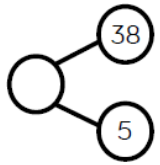
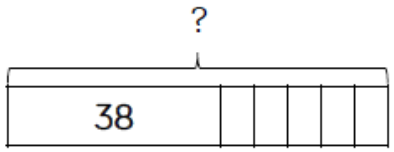
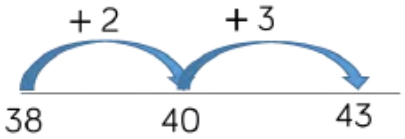
SARUM HALL
SCHOOL

MATHS CALCULATION POLICY (Year 3)

Date:	July 2025
Next Review Due:	September 2026
Reviewed by:	Chen Lee

This policy has been largely adapted from the White Rose Maths Calculation Policy with further material added.
It is a working document and will be revised and amended as necessary.

ADDITION

<table>
<tr><th>Skill</th><th colspan="3">Representations and Models</th><th>Vocabulary</th></tr>
<tr><td rowspan="3">Add 1-digit and 2-digit numbers to 100</td><td colspan="3">Example: 38 + 5 = 43</td><td rowspan="3">• Multiples
• Partitioning
• Ones
• Tens
• Hundreds
• Place value
• Compare
• Numbers to 100/1000
• 10 or 100 more
• Count in steps
• Count in multiples
• Estimate
• Addition/add
• Equals
• Facts
• Missing number
• Number bonds
• 2-digit number
• 3-digit number
• Commutative
• Column addition</td></tr>
<tr><td>Part-whole model
 
</td><td>Bar Model
 
</td><td>Number lines (labelled)
 
</td></tr>
<tr><td>Number links (blank)
 
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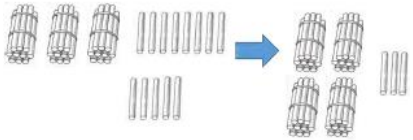
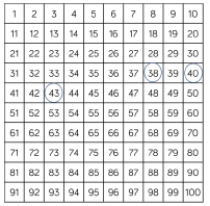
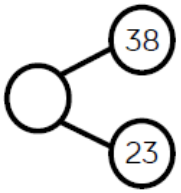
  </td><td>Hundred square
  </td></tr>
<tr><td rowspan="2">Add two 2-digit numbers to 100</td><td colspan="3">Example: 38 + 23 = 61</td></tr>
<tr><td>Part-whole model
 
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 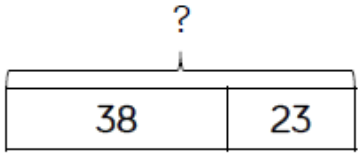
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 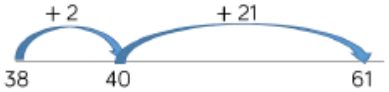
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 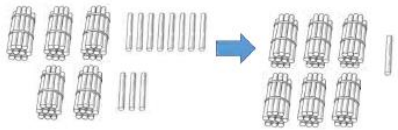 </td>
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 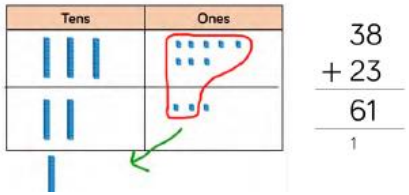
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 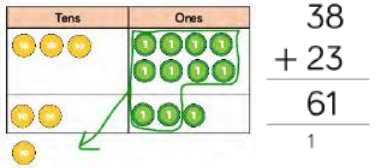
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<tr>
<td rowspan="3">Add numbers with up to 3 digits</td>
<td colspan="3">Example: 265 + 164 = 429</td>
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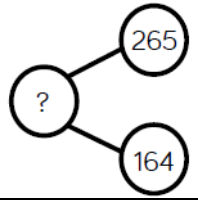
<td colspan="2">Part-whole model
 
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 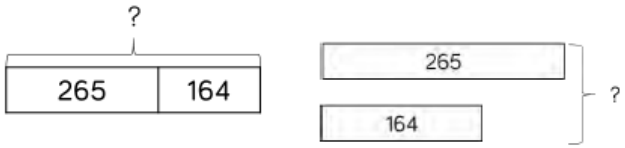
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 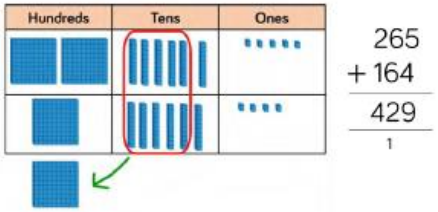
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 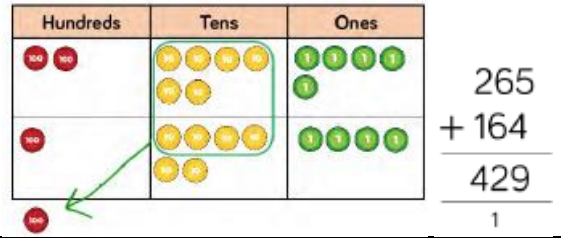
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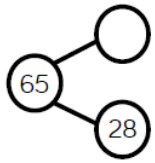
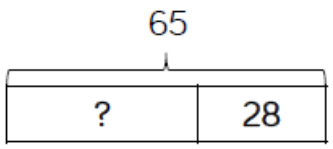
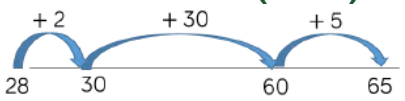
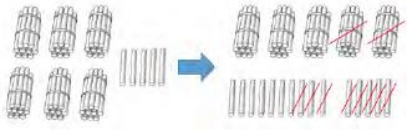
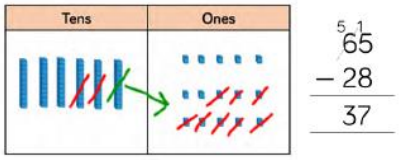
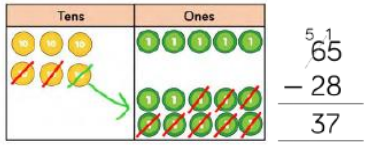
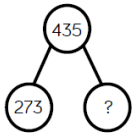
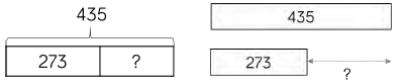
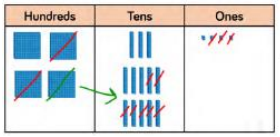
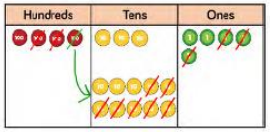
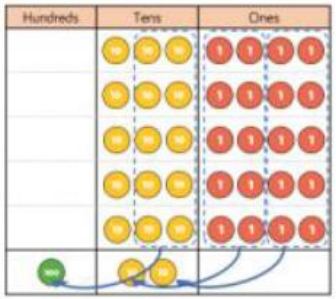
SUBTRACTION

Skill	Representations and Models	Vocabulary
Subtract 1 and 2-digit numbers to 100	**Example:** 65 – 28 = 37 **Part-whole model**  **Bar Model**  **Number lines (blank)**  **Straws**  **Base 10/Dienes**  5 1 65 – 28 37 **Place value counters**  5 1 65 – 28 37	• Partitioning • Ones • Tens • Hundreds • Place value • Compare • Numbers to 100/1000 • 10 or 100 less • Count in steps • Count in multiples • Estimate • Subtraction/subtract • Take away • Equals • Facts • Missing number • Number bonds • 2-digit number • 3-digit number • Commutative • Column subtraction • Exchange
Subtract numbers with up to 3 digits	**Example:** 435 – 273 = 162 **Part-whole model**  **Bar Model**  **Base 10/Dienes**  3 1 435 – 273 162 **Place value counters**  3 1 435 – 273 162	

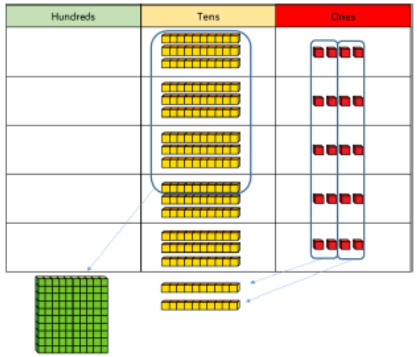
MULTIPLICATION

Skill	Representations and Models	Vocabulary
Multiply 2-digit numbers by 1-digit numbers	**Example:** $34 \times 5 = 170$	• Multiples • Partitioning • Ones • Tens • Hundreds • Place value • Compare • Numbers to 100/1000 • Count in steps • Count in multiples • Estimate • Multiplication • Multiply • Arrays • Row • Column • Count in… • Groups of… • Times • Repeated addition • Factors • Product • Facts • Missing number • 2-digit number • 3-digit number

Place value counters



Base 10



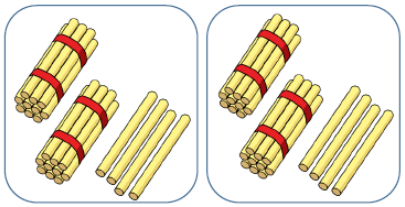
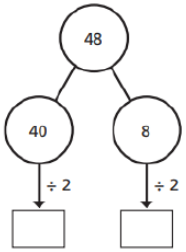
Expanded written method

	H	T	O	
		3	4	
×			5	
		2	0	(5 × 4)
+	1	5	0	(5 × 30)
	1	7	0	

Short written method

	H	T	O	
		3	4	
×			5	
	1	7	0	
	1	2		

DIVISION

<table>
<tr><th>Skill</th><th colspan="2">Representations and Models</th><th>Vocabulary</th></tr>
<tr><td rowspan="3">Divide 2-digits by 1-digit (sharing with no exchange)</td><td colspan="2">Example: 48 ÷ 2 = 24</td><td rowspan="3">• Multiples
• Partitioning
• Ones
• Tens
• Hundreds
• Place value
• Compare
• Numbers to 100/1000
• Estimate
• Division
• Divide
• Share
• Exchange
• Remainders
• Arrays
• Row
• Column
• Facts
• Missing number
• Inverse
• 2-digit number
• 3-digit number</td></tr>
<tr><td>Straws
  </td><td>Part-whole model
 
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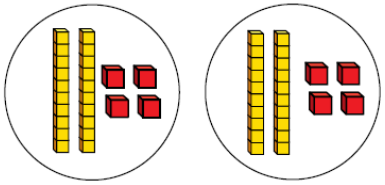
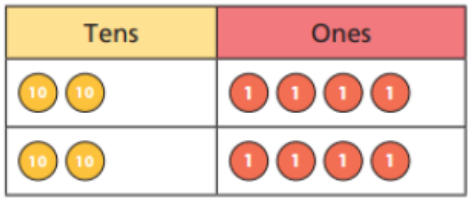
<tr><td>Base 10
  </td><td>Place value counters
 
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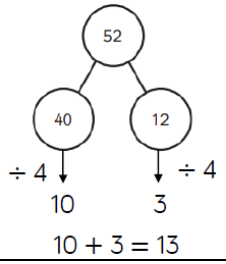
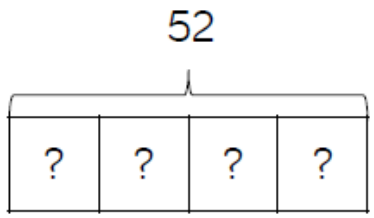
<tr><td rowspan="3">Divide 2-digits by 1-digit (sharing with exchange)</td><td colspan="2">Example: 52 ÷ 4 = 13</td></tr>
<tr><td>Part-whole model
 

10 + 3 = 13</td><td>Bar model
 
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 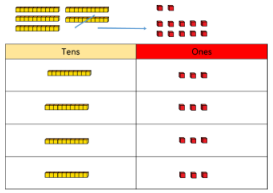
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 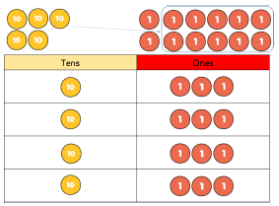
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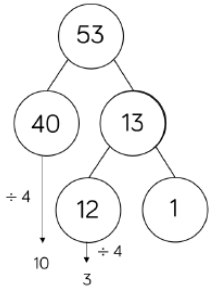
<tr><td rowspan="3">Divide 2-digits by 1-digit (sharing with remainders)</td><td colspan="2">Example: 53 ÷ 4 = 13 r1</td><td rowspan="3"></td></tr>
<tr><td>Part-whole model
 
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 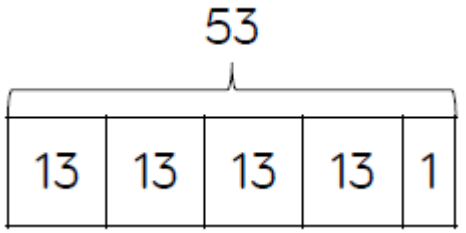
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 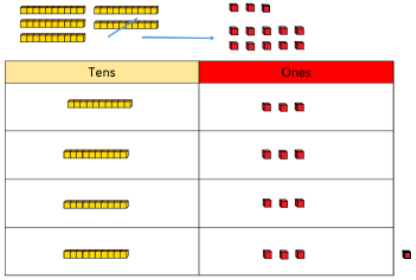
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