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

Domain: Addition and Subtraction

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<th>Achievement Objectives</th>
<th>Number and Algebra: Level One</th>
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<td>Number Strategies:</td>
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<td>- Use a range of counting, grouping, and equal-sharing strategies with whole numbers and fractions</td>
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<td>Number Knowledge:</td>
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<td>- Know the forward and backward counting sequences of whole numbers to 100.</td>
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<td>- Know the groupings with five, within ten, and with ten.</td>
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<td>Equations and Expressions:</td>
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<td>- Communicate and explain counting, grouping, and equal-sharing strategies, using words, numbers and pictures.</td>
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<td>Patterns and Relationships:</td>
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<td>- 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.</td>
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### Key Teaching Ideas

#### Example Problems

| 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 |

#### References

*Teaching Addition, Subtraction, and Place Value (Book 5)*

Animals on the Farm (18)

Identify numbers in the range 0–20, at least.

### Knowledge being developed

#### Resources

*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

#### Additional problems

- 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 |

#### References

*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.

#### Resources

*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) | $5 + 2$
$3 + 5$
$7 - 5$
$10 - □ = 5$ | *Teaching Addition, Subtraction, and Place Value (Book 5)*
*Murties 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) |

| 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) | $3 + 4$
$2 + 6$
$7 - 5$
$9 - □ = 7$ | *Teaching Addition, Subtraction, and Place Value (Book 5)*
*Adding and subtracting with counters or hands* (23) | Instantly recognise patterns to ten (doubles and five based), including finger and tens frame patterns. | *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, 8-3-44, 8-3-45, 8-3-46 |

| 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) | $7 + □ + 10$
$10 - 3 = □$ | *Teaching Addition, Subtraction, and Place Value (Book 5)*
*Making Tens* (25) | Recall facts within five and doubles to ten. | *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 |

| 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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