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<b>Achievement Objectives</b>	<b>Number and Algebra: Level One</b>
	<p><u>Number Strategies:</u></p> <ul style="list-style-type: none"> <li>Use a range of counting, grouping, and equal-sharing strategies with whole numbers and fractions</li> </ul> <p><u>Number Knowledge:</u></p> <ul style="list-style-type: none"> <li>Know the forward and backward counting sequences of whole numbers to 100.</li> <li>Know the groupings with five, within ten, and with ten.</li> </ul> <p><u>Equations and Expressions:</u></p> <ul style="list-style-type: none"> <li>Communicate and explain counting, grouping, and equal-sharing strategies, using words, numbers and pictures.</li> </ul> <p><u>Patterns and Relationships:</u></p> <ul style="list-style-type: none"> <li>Generalise that the next counting number gives the result of adding one object to a set and that counting the number of objects in a set tells how many.</li> </ul>

Key Teaching Ideas	Problem progression	References	Knowledge being developed	Resources
<p>Numbers can be added by counting on from the largest number in increments of one. (Key Idea #1)</p>	<p> <math>9 + 2 = \square</math>, <math>8 + 4 = \square</math>,  <math>14 + 3 = \square</math>, <math>25 + 4 = \square</math>,  <math>99 + 5 = \square</math>, <math>77 + 4 = \square</math>,  <math>8 + \square = 11</math>, <math>15 + \square = 19</math>,  <math>67 + \square = 72</math>, <math>89 + \square = 96</math>                      14 is how many more than 8?                      33 is how many more than 27?                      74 is how many more than 69?                 </p>	<p><b>Teaching Addition, Subtraction, and Place Value (Book 5)</b></p> <p> <a href="#">Number Tiles</a> (29)  <a href="#">The Number Strip</a> (30)  <a href="#">The Bears' Picnic</a> (31)  <a href="#">Change Unknown</a> (31)                 </p> <p><b>BSM</b></p> <p>                     Can You Count On? 6-3-2 (7)                      Taking a Group and Counting On 9-3-57 (124)                      7-1-53, 9-1-11, 9-1-49, 10-1-7, 10-1-49, 10-1-50, 10-1-51                 </p>	<p>Identify all of the numbers in the range 0–100 at least.</p>	<p><b>Teaching Number Knowledge (Book 4)</b></p> <p> <a href="#">Number Mat and Lily Pads</a> (2)  <a href="#">"Teen" and "Ty" Numbers</a> (3)  <a href="#">Number Hangman</a> (5)                 </p> <p><b>BSM</b></p> <p>8-1-45, 8-1-81, 9-1-4, 9-1-5, 9-1-6, 9-1-42, 9-1-82, 12-1-1</p>

Transition: Moving from Counting All to Advanced Counting

Domain: Addition and Subtraction

Key Teaching Ideas	Problem progression	References	Knowledge being developed	Resources
Numbers can be subtracted by counting back from the largest number in increments of one. (Key Idea #2)	$12 - 3 = \square$ , $14 - 5 = \square$ , $23 - 4 = \square$ , $41 - 2 = \square$ , $67 - 5 = \square$ , $72 - 6 = \square$ , $12 - \square = 9$ , $24 - \square = 19$ , $67 - \square = 58$ , $94 - \square = 89$ 16 is how many less than 21? 39 is how many less than 43? 74 is how many less than 80?	<b>Teaching Addition, Subtraction, and Place Value (Book 5)</b> <a href="#">Counting Back</a> (32)  <b>BSM</b> 9-3-13, 9-3-14, 9-3-55, 9-3-56, 9-3-57,9-3-58, 9-3-59, 9-3-85, 10-1-8, 10-1-52, 10-1-53	Say the forwards and backwards number word sequences in the range 0–100, at least, connecting that the result of adding or taking one more/less object to a set is given by the next/previous counting number.	<b>Teaching Number Knowledge (Book 4)</b> <a href="#">Number Fans</a> (4) <a href="#">Counting</a> (11) <a href="#">Lucky Dip</a> (13) <a href="#">Using Calculators</a> (14) <a href="#">Hundreds Boards and Thousands Book</a> (16)  <b>BSM</b> 9-1-4, 9-1-42, 9-3-9
Objects can be counted by creating bundles of ten. (Key Idea #3)	$40 + 20 = \square$ , $70 - 50 = \square$ , $60 + 30 = \square$ , $90 - 20 = \square$ , $42 + 30 = \square$ , $75 - 20 = \square$ , $54 - \square = 24$ , $27 + \square = 57$ , $36 + \square = 76$ , $94 - \square = 54$	<b>Teaching Addition, Subtraction, and Place Value (Book 5)</b> <a href="#">Ones and Tens</a> (33)	Order numbers in the range 0–100, at least.	<b>Teaching Number Knowledge (Book 4)</b> <a href="#">Card Ordering</a> (12) <a href="#">Arrow Cards</a> (13) <a href="#">Rocket- Where Will I Fit</a> (15) <a href="#">Number Line Flips</a> (15) <a href="#">Squeeze – Guess My Number</a> (15) <a href="#">Bead Strings</a> (17) <a href="#">Who is the Richest?</a> (18)  <b>Figure It Out</b> N 2.1 (1) <a href="#">The Mail Gets Through</a> N 2-3 (1) <a href="#">Happy Hundreds</a>  <b>BSM</b> 9-3-51, 9-3-52, 10-1-4, 11-1-4, 11-1-5, 11-1-43, 11-1-44, 11-1-45, 11-1-46, 11-3-6, 11-3-7, 11-3-46, 11-3-47, 11-3-48, 11-3-83

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Transition: Moving from Counting All to Advanced Counting

Domain: Addition and Subtraction

Key Teaching Ideas	Problem progression	References	Knowledge being developed	Resources
Groups of ten can be added and subtracted by using simple addition facts (Key Idea #4)	3 tens + 1 ten 5 tens – 2 tens 50 + 30 40 – 20 48 - 20 84 + 10 76 - 30	<i>Teaching Addition, Subtraction, and Place Value (Book 5)</i> <a href="#">Ten Stickers Per Packet</a> (34) <a href="#">Adding Tens</a> (35) <a href="#">Subtracting Tens</a> (35)	Recall the facts to ten, and the teen facts, e.g. $3 + 7 = 10$ , $10 - 6 = 4$ , $10 + 8 = 18$ .	<i>Teaching Number Knowledge (Book 4)</i> <a href="#">Up to Ten</a> (32) <a href="#">Tens Frames Again</a> (34) <a href="#">Using Tens Frames to Describe Patterns to Ten</a> (34) <a href="#">Addition Flash Cards</a> (37)  <i>BSM</i> 9-1-9, 9-1-10, 9-1-47, 9-1-48, 9-3-11, 9-3-12, 9-3-54, 10-1-3, 10-3-46, 11-3-8, 11-3-9, 11-3-49, 11-3-50, 11-3-51
Addition is commutative, so the order of the numbers can be rearranged to make counting on easier (Key Idea #5)	$3 + 11 = 11 + 3$ $4 + 23 = 23 + 4$ $3 + 21 + 2 = 3 + 2 + 21$ $2 + 94 = 94 + 2$	<i>Teaching Addition, Subtraction, and Place Value (Book 5)</i> <a href="#">The Bigger Number First</a> (36)	Recall the doubles to 20, e.g. $7 + 7 = 14$ .	<i>Teaching Number Knowledge (Book 4)</i> <a href="#">Double Trouble</a> (32)  <i>Figure It Out</i> N 2.2 <a href="#">Helping Hands</a> (3)  <i>BSM</i> 10-1-6, 10-1-47, 10-1-48, 10-1-83

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Knowledge being developed	Resources
Recall the number of tens within decades	<p><b>Teaching Number Knowledge (Book 4)</b></p> <p><a href="#">Zap</a> (26)</p> <p><a href="#">Number Boggle</a> (33)</p> <p><b>Figure It Out</b></p> <p>N 2.2 <a href="#">Flexible Fingers</a> (8)</p> <p>BF 2-3 <a href="#">One Liner</a> (1)</p> <p>BF 2-3 <a href="#">Fizzing It Up</a> (5)</p> <p><b>BSM</b></p> <p>9-1-9, 9-1-10, 9-1-47, 9-1-48, 10-1-5, 10-1-45, 10-1-46, 11-1-12</p>
Recall the decades that add to 100, e.g. $60 + 40 = 100$ .	<p><b>BSM</b></p> <p>9-3-8, 9-3-49, 9-3-50</p>

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