

## Parklands Calculation Policy - Subtraction - September 2025 (Review: Sept 2026)

### Stage One: Practical Subtraction

**Key Vocabulary:** take away, how many left? Less than, count back, fewer than, number bond, part, whole digit, 1-digit number, count, subitise, order, ordinal, compare forwards, backwards, numerals, digit, one more, one less, equal to, less than, fewer, tens frame

Lots of verbal counting on and back - showing children visuals - number lines to 20.

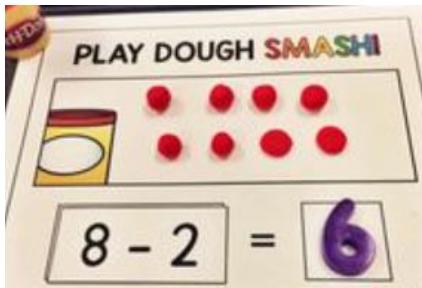
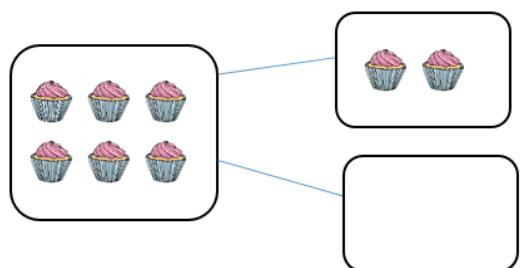
Start with addition - teach the inverse using part whole models as a visual

Use counters and move them away from the group as you take them away counting backwards as you go.

Use physical objects, counters, cubes etc to show how objects can be taken away.

Use numicon/tens frames/playdoh - answer how many left?

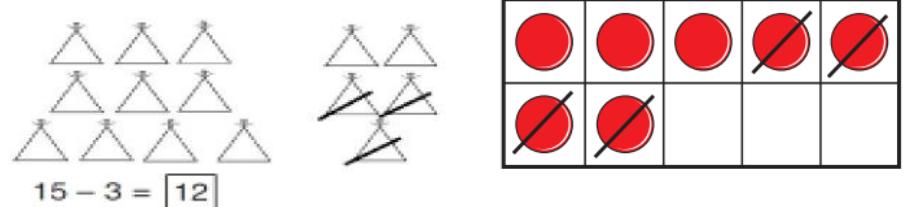
Children should be exposed to visual simple number sentences so they can see the abstract also.



### Written method:

Cross out drawn objects to show what has been taken away.

### Example:



### Reception

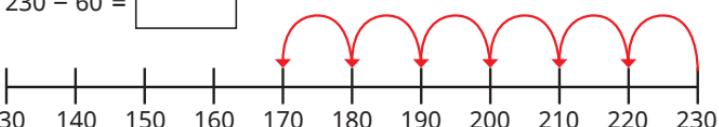
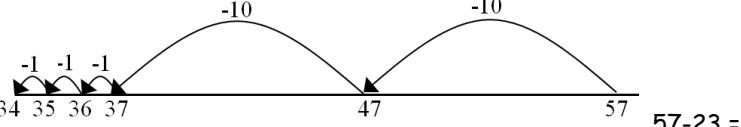
#### Children need to be able to:

- Have one to one correspondence
- Reliably count objects up to 20.
- Recognise numerals up to 20.

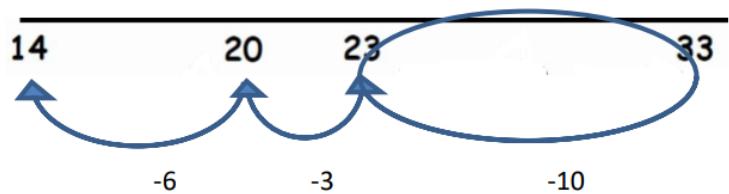
Count backwards from 10

Say one less than any number up to 20

Subitise up to 5 objects. (Instantly recognise how many there are without having to count)

<p><b>Stage Two: Moving towards formal written methods - number lines</b></p> <p><b>Key Vocabulary:</b> number lines, part whole model, jump, inverse, bar model, exchange, two digit, three digit, find the difference, base 10, tens, ones, hundreds</p>	<p><b>Key Stage One/LKS2</b></p>
<p>Children use a variety of representations, including base 10, place value counters, double-sided counters, number lines, part-whole models and bar models to build their knowledge of subtraction.</p> <p><b>Numbered number lines</b></p> <p>Children should be able to count back using a numbered number line. This should be first done in ones, tens and then other numbers.</p> <p>Start at the bigger number and count back the smaller number showing the jumps on the number line.</p> <p>Moving to blank number lines towards LKS2</p>	<p><b>In Y1 children need to be able to:</b></p> <p>Read, write and interpret mathematical statements subtraction (-) and equals (=) signs.</p> <p>Represent and use number bonds and related subtraction facts within 10.</p> <p>Add and subtract one-digit and two-digit numbers to 10, including zero.</p> <p>Represent and use number bonds and related subtraction facts within 20.</p> <p>Add and subtract one-digit and two-digit numbers to 20, including zero</p> <p>Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems.</p>
<p><b>Ones</b></p> <p><math>6 - 3 = 3</math></p>  <p><math>10 - 8 = 2</math></p>  <p><b>Tens</b></p> <p><math>230 - 60 =</math> <input type="text"/></p>   <p><math>57 - 23 =</math></p>	<p><b>In Y2 children need to be able to:</b></p> <p>Solve problems with addition and subtraction:</p> <ul style="list-style-type: none"> <li>Using concrete objects and pictorial representations, including those involving numbers, quantities and measures</li> <li>Applying their increasing knowledge of mental and written methods</li> </ul> <p>Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100</p> <p>Add and subtract numbers using concrete objects, pictorial representations, and mentally, including:</p> <ul style="list-style-type: none"> <li>A two-digit number and 1s</li> <li>A two-digit number and 10s</li> </ul>

## Parklands Calculation Policy - Subtraction - September 2025 (Review: Sept 2026)



$$33 - 19 =$$

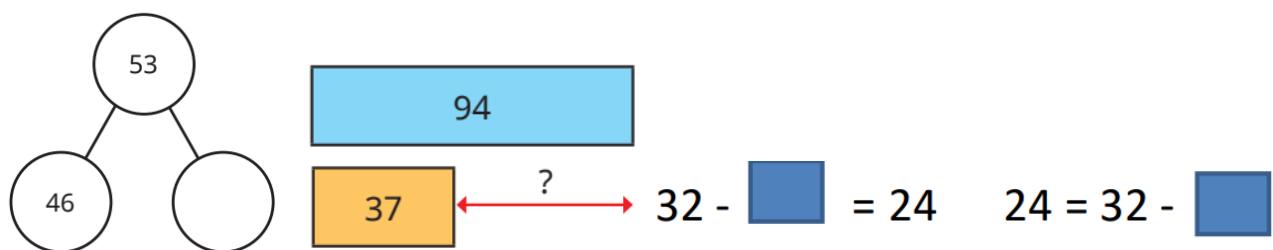
Number lines can also be used to show difference between e.g. What is the difference between 49 and 82? 33  
 Relate this back to the inverse.



$$10 + 10 + 10 + 3 = 33$$

The difference between 49 and 82 is 33.

Children should be exposed to a range of representations to understanding 'difference between' e.g. bar models, part whole models and missing box questions.



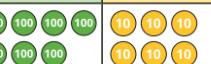
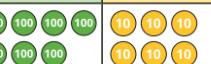
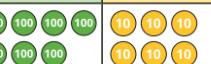
By Year 2 children will learn to use the column method to add subtract 2 digit numbers, beginning with no exchange. They are taught to set out the calculation carefully, one number per box and ensuring the tens and the ones are in the correct position. By the end of Year 2 most children will be able to complete the column method with exchange.

- 2 two-digit numbers
- Adding 3 one-digit numbers

Show that addition of 2 numbers can be done in any order (commutative) and subtraction of 1 number from another cannot

Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems

## Parklands Calculation Policy - Subtraction - September 2025 (Review: Sept 2026)

<p><b>Stage Three: Formal standard method of subtraction</b></p> <p><b>Column method</b>    This is introduced in Y2 and is built on and progresses throughout KS2.</p> <p><b>Progression in subtraction:</b></p> <ul style="list-style-type: none"> <li>Y2 - 2 digit column method no exchange - followed by exchange for those who are secure in the method</li> <li>Y3 - Subtract numbers with up to 3 digits - no exchange followed by exchange</li> <li>Y4 - Subtract numbers with up to 4 digits - no exchange followed by exchange</li> <li>Y5/6 - Subtract numbers with more than 4 digits</li> </ul> <p><b>Key Vocabulary:</b> column subtractions, tens, ones, hundreds, thousands, exchange, regroup, written method, operation</p> <p>Although this stage moves children to a formal written method, children are still supported to grasp the concept through the use of manipulatives such as base 10 and counters with place value charts. These are modelled to the children through the WR scheme and are available during lessons for those who need it.</p> <p><b>Examples:</b></p> <p><b>Base 10</b>    Work out <math>63 - 51</math></p> <table border="1" data-bbox="121 790 480 938"> <thead> <tr> <th>Tens</th> <th>Ones</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> </tr> </tbody> </table> <p><b>Counters</b>    Work out <math>769 - 147</math></p> <table border="1" data-bbox="121 1029 503 1168"> <thead> <tr> <th>Hundreds</th> <th>Tens</th> <th>Ones</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> </tr> </tbody> </table> <p><b>Formal written method examples:</b>    We teach children to 'exchange' ones for tens etc. We teach children to clearly cross out the number they are exchanging and write 1 less than it in small numbers next to it. It is important that children understand they are not exchanging the whole number just one part e.g. 1 ten or 1 hundred.</p>	Tens	Ones			Hundreds	Tens	Ones				<p><b>Key Stage 2</b></p> <p><b>In Y3 children need to be able to:</b></p> <ul style="list-style-type: none"> <li>Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction</li> <li>Estimate the answer to a calculation and use inverse operations to check answers</li> <li>Solve problems, including missing number facts, place value, and more complex addition and subtraction.</li> </ul> <p><b>In Y4 children need to be able to:</b></p> <ul style="list-style-type: none"> <li>Add and subtract numbers with up to 4 digits using The formal written methods of columnar addition and subtraction where appropriate</li> <li>Estimate and use inverse operations to check answers to a calculation</li> <li>Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.</li> </ul> <p><b>In Y5/6 children need to be able to:</b></p>
Tens	Ones										
											
Hundreds	Tens	Ones									
											

<p><u>2 digit</u></p> $  \begin{array}{r}  32 \\  - 11 \\  \hline  21  \end{array}  \rightarrow  \begin{array}{r}  5613 \\  - 27 \\  \hline  36  \end{array}  $	<p>Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction)</p> <p>Add and subtract numbers mentally with increasingly large numbers</p> <p>Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy</p>
<p><u>3 digit</u></p> $  \begin{array}{r}  423 \\  - 312 \\  \hline  111  \end{array}  \quad \text{no exchange}  $ $  \begin{array}{r}  24516 \\  - 127 \\  \hline  129  \end{array}  \quad \text{one exchange}  $ $  \begin{array}{r}  56512 \\  - 267 \\  \hline  385  \end{array}  \quad \text{more than one exchange}  $	<p>Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.</p> <p>Use their knowledge of the order of operations to carry out calculations involving the four operations</p>

4 digit

$$\begin{array}{r}
 5624 \\
 -2310 \\
 \hline
 3314
 \end{array}$$

no exchange

$$\begin{array}{r}
 31\overset{4}{5}11 \\
 -1029 \\
 \hline
 2122
 \end{array}$$

one exchange

$$\begin{array}{r}
 12\overset{10}{+}03 \\
 -1743 \\
 \hline
 8360
 \end{array}$$

more than one exchange

Varied contexts

more than 4 digits

$$\begin{array}{r}
 3416832 \\
 -19024 \\
 \hline
 27812
 \end{array}$$

$$\begin{array}{r}
 3452109 \\
 -6799 \\
 \hline
 338419
 \end{array}$$

$$\begin{array}{r}
 2881200 \\
 -26145 \\
 \hline
 282055
 \end{array}$$

mixed exchange  
and no exchange

