16$ $16 - 9 = 7$</p> <p>b) Repeat as above.</p> <p>BB: $20 - 4 = 16$ $16 + 4 = 20$ $20 - 16 = 4$ $4 + 16 = 20$</p> <p style="text-align: right;"><i>40 min</i></p>	<p style="text-align: center;">Notes</p> <p>Individual work Monitored, helped</p> <p>Discussion</p> <p>Discussion, checking, agreement, self-correcting</p> <p>Discussion, checking, agreement, self-correcting</p>
7	<p>Book 1, page110</p> <p>Q.4 Read: <i>Fill in the missing numbers and signs</i></p> <p>a) Everyone put your finger on '8' on your number line. Follow what the signs tell you and fill in the missing numbers. Review orally with whole class.</p> <p>Deal with part b) in similar fashion.</p> <p style="text-align: right;"><i>45 min</i></p>	<p>Individual work, monitored</p> <p>Discussion, checking agreement</p> <p>Mistakes corrected at number line</p>

<h1>Bk1</h1>	<p>R: Mental counting C: Number bonds and sums to 17 E: Problems in context, tables</p>	<h2 style="text-align: center;">Lesson Plan 111</h2>																				
<p>Activity</p> <p>1</p>	<p>Making 17</p> <p>Look at the posters and find things which together make 17.</p> <p><i>Poster 5</i> e.g. 9 flying birds, 5 ducks, 2 tortoises and 1 fox <i>Poster 6</i> e.g. 13 bees, 3 butterflies and 1 snail</p> <p>Look around the classroom and find things which make 17.</p> <p style="text-align: right;">5 min</p>	<p style="text-align: center;">Notes</p> <p>Whole class activity Involve several Ps</p> <p>BB: $9 + 5 + 2 + 1 = 17$ $13 + 3 + 1 = 17$</p> <p>Discussion, agreement, checking</p>																				
<p>2</p>	<p>Pictures of 17</p> <p>Look at the different pictures of 17. (T talks about each one.)</p> <p>BB:</p> <div style="border: 1px solid black; padding: 5px; display: inline-block;"> <p style="margin: 0;">17 seventeen </p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> </div> <div style="text-align: center;"> </div> <div style="text-align: center;"> <p>XVII</p> </div> </div> </div> <p>How many digits does it have? (2 digits: 1 ten and 7 units, both odd) In relay (one P after another):</p> <ul style="list-style-type: none"> • 17 pupils put your hands on your head; • 17 pupils stand up and turn around. <p>A, come and point to 17 on the number line. Is he/she correct? What is the number before (after) 17? (16, 18)</p> <p style="text-align: right;">12 min</p>	<p>Enlarged copy master</p> <p>Involve several Ps</p> <p>Talk about birthdays, ages, dates, anything involving 17</p> <p>Ps come to front to write '17' on BB, saying which digit is the ten and which is units</p> <p>At speed, class counting aloud</p> <p>Checking, agreement</p>																				
<p>3</p>	<p>Book 1, page 111</p> <p>Q.1 Read: <i>Continue drawing the number strips for 17. Write down the additions.</i></p> <p>Ps can make first on desks with number strips (or Cuisenaire rods or plastic cubes stuck together).</p> <p style="text-align: center;">BB:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: center;">10</td> <td style="width: 50%;"></td> </tr> <tr> <td style="text-align: center;">7</td> <td></td> </tr> <tr> <td style="text-align: center;">1</td> <td></td> </tr> <tr> <td style="text-align: center;">2</td> <td></td> </tr> <tr> <td style="text-align: center;">3</td> <td></td> </tr> <tr> <td style="text-align: center;">4</td> <td></td> </tr> <tr> <td style="text-align: center;">5</td> <td></td> </tr> <tr> <td style="text-align: center;">6</td> <td></td> </tr> <tr> <td style="text-align: center;">8</td> <td></td> </tr> <tr> <td style="text-align: center;">9</td> <td></td> </tr> </table> <p style="margin-left: 20px;"> $10 + 7 = 17$ $9 + 1 + 7 = 9 + 8 = 17$ $8 + 2 + 7 = 8 + 9 = 17$ $7 + 3 + 7 = 7 + 10 = 17$ $6 + 4 + 7 = 6 + 11 = 17$ $5 + 5 + 7 = 5 + 12 = 17$ $4 + 6 + 7 = 4 + 13 = 17$ $3 + 7 + 7 = 3 + 14 = 17$ $2 + 8 + 7 = 2 + 15 = 17$ $1 + 9 + 7 = 1 + 16 = 17$ </p> <p style="text-align: right;">22 min</p>	10		7		1		2		3		4		5		6		8		9		<p>Start as whole class activity, changing to individual work when T thinks Ps understand</p> <p>Drawn on BB or use enlarged copy master or OHP.</p> <p>T monitoring helping</p> <p>Discussion</p> <p>Checking, agreement</p> <p>Class reads out equations together.</p>
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<p>4</p>	<p>Interlude</p> <p>Song, rhyme, exercises</p> <p style="text-align: right;">24 min</p>	<p>Whole class in unison</p>																				

Bk1		<i>Lesson Plan 111</i>
Activity 5	<p>Book 1, page 111</p> <p>Q.2 Read: <i>Anne and Vicky have picked some flowers. Vicky has 5 flowers more than Anne. How many flowers could they have picked? Complete the table.</i></p> <p>What does the 1st (2nd) row in the table show? What does 'A + V' mean? (Anne + Vicky, i.e. total flowers picked)</p> <p>Try to fill in the table logically. (Anne: 0, 1, 2, 3, 4, . . .) and go as far as you can.</p> <p>Review at BB with whole class, with Ps explaining solution.</p> <p style="text-align: right;"><i>34 min</i></p>	<p style="text-align: center;">Notes</p> <p>Individual work Monitored, helped Note which Ps can go beyond $7 + 11 = 18$ Discussion</p> <p>Drawn on BB or use enlarged copy master or OHP Discussion, agreement, checking, self-correcting</p>
6	<p>Book 1, page 111, Q.3</p> <p>Listen carefully to the story and show me the answers with number cards after each part when I say.</p> <p><i>Peter and Geoff each had 9 p in their piggy banks.</i></p> <p>The picture shows one of the piggy banks containing nine 1p's. Which coins might the other piggy bank contain? (e.g. 5p + 2p + 2p, etc.)</p> <p><i>Peter is given another 8 p from his grandfather.</i> How many pennies does Peter have now? Show me with number cards . . . now! (17)</p> <p><i>Geoff buys flowers for his grandmother for 8 p.</i> How many pennies does Geoff have now? Show me with a number card . . . now! (1)</p> <p><i>Who has more money now?</i> (Class shouts 'Peter') <i>How much more?</i> Show me with number cards . . . now! (16)</p> <p>(Or done as individual work, monitored and reviewed with whole class.) (Demonstrate with pupils acting out story if there are problems.)</p> <p style="text-align: right;"><i>40 min</i></p>	<p>Whole class activity</p> <p>T repeats slowly.</p> <p>Discussion</p> <p style="text-align: right;"><i>Peter</i></p> <p>In unison BB: $9 + 8 = 17$</p> <p style="text-align: right;"><i>Geoff</i></p> <p>In unison BB: $9 - 8 = 1$</p> <p>In unison BB: Peter</p> <p>In unison BB: $17 - 1 = 16$</p> <p>Ps explain solutions at BB</p>
7	<p>Book 1, page 111</p> <p>Q.4 Read: <i>Complete the table. Write down the rule in different ways.</i></p> <p>T explains task. Review at BB with whole class. Mistakes corrected by demonstration or at number line.</p> <p style="text-align: right;"><i>45 min</i></p>	<p>Individual work, monitored Draw on BB or use enlarged copy master or OHP Discussion, checking, agreement</p> <p>BB: $a + b = 17$ $a = 17 - b$ $b = 17 - a$</p>

<h1>Bk1</h1>	<p>R: Mental operations C: Operations, equations to 17 E: Problem in context</p>	<h2>Lesson Plan 112</h2>
Activity 1	Oral work Let's count: a) from 1 to 17 by 2 Ps: 1, 3, 5, 7, 9, 11, 13, 15, 17 b) from 17 to 1 by 4 Ps: 17, 13, 8, 5, 1 c) from 2 to 17 by 5 Ps: 2, 7, 12, 17 <p style="text-align: right;">5 min</p>	Notes Whole class activity In chorus at a good pace T takes note of Ps having difficulties
2	Secret numbers I am thinking of a number. You have to guess what it is by asking me questions. I will answer only 'Yes' or 'No'. (15, 16, 17) (e.g. 15: Ps: 'Does it have 1 digit?' T: 'No'. Ps: 'Is even?' T: 'No' Ps: 'Is it less than 10?' T: 'No'. Ps: 'Is it more than 15?' etc.) <p style="text-align: right;">10 min</p>	Whole class activity Involve several pupils Encourage Ps to ask logical questions/remember clues Praise clever questions
3	Book 1, page 112 Q.1 Read: <i>Fill in the missing numbers.</i> a) What have the circles to do with the numbers? (17 circles altogether; 10 in top row, 7 in bottom row; 8 white circles and 9 grey circles) Use these circles to help you fill in the missing numbers. Review with whole class. Use counters if there are difficulties. BB: $8 + 9 = 17$ $17 - 9 = 8$ $9 + 8 = 17$ $17 - 8 = 9$ b) Repeat as above. BB: $20 - 3 = 17$ $17 + 3 = 20$ $20 - 17 = 3$ $3 + 17 = 20$ <p style="text-align: right;">18 min</p>	Individual work Monitored, helped Discussion Checking, agreement Demonstrate with white and blue circles stuck to BB Review mistakes Self-correction at number line
4	Interlude Action song <p style="text-align: right;">20 min</p>	Whole class in unison
5	Number line Look at the BB. Which numbers could each shape represent? a) Let's all read the inequality: 'nine is less than the square, the square is less than 14' A , come and put your finger on '9' and B , come and put your finger on '14' on the class number line. C , come and read the numbers in between. Are these the numbers the square could be? (Yes) Is C correct? Who thinks something else? Let's check. b) Let's all read the inequality: 'thirteen is less than the triangle plus four; the triangle plus 4 is less than seventeen' D , come and put your finger on '13'. E , come and put your finger on '17'. F , come and read the numbers in between. (14, 15, 16) Are these the numbers the triangle could be? (No, these numbers are equal to the triangle plus 4.) Write down the numbers the triangle could be. Is F correct? Who thinks something else? Let's check. c) As for part b) but noting the sign for 'less than or equal to'. <p style="text-align: right;">28 min</p>	Whole class activity BB: a) $9 < \square < 14$ (Ps: \square : 10, 11, 12, 13) Discussion, agreement, checking b) $13 < \triangle + 4 < 17$ (Ps: $\triangle + 4$: 14, 15, 16 \triangle : 10, 11, 12) Discussion, agreement, checking c) $13 < 17 - \bigcirc \leq 16$ (Ps: $17 - \bigcirc$: 14, 15, 16 \bigcirc : 3, 2, 1)

Bk1		<i>Lesson Plan 112</i>
Activity 6	<p>Book 1, page 112</p> <p>Q.2 Read: <i>Julie painted 17 eggs for Easter. She painted the same number of eggs yellow as blue. She painted the rest red.</i></p> <p>T explains task. Who could write an equation about it? (BB)</p> <p>Discuss strategy for solution. (e.g. Colour one egg yellow, then one egg blue, etc.)</p> <p>Read: <i>How many yellow, blue and red eggs could there be if the number of eggs in each colour is odd?</i></p> <p>Could we colour 2 eggs yellow and 2 eggs blue? (No, 2 is not odd)</p> <p>Colour the eggs in different ways and write an equation to match.</p> <p>Review with whole class, with Ps writing equations on BB.</p> <p>Why is the number of red eggs always odd? (odd + odd = even, and odd – even = odd.)</p> <p style="text-align: right;"><i>34 min</i></p>	<p style="text-align: center;">Notes</p> <p>Whole class discussion</p> <p>BB: $y + b + r = 17$, $y = b$</p> <p>Discussion, agreement</p> <p>Discussion</p> <p>Individual work, monitored</p> <p>BB: $1 + 1 + 15 = 17$ $3 + 3 + 11 = 17$ $5 + 5 + 7 = 17$ $7 + 7 + 3 = 17$</p>
7	<p>Book 1, page 112</p> <p>Q.3/4 See how many you can do in 6 minutes!</p> <p>Review orally round class. Mistakes corrected at number line.</p> <p style="text-align: right;"><i>42 min</i></p>	<p>Individual work, monitored</p> <p>Discussion, agreement</p> <p>Checking, self-correcting</p>
8 Extension	<p>Book 1, page 112, Q.5</p> <p>Listen carefully and try to picture the story in your head. Show me the answer with a number card when I say.</p> <p><i>Penny had 17 postcards. She gave 9 to Sue and swapped 8 with Anthony. How many postcards does she have left?</i></p> <p>Show me with a number card . . . now! (8)</p> <p>X, explain to us how you worked out your answer. Who agrees? Who thought in a different way?</p> <p>Who can come and write an equation about the story?</p> <p style="text-align: right;"><i>45 min</i></p>	<p>Whole class activity</p> <p>T repeats slowly</p> <p>Give Ps time to think</p> <p>In unison</p> <p>Discussion, agreement</p> <p>BB: $17 - 9 - 8 + 8 = 8$</p>