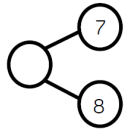
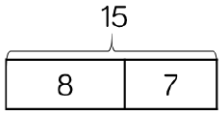
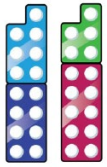
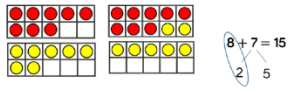
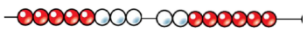
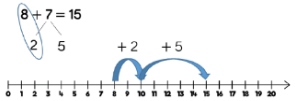
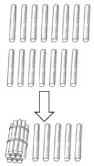
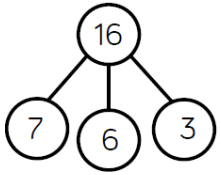
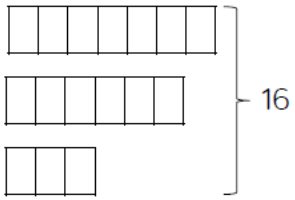
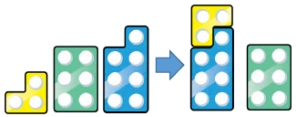
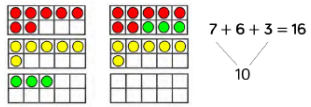
SARUM HALL
SCHOOL

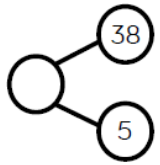
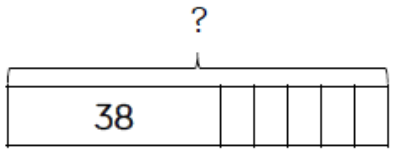
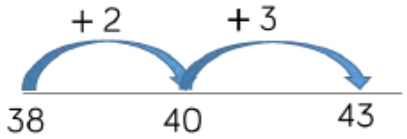
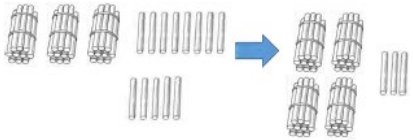
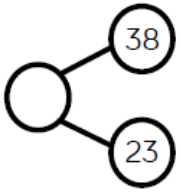
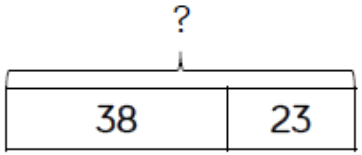
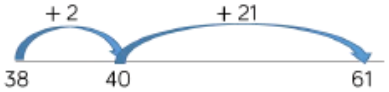
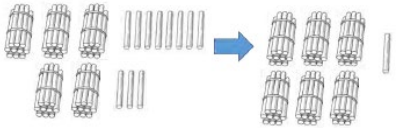
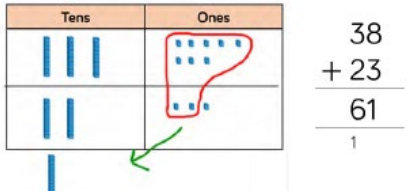
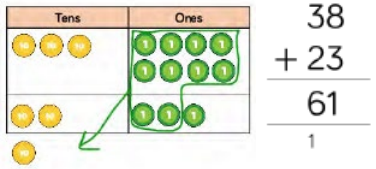
MATHS CALCULATION POLICY (Year 2)

Date:	July 2024
Next Review Due:	September 2025
Reviewed by:	Chen Lee

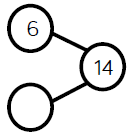
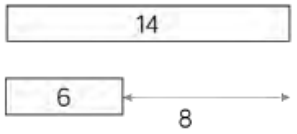
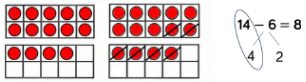
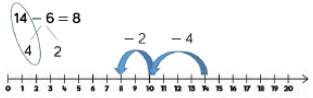
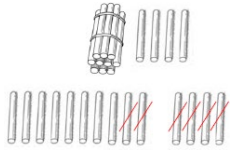
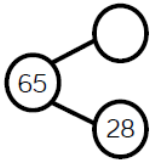
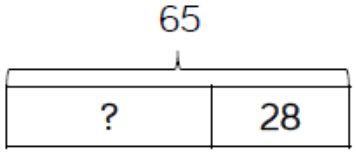
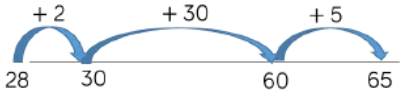
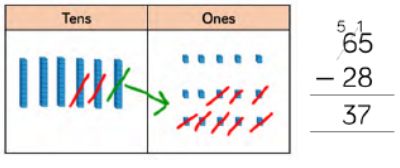
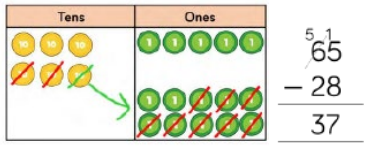
This policy has been largely adapted from the White Rose Maths Calculation Policy with further material added.
It is a working document and will be revised and amended as necessary.

ADDITION

Skill	Representations and Models				Vocabulary
Add 1 and 2-digit numbers to 20	**Example:** $8 + 7 = 15$				• Sort • Represent • Multiples • Partitioning • Ones • Tens • Place value • Compare • Numbers to 100 • Hundreds • Count in steps • Count in multiples • Estimate • More • Addition/add • Equals • Facts • Problems • Missing number • Number bonds • 2-digit number • 3-digit number • Commutative
	Part-whole model 	**Bar Model** 	**Number shapes** 	**Ten frames (within 20)** 	
	Bead strings (20) 	**Number tracks** 	**Number lines (labelled)** 	**Straws** 	
Add three 1-digit numbers	**Example:** $7 + 6 + 3 = 16$				
	Part-whole model 	**Bar Model** 	**Number shapes** 	**Ten frames (within 20)** 	

<table>
<tr><td rowspan="3">Add 1-digit and 2-digit numbers to 100</td><td colspan="3">Example: 38 + 5 = 43</td></tr>
<tr><td>Part-whole model
 
</td><td>Bar Model
 
</td><td>Number lines (labelled)
</td></tr>
<tr><td>Number links (blank)
 
</td><td>Straws
  </td><td>Hundred square
 </td></tr>
<tr><td rowspan="3">Add two 2-digit numbers to 100</td><td colspan="3">Example: 38 + 23 = 61</td></tr>
<tr><td>Part-whole model
 
</td><td>Bar Model
 
</td><td>Number lines (blank)
 
</td></tr>
<tr><td>Straws
  </td><td>Base 10/Dienes
 
</td><td>Place value counters
 
</td></tr>
</table>

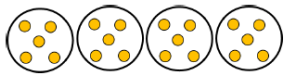
SUBTRACTION

Skill	Representations and Models	Vocabulary
Subtract 1 and 2-digit numbers to 20	**Example:** 14 – 6 = 8 **Part-whole model**  **Bar Model**  **Number shapes** **Ten frames (within 20)**  **Number tracks** **Number lines (labelled)**  **Straws** 	• Sort • Represent • Partitioning • Ones • Tens • Place value • Numbers to 100 • Hundreds • Estimate • Less • Subtraction/ subtract • Take away • Minus • Difference • Equals • Facts • Problems • Missing number • Inverse • Number bonds • 2-digit number • 3-digit number
Subtract 1 and 2-digit numbers to 100	**Example:** 65 – 28 = 37 **Part-whole model**  **Bar Model**  **Number lines (blank)**  **Straws** **Base 10/Dienes**  **Place value counters** 	

MULTIPLICATION

Skill	Representations and Models	Vocabulary
Solve 1-step problems using multiplication	**Example:** One bag holds 5 apples. How many apples do 4 bags hold?	• Sort • Represent • Multiples • Partitioning • Ones • Tens • Place value • Numbers to 100 • Hundreds • Count in steps • Count in multiples • Estimate • Multiplication • Multiply • Arrays • Row • Column • Count in… • Lots of… • Groups of… • Times • Repeated addition • Equals • Facts • Problems • Missing number • 2-digit number • 3-digit number

Bar model

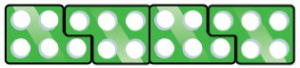


$5 + 5 + 5 + 5 = 20$

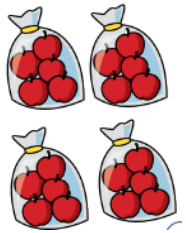
$4 \times 5 = 20$

$5 \times 4 = 20$

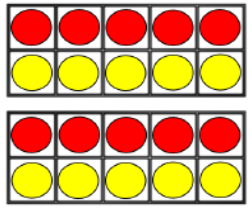
Number shapes



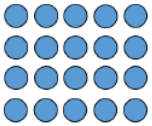
Counters



Ten frames



Arrays

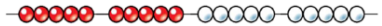


$5 + 5 + 5 + 5 = 20$

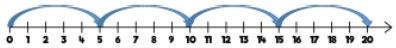
$4 \times 5 = 20$

$5 \times 4 = 20$

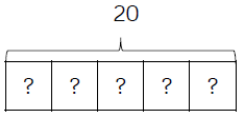
Bead strings



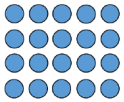
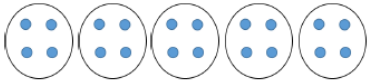
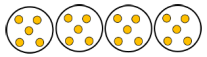
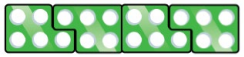
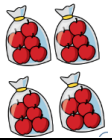
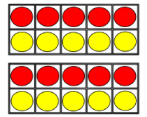
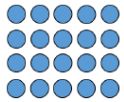
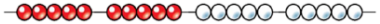
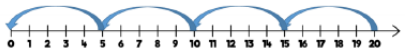
Number lines



DIVISION

<table>
<tr><th>Skill</th><th>Representations and Models</th><th>Vocabulary</th></tr>
<tr><td>Solve one-step problems with division (sharing)</td><td>
Example: There are 20 apples altogether. They are shared equally between 5 bags. How many apples are in each bag?
Bar model


Real life objects

Arrays

20 ÷ 5 = 4
Counters

20 ÷ 5 = 4
</td><td rowspan="2">
• Sort
• Represent
• Multiples
• Partitioning
• Ones
• Tens
• Place value
• Numbers to 100
• Hundreds
• Estimate
• Division
• Divide
• Arrays
• Row
• Column
• Count in…
• Lots of…
• Groups of…
• Share
• Equals
• Facts
• Problems
• Missing number
• Inverse
• 2-digit number
• 3-digit number
</td></tr>
<tr><td>Solve one-step problems with division (grouping)</td><td>
Example: There are 20 apples altogether. They are put in bags of 5. How many bags are there?
Bar model

20 ÷ 5 = 4
Number shapes

Counters

Ten frames

Arrays

20 ÷ 5 = 4
Bead strings

Number lines


</td></tr>
</table>