



SARUM HALL SCHOOL

MATHS CALCULATION POLICY (Year 1)

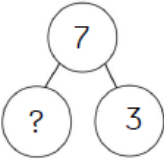
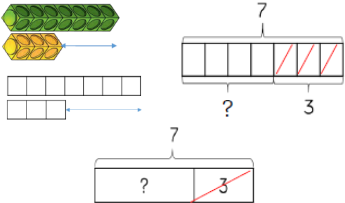

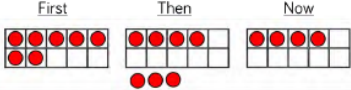


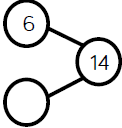
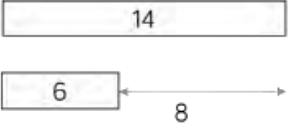

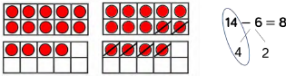
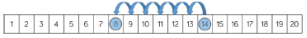
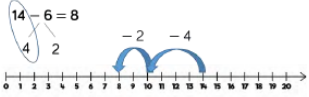
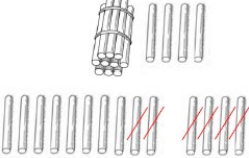
Date: July 2024
Next Review Due: September 2025
Reviewed by: Chen Lee

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.

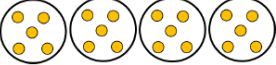

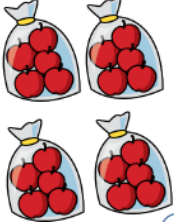
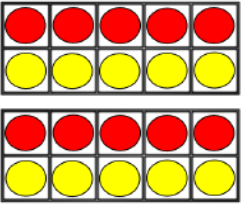
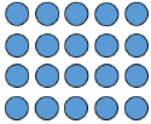
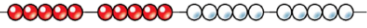
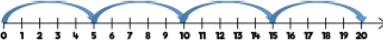
ADDITION

| Skill | Representations and Models | | | | Vocabulary |
|--|------------------------------|----------------------|--------------------------------|-------------------------------|---|
| Add two 1-digit numbers to 10 | Example: $4 + 3 = 7$ | | | | <ul style="list-style-type: none"> • Sort • Represent • Multiples • Partitioning • Ones • Tens • Place value • Compare • Addition/add • Equals • Facts • Problems • Missing number • Number bonds • 2-digit number |
| | Part-whole model | Bar model | Number shapes | | |
| Ten frames (within 10) | Bead strings (10) | Number tracks | | | |
| Add 1 and 2-digit numbers to 20 | Example: $8 + 7 = 15$ | | | | |
| | Part-whole model | Bar Model | Number shapes | Ten frames (within 20) | |
| | Bead strings (20) | Number tracks | Number lines (labelled) | Straws | |

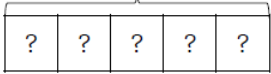
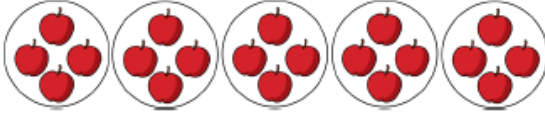
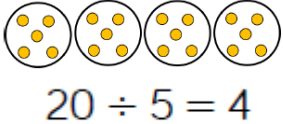

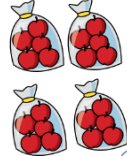
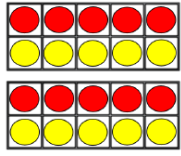
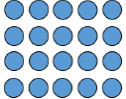

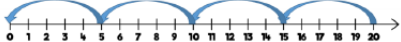
SUBTRACTION

| Skill | Representations and Models | Vocabulary | | | | |
|---|--|--|---|---|--|---|
| Subtract 1-digit numbers within 10 | Example: $7 - 3 = 4$ | <ul style="list-style-type: none"> • Sort • Represent • Partitioning • Ones • Tens • Place value • Compare • Subtraction/ subtract • Take away • Minus • Difference • Equals • Facts • Problems • Missing number • Inverse • Number bonds • 2-digit number | | | | |
| | Part-whole model  | | Bar model  | Number shapes  | | |
| | Ten frames (within 10)  | | Bead strings (10)  | Number tracks  | | |
| 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  | | |

MULTIPLICATION

| Skill | Representations and Models | Vocabulary |
|--|--|---|
| <p>Solve 1-step problems using multiplication</p> | <div data-bbox="678 316 1077 403" style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <p>One bag holds 5 apples. How many apples do 4 bags hold?</p> </div> <div style="display: flex; flex-wrap: wrap;"> <div style="width: 50%;"> <p>Bar model</p>  <p>$5 + 5 + 5 + 5 = 20$ $4 \times 5 = 20$ $5 \times 4 = 20$</p> </div> <div style="width: 50%;"> <p>Number shapes</p>  </div> <div style="width: 50%;"> <p>Counters</p>  </div> <div style="width: 50%;"> <p>Ten frames</p>  </div> </div> <div style="display: flex; flex-wrap: wrap; margin-top: 10px;"> <div style="width: 33%;"> <p>Arrays</p>  <p>$5 + 5 + 5 + 5 = 20$ $4 \times 5 = 20$ $5 \times 4 = 20$</p> </div> <div style="width: 33%;"> <p>Bead strings</p>  </div> <div style="width: 33%;"> <p>Number lines</p>  </div> </div> | <ul style="list-style-type: none"> • Sort • Represent • Multiples • Partitioning • Ones • Tens • Place value • Compare • Multiplication • Multiply • Arrays • Row • Column • Count in... • Lots of... • Groups of... • Times • Repeated addition • Equals • Facts • Problems • Missing number • 2-digit number |

DIVISION

| Skill | Representations and Models | Vocabulary |
|--|--|---|
| Solve one-step problems with division (sharing) | <p>There are 20 apples altogether. They are shared equally between 5 bags. How many apples are in each bag?</p> <p>Example:</p> | <ul style="list-style-type: none"> • Sort • Represent • Multiples • Partitioning • Ones • Tens • Place value • Compare • Division • Divide • Arrays • Row • Column • Count in... • Lots of... • Groups of... • Share • Equals • Facts • Problems • Missing number • Inverse • 2-digit number |
| | <div style="text-align: center;"> <p>Bar model</p> <p>20</p>  </div> <div style="text-align: center;"> <p>Real life objects</p>  </div> | |
| Solve one-step problems with division (grouping) | <p>There are 20 apples altogether. They are put in bags of 5. How many bags are there?</p> <p>Example:</p> | |
| | <div style="text-align: center;"> <p>Bar model</p>  <p>$20 \div 5 = 4$</p> </div> <div style="text-align: center;"> <p>Number shapes</p>  </div> <div style="text-align: center;"> <p>Counters</p>  </div> <div style="text-align: center;"> <p>Ten frames</p>  </div> | |
| <div style="text-align: center;"> <p>Arrays</p>  <p>$20 \div 5 = 4$</p> </div> <div style="text-align: center;"> <p>Bead strings</p>  </div> <div style="text-align: center;"> <p>Number lines</p>  </div> | | |