

**Reception**

# Calculation policy

Updated September 2024

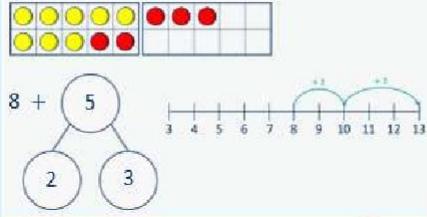
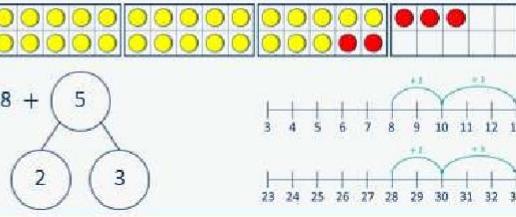
# Guidance for teachers

The calculation policy is divided into four sections: addition, subtraction, multiplication and division. At the start of each section, you will find an overview of the progression of skills. Calculations involving decimal numbers and fractions are included.

The calculation policy follows the same concrete, pictorial, abstract approach as our main schemes of learning. Where appropriate, sentence stems and key questions are included alongside the key representations.

Where skills are divided into more than one section across the page, there is a progression in the level of difficulty from left to right.

For example, when adding across a 10, children need to be able to add across 10 itself, before making links with related facts.

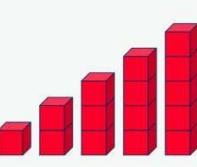
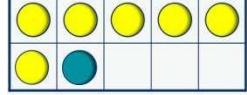
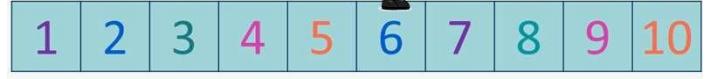
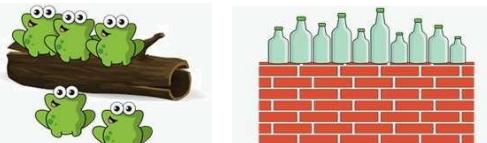
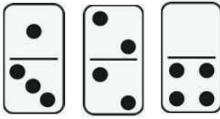
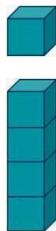
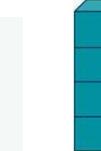
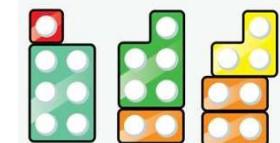
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|---|--|---|
| <b>Add across a 10</b><br><br>Partition the number you are adding to make a full ten. | ... can be partitioned into ... and ...<br><br> | I add ... to get to ... then I add ...<br>$8 + 5 = 13$<br>$28 + 5 = 33$<br><br> |
|---|--|---|

# Progression of skills – Addition

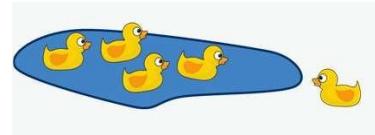
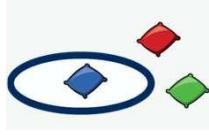
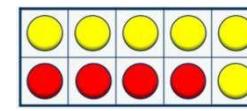
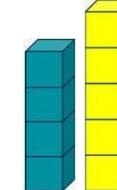
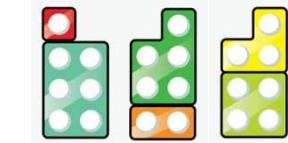
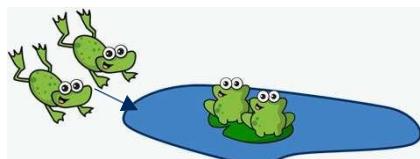
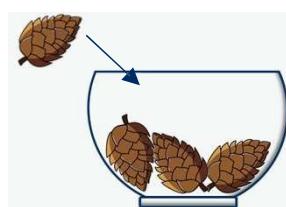
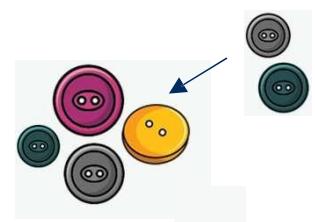
## Reception

- Conceptually subitise to 5
- 1 more
- Notice the composition of numbers within 10
- Combine 2 groups
- Add more

# Addition

|  |  |
|--|--|
| <b>Reception</b>   | <ul style="list-style-type: none"> <li>Have a deep understanding of numbers to 10, including the composition of each number.</li> <li>Subitise (recognise quantities without counting) up to 5</li> <li>Automatically recall (without reference to rhymes, counting or other aids) number bonds up to 5 and some number bonds to 10, including double facts.</li> </ul>  |
| <b>Progression of skills</b>   | <b>Key representations</b>   |
| <b>Conceptually subitise to 5</b><br><br>Notice the parts that make up the whole.            | What do you see?<br>How do you see it?<br>     |
| <b>1 more</b><br><br>Continue to link to stories, songs and rhymes.                          | 1 more than ... is ...<br>    |
| <b>Notice the composition of numbers within 10</b><br><br>Link to stories, songs and rhymes. | How many...?<br>How many...?<br>How many altogether?<br>       |

# Addition

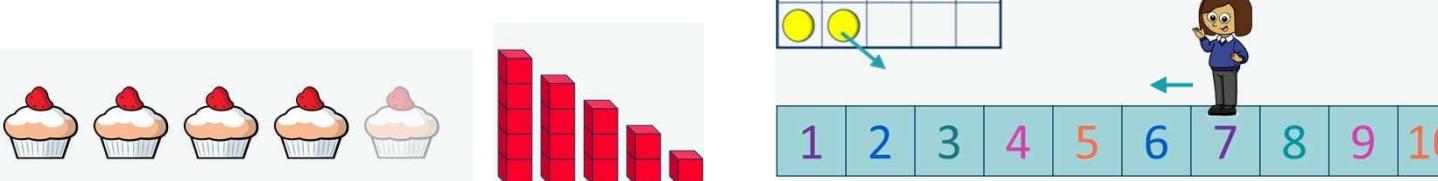
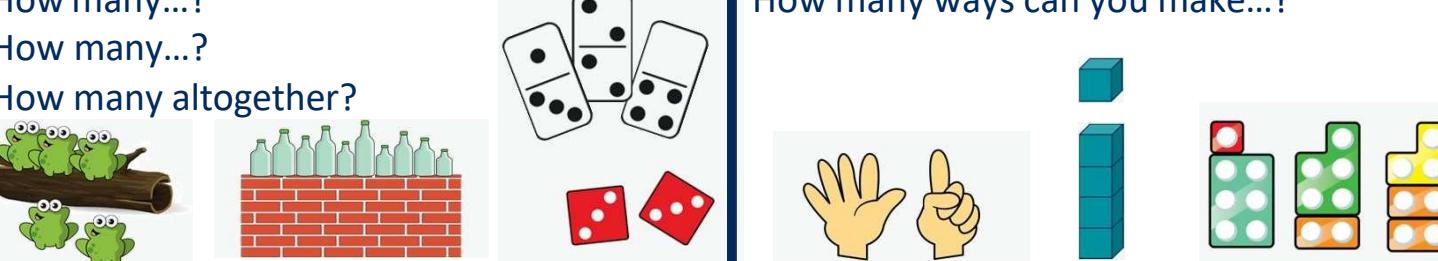
| Progression of skills   | Key representations   |   |  |
|---|---|---|--|
| <b>Combine 2 groups</b><br><br>2 groups are combined to find the total. | There are ....<br>There are ....<br>There are .... altogether.<br><br> | .... and .... make ....<br><br><br><br> |  |
| <b>Add more</b><br><br>A quantity is increased.                         | First... Then.... Now....<br><br>                                     | I have ....<br>I add .... more.<br>Now I have....<br><br><br>  |  |

# Progression of skills – Subtraction

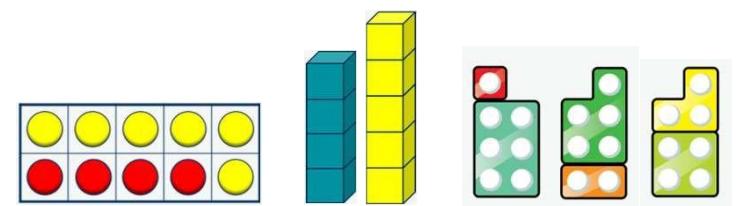
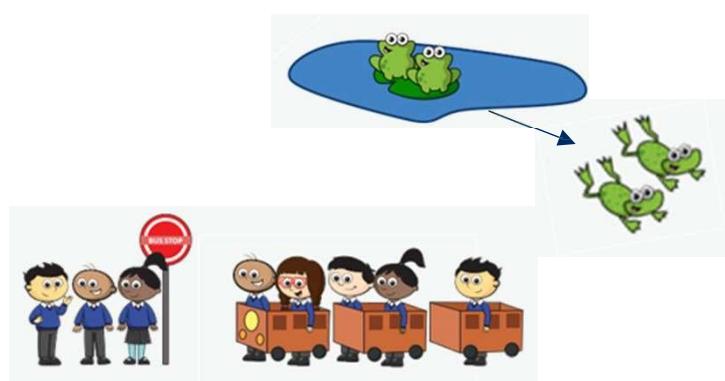
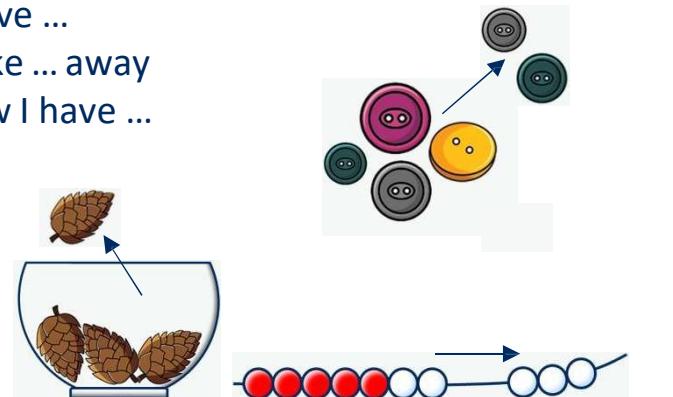
## Reception

- Conceptually subitise to 5
- 1 less
- Notice the composition of numbers within 10
- Partition
- Take away

# Subtraction

|  |   |
|--|---|
| <b>Reception</b>   | <ul style="list-style-type: none"> <li>Have a deep understanding of number to 10, including the composition of each number.</li> <li>Subitise (recognise quantities without counting) up to 5</li> <li>Automatically recall (without reference to rhymes, counting or other aids) number bonds up to 5 (and some subtraction facts) and some number bonds to 10, including double facts.</li> </ul> |
| <b>Progression of skills</b>   | <b>Key representations</b>  |
| <b>Conceptually subitise to 5</b><br><br>Notice the parts that make up the whole.            | <p>What do you see?<br/>How do you see it?</p>    |
| <b>1 less</b><br><br>Continue to link to stories, songs and rhymes.                          | <p>1 less than ... is ...</p>    |
| <b>Notice the composition of numbers within 10</b><br><br>Link to stories, songs and rhymes. | <p>How many...?<br/>How many...?<br/>How many altogether?</p>   |

# Subtraction

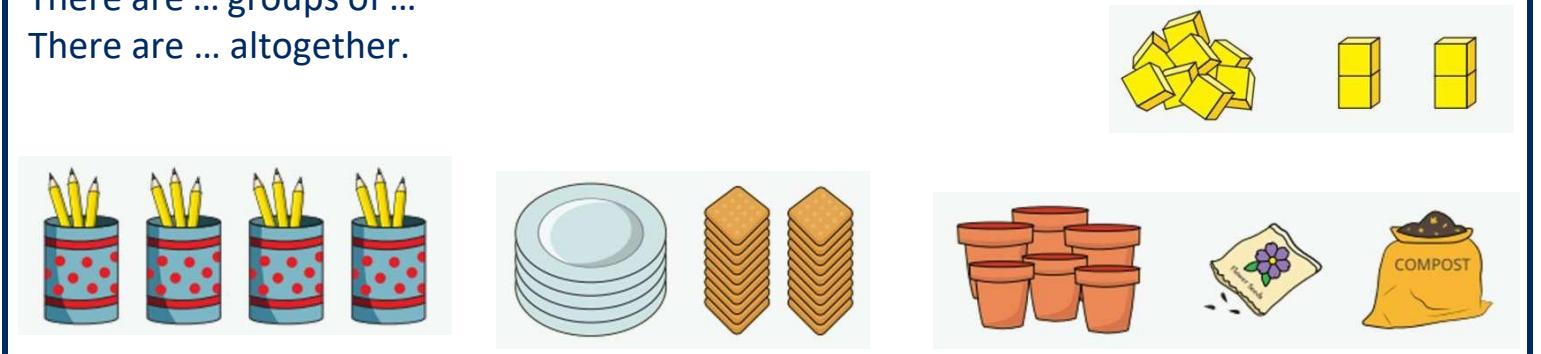
| Progression of skills   | Key representations   |   |  |
|---|---|---|--|
| <b>Partition</b><br><br>Using objects, explore different ways to partition a number into 2 or more parts. | <p>There are ... altogether.<br/>I can see ... here and ... there.</p>  | <p>... and ... make ...</p>                                |  |
| <b>Take away</b><br><br>A quantity is reduced.  | <p>First... Then... Now...</p>   | <p>I have ...<br/>I take ... away<br/>Now I have ...</p>  |  |

# Progression of skills – Multiplication

## Reception

- Double to 10
- Make equal groups

# Multiplication

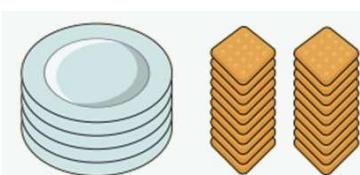
|   |   |
|---|---|
| <b>Reception</b>  | <ul style="list-style-type: none"> <li>Have a deep understanding of number to 10, including the composition of each number.</li> <li>Subitise (recognise quantities without counting) up to 5</li> <li>Automatically recall (without reference to rhymes, counting or other aids) number bonds up to 5 and some number bonds to 10, including double facts.</li> <li>Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally.</li> </ul> |
| <b>Progression of skills</b>  | <b>Key representations</b> <p><b>Double to 10</b></p> <p>Prompt children to notice that double means twice as many and to notice that there are two equal groups.</p> <p>Double ... is ...<br/>...է թվական ...</p>   |
| <b>Make equal groups</b> <p>Provide opportunities to make equal groups when tidying up or during snack time. Encourage children to check that each group has the same amount.</p> | <p>There are ... groups of ...<br/>There are ... altogether.</p>    |

# Progression of skills – Division

## Reception

- Sharing
- Grouping

# Division

|  |   |
|--|---|
| <b>Reception</b>   | <ul style="list-style-type: none"> <li>Have a deep understanding of number to 10, including the composition of each number.</li> <li>Subitise (recognise quantities without counting) up to 5</li> <li>Automatically recall (without reference to rhymes, counting or other aids) number bonds up to 5 and some number bonds to 10, including double facts.</li> <li>Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally.</li> </ul> |
| <b>Progression of skills</b>   | <b>Key representations</b>  |
| <b>Sharing</b><br><br>Provide practical activities such as sharing items during snack time. Encourage children to check whether items have been shared fairly (equally). | <p>There are ... altogether.<br/>They are shared equally between ... groups.</p>     |
| <b>Grouping</b><br><br>Provide opportunities to make equal groups when tidying up or during snack time. Encourage children to check that each group has the same amount. | <p>There are ... groups of ...<br/>There are ... altogether.</p>      |