

# Mastery Learning Folder Mental Maths Computation Continuum

Mastery Learning Folders are designed to support classroom learning and to assist the movement of knowledge from working memory to long-term memory.

Foundational Skills	Level 1	Level 2
<p><u>FIND IN THE FLASHCARD CLUB</u></p> <p>Counting Principles up to Ten:</p> <ol style="list-style-type: none"> <li>1. Stable Order: know number names in order</li> <li>2. One-to-One Correspondence: matching quantity to count</li> <li>3. Cardinality: last number spoken when counting represents the total</li> </ol> <p>Additionally</p> <ol style="list-style-type: none"> <li>a. Order Irrelevance: counting objects from different start points</li> <li>b. Abstraction: count similar objects - count different objects - count unseen objects</li> <li>c. Subitising</li> </ol> <p><u>Numerals to 20</u> <u>Principles of Counting</u></p> <p>Connect number names, numerals and quantities, including zero, initially up to 10 and then beyond.</p> <p><u>Number Names to Ten</u> <u>Number Connections</u></p> <p>Subitise small collections of objects.</p> <p><u>Subitising (irregular to 6)</u> <u>Subitising (objects to 10)</u></p> <p>Compare, order and make correspondences between collections, initially to 20, and explain reasoning.</p> <p><u>Comparing Collections</u> <u>Ordinal Names</u> <u>Ordinal to 5</u></p> <p>Represent practical situations to model addition and sharing.</p> <p><u>Practical Addition</u> <u>Sharing</u></p> <p><b>TEMPLATES</b></p> <p><u>Recording Chart</u> <u>Student Graph</u> <u>Blank Flashcard Sheet</u></p> <p>Nicola Carr-White MASTERY LEARNING GROUP</p>	<p><u>FIND IN THE FLASHCARD CLUB</u></p> <p>Represent and solve simple addition and subtraction problems using a range of strategies including counting on, partitioning and rearranging parts.</p> <p><b>Addition</b></p> <p><u>Adding Zero</u> <u>Ten Frame Partitioning</u> <u>Friends of Ten</u> <u>Counting On by 1, 2 &amp; 3</u> <u>Ten Plus</u> <u>Doubles to 20</u> <u>Mixed Addition Strategies</u></p> <p><b>Subtraction</b></p> <p><u>Subtracting Zero</u> <u>Subtraction Using Friends of Ten</u> <u>Subtraction Using Doubles</u></p> <p>Develop confidence with number sequences to and from 100 by ones from any starting point. Skip count by twos, fives and tens starting from zero.</p> <p><b>Multiplication</b></p> <p><u>Skip Count by 2</u> <u>Skip Count by 5</u> <u>Skip Count by 10</u></p>	<p><u>FIND IN THE FLASHCARD CLUB</u></p> <p>Explore the connection between addition and subtraction.</p> <p><u>Part Part Whole</u></p> <p>Solve simple addition and subtraction problems using a range of efficient mental and written strategies.</p> <p><b>Addition</b></p> <p><u>Friends of 20</u> <u>Bridging Ten</u> <u>Doubles Plus 1</u> <u>Doubles Plus 2</u> <u>Make it a Double</u> <u>Mixed Addition Strategies</u></p> <p><b>Subtraction</b></p> <p><u>Two Part Subtraction</u> <u>Use Known Facts</u> <u>Use Tens &amp; Ones</u> <u>Use Adding On</u> <u>Find the Difference</u> <u>Make It Easy</u></p> <p>Recognise and represent multiplication as repeated addition, groups and arrays.</p> <p><b>Multiplication</b></p> <p><u>Skip Count by 3</u></p>

# Mastery Learning Folder Mental Maths Flashcards

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## Level 3

### FIND IN THE FLASHCARD CLUB

Recall multiplication facts of two, three, five and ten and related division facts.

Mult/Div Triangles for 10  
Mult/Div for 10

Mult/Div Triangles for 5  
Mult/Div for 5

Mult/Div Triangles for 3  
Mult/Div for 3

Mult/Div Triangles for 2  
Mult/Div for 2

Dividing with Doubles

## Level 4 +

### FIND IN THE FLASHCARD CLUB

Recall multiplication facts up to  $10 \times 10$ .

Mult/Div Triangles for 4  
Mult/Div for 4

Mult/Div Triangles for 6  
Mult/Div for 6

Mult/Div Triangles for 7  
Mult/Div for 7

Mult/Div Triangles for 8  
Mult/Div for 8

Mult/Div Triangles for 9  
Mult/Div for 9

Apply place value to partition, rearrange and regroup numbers to at least tens of thousands to assist calculations and solve problems.

Mult by 10, 100, 1000  
Balancing Strategy  
Chunking Strategy  
Easy Pairs Strategy  
Partition and Fix Strategy  
Place Value Strategy