SARUM HALL
SCHOOL

MATHS CALCULATION POLICY (Year 4)

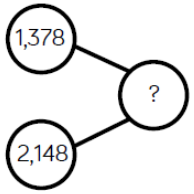
Date:	July 2024
Next Review Due:	September 2025
Reviewed by:	Chen Lee

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.

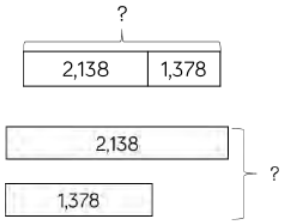
ADDITION

Skill	Representations and Models	Vocabulary
Add numbers with up to 4 digits	**Example:** 1,378 + 2,148 = 3,526	• Multiples • Partitioning • Ones • Tens • Hundreds • Thousands • Negative numbers / integers • Round • Place value • Compare • 1000 more • Count in steps • Count in multiples • Estimate • Addition/add • Equals • Facts • Missing number • Number bonds • 2/3/4-digit number • Commutative • Column addition

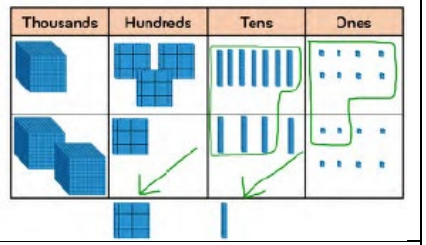
Part-whole model



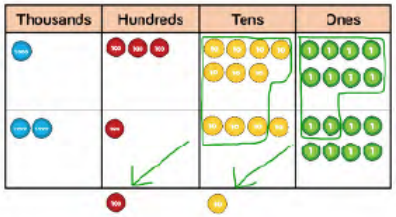
Bar Model



Base 10/Dienes



Place value counters



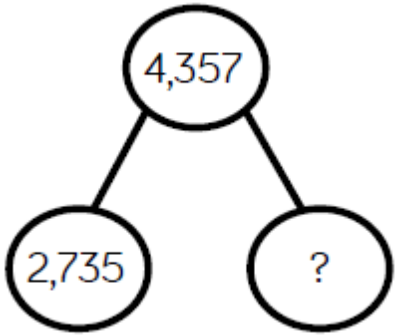
Column addition

	1	3	7	8
+	2	1	4	8
	3	5	2	6
		1	1	

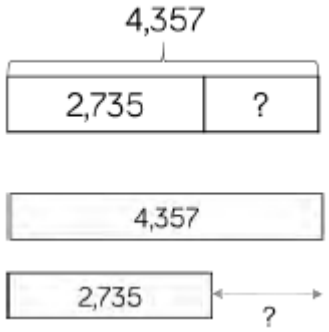
SUBTRACTION

Skill	Representations and Models	Vocabulary
Subtract numbers with up to 4 digits	**Example:** 4,357 – 2,735 = 1,622	• Multiples • Partitioning • Ones • Tens • Hundreds • Thousands • Negative numbers / integers • Round • Place value • Compare • 1000 less • Count in steps • Count in multiples • Estimate • Subtraction/subtract • Take away • Equals • Facts • Missing number • Number bonds • 2/3/4-digit number • Commutative • Column subtraction • Exchange

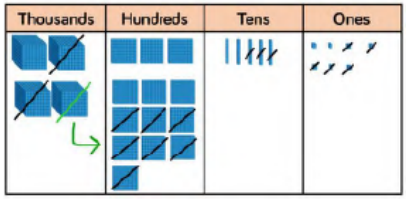
Part-whole model



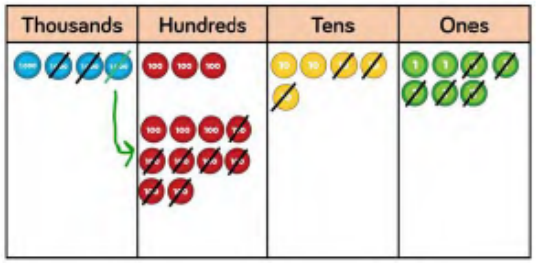
Bar Model



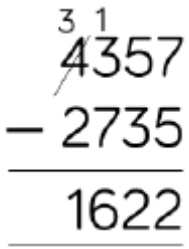
Base 10/Dienes



Place value counters



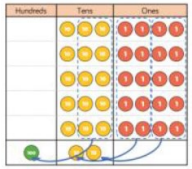
Column subtraction



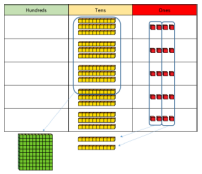
MULTIPLICATION

<table>
<tr><th>Skill</th><th>Representations and Models</th><th>Vocabulary</th></tr>
<tr><td>Multiply 2-digit numbers by 1-digit numbers</td><td>
Example: $34 \times 5 = 170$

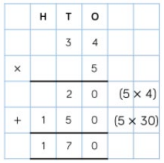
Place value counters

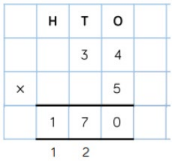
Base 10

Expanded written method

Short written method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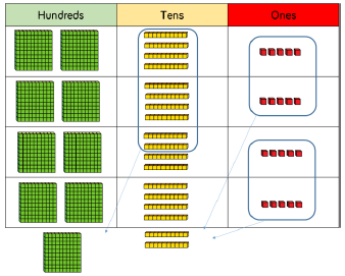
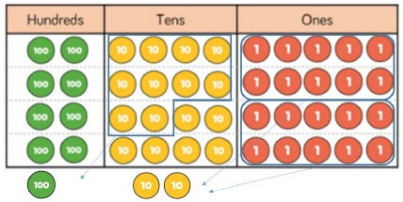
Multiples
Partitioning
Ones
Tens
Hundreds
Thousands
Negative numbers / integers
Round
Place value
Compare
Count in multiples
Estimate
Multiplication
Multiply
Arrays
Row
Column
Count in…
Groups of…
Times
Repeated addition
Factors
Product
Facts
Missing number
2/3/4-digit number

</td></tr>
<tr><td>Multiply 3-digit numbers by 1-digit numbers</td><td>
Example: $245 \times 4 = 980$

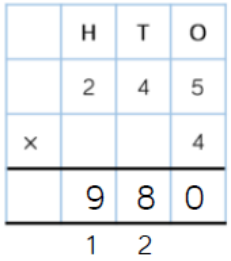
Base 10

Place value counters

Short written method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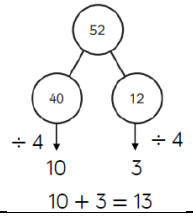
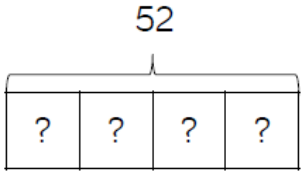
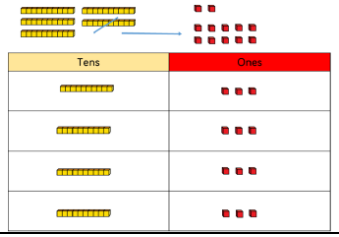
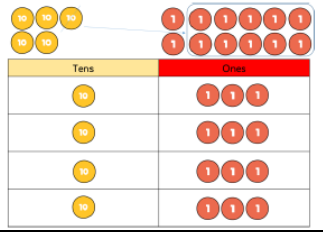
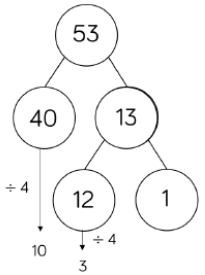
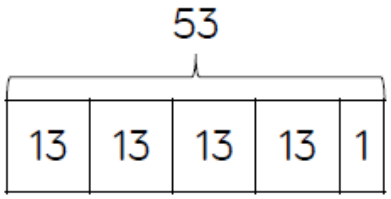
DIVISION

Skill	Representations and Models		Vocabulary
Divide 2-digits by 1-digit (sharing with exchange)	**Example:** $52 \div 4 = 13$		• Multiples • Partitioning • Ones • Tens • Hundreds • Thousands • Negative numbers / integers • Round • Place value • Compare • Estimate • Division • Divide • Share • Exchange • Remainders • Arrays • Row • Column • Facts • Missing number • Inverse 2/3/4-digit number
	Part-whole model  	**Bar model**  	
	Base 10  	**Place value counters**  	
Divide 2-digits by 1-digit (sharing with remainders)	**Example:** $53 \div 4 = 13\ r1$		
	Part-whole model  	**Bar model**  	

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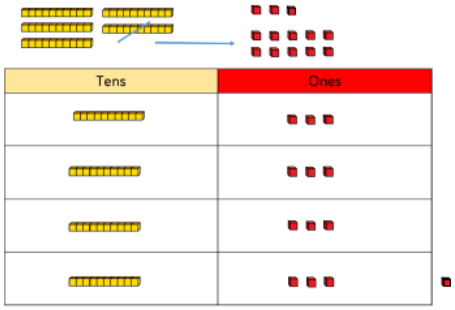
Base 10


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<td>
Place value counters

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<td>Divide 2-digits by 1-digit (grouping)</td>
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Example: 52 ÷ 4 = 13
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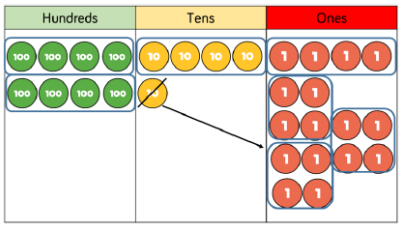
Place value counters


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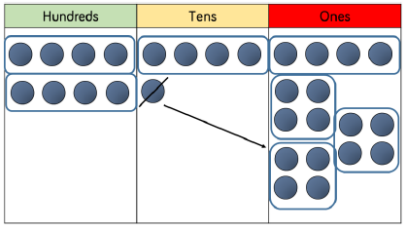
Place value grid


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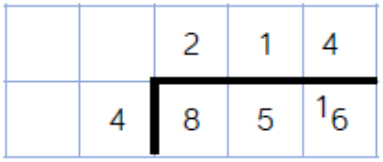
Written short division


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<table>
<tr>
<td>Divide 3-digits by 1-digit (sharing)</td>
<td colspan="3">Example: 856 ÷ 4 = 214</td>
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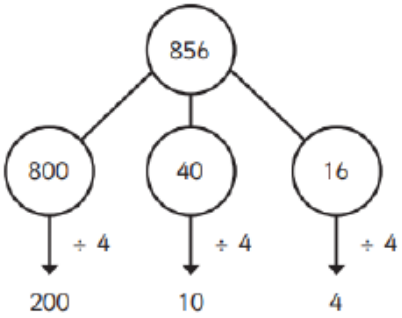
<td>Part-whole model
 
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 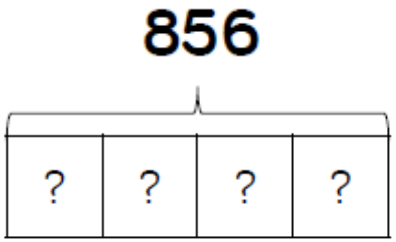
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 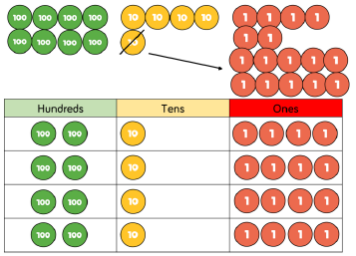
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