

Transition: Moving from One-to-one Counting to Counting from One on Materials and by Imaging

Domain: Addition and Subtraction

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CA
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Achievement Objectives	Number and Algebra: Level One
	<p><u>Number Strategies:</u></p> <ul style="list-style-type: none"> Use a range of counting, grouping, and equal-sharing strategies with whole numbers and fractions <p><u>Number Knowledge:</u></p> <ul style="list-style-type: none"> Know the forward and backward counting sequences of whole numbers to 100. Know the groupings with five, within ten, and with ten. <p><u>Equations and Expressions:</u></p> <ul style="list-style-type: none"> Communicate and explain counting, grouping, and equal-sharing strategies, using words, numbers and pictures. <p><u>Patterns and Relationships:</u></p> <ul style="list-style-type: none"> 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.

Key Teaching Ideas	Example Problems	References	Knowledge being developed	Resources
The number of objects in the set stays the same, regardless of spatial arrangement (Key Idea #1)	Count them in the egg tray 1, 2, 3, 4 Count them on the tens frame 1, 2, 3, 4	Teaching Addition, Subtraction, and Place Value (Book 5) Animals on the Farm (18)	Identify numbers in the range 0–20, at least.	BSM 2-1-5, 6-1-7, 6-1-9, 6-3-2, 6-3-3, 6-3-4, 6-3-5, 6-3-6, 6-3-7, 6-3-22, 6-3-43, 6-3-44, 6-3-45, 6-3-46, 6-3-49, 6-3-50, 6-3-81, 6-3-83, 7-1-1, 7-1-2, 7-1-41, 7-1-42, 7-1-43, 7-3-4, 7-3-9, 7-3-45, 7-4-46, 8-1-4, 8-1-43, 8-1-44, 8-1-53, 11-1-6, 11-1-47, 11-1-82
Addition and subtraction problems that involve numbers up to five can be solved by physically counting all the objects from one or mentally counting the objects (Key Idea #2)	2 + 3 1 + 3 4 – 2 5 - 0	Teaching Addition, Subtraction, and Place Value (Book 5) Adding and Subtracting with One Hand (19) BSM How Many Left Outside? 8-1-53 (28) Mini Skittles 8-1-85 (29)	Say the forward and backward number word sequences in the range 0–20, at least.	Teaching Number Knowledge (Book 4) Counting (11) Number Line Flips (15)

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Addition and subtraction problems that involve five as one of the numbers can be solved by physically counting all the objects from one or mentally counting the objects (Key Idea #3)	$5 + 2$ $3 + 5$ $7 - 5$ $10 - \square = 5$	Teaching Addition, Subtraction, and Place Value (Book 5) Murtles 5 and... (21) Fly Flip (21) Using Fives (22)	Order numbers in the range 0–20, at least.	Teaching Number Knowledge (Book 4) Counting (11) Number Line Flips (15) BSM 7-1-4, 7-1-5, 7-1-46, 7-1-48, 7-1-81, 7-1-82, 7-3-3, 7-3-44, 8-1-6, 8-3-3, 8-3-4, 8-3-5, 8-3-44, 8-3-45, 8-3-46
Addition and subtraction problems that involve numbers up to ten can be solved by physically counting all the objects from one or mentally counting the objects (Key Idea #4)	$3 + 4$ $2 + 6$ $7 - 5$ $9 - \square = 7$	Teaching Addition, Subtraction, and Place Value (Book 5) Adding and subtracting with counters or hands (23) BSM Setting foot on Cigol 9-1-14 (41) Milking the Cows 9-3-13 (122)	Instantly recognise patterns to ten (doubles and five based), including finger and tens frame patterns.	BSM 7-1-49, 7-1-50, 7-1-51, 7-1-83, 8-1-5, 8-1-7, 8-1-46, 8-1-47, 8-1-48, 8-1-49, 8-1-82, 9-1-6, 9-1-12, 9-1-13, 9-1-43, 9-1-44, 9-1-50, 9-1-51, 9-1-52, 9-1-53, 9-1-54, 9-1-85, 9-1-86
Addition and subtraction problems that involve ten as one of the numbers can be solved by physically counting all the objects from one or mentally counting the objects (Key Idea #5)	$7 + \square + 10$ $10 - 3 = \square$	Teaching Addition, Subtraction, and Place Value (Book 5) Making Tens (25)	Recall facts within five and doubles to ten.	
Place value is developed by connecting physical models, words, and symbols (Key Idea #6)	Bundling the tens in 15 sticks and finding 1 bundle of ten and 5 left over. 15 is one ten and 5 ones	Teaching Addition, Subtraction, and Place Value (Book 5) Read Say Do: 10-19 (26) BSM Our System 9-19 (30) Houses for Earthlings 9-1-10 (31) Place-value Snap 9-1-48 (32)		

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