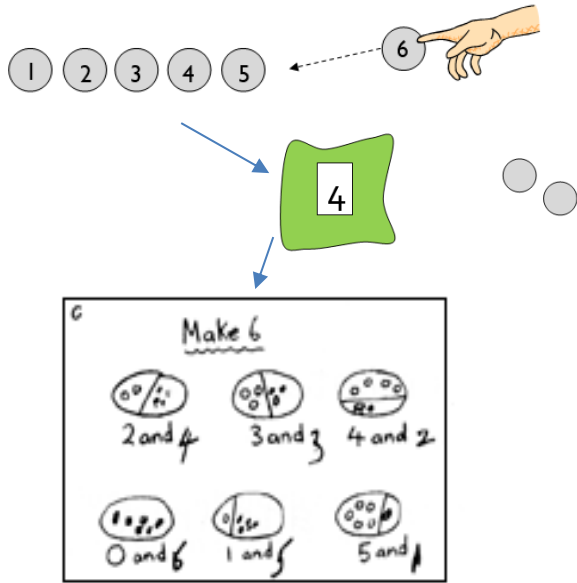


Maple



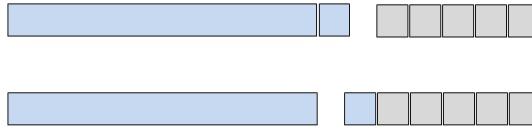
Children are taught that addition is the combining of two or more amounts. They begin by counting all of the items in the groups, then move on to counting on from the largest amount. Children are encouraged to develop a mental image of the size of numbers. They learn to think about addition as combining amounts in practical, real life situations. They begin to record addition number sentences such as $2 + 4 = 6$ and $8 = 3 + 5$ and $3 + 2 + 4 = 9$

Holly

Children move on to using Base 10 equipment to support their developing understanding of addition.

$11 + 5 = 16$

11 cubes are lined up (1 ten and 1 unit/one).
5 cubes are added to the line of 11 giving a total of 16.



If possible, use two different colours of base 10 equipment so that the initial amounts can still be seen.

Elm

Children continue to use the Base 10 equipment to support their calculations, including exchanging 10 units/ones for 1 ten when the total of the units/ones is 10 or more. They will record their own drawings of the Base 10 equipment, using lines for 10 rods and dots for the unit blocks.

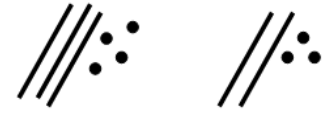
$34 + 23 = ?$

The units/ones are added first $4 + 3 = 7$

The tens are added next

$30 + 20 = 50$

Both answers are put together $50 + 7 = 57$



$28 + 36 = ?$

The units/ones are added first

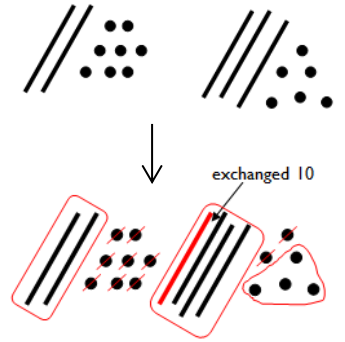
$8 + 6 = 14$ with ten

units/ones exchanged

for 1 ten.

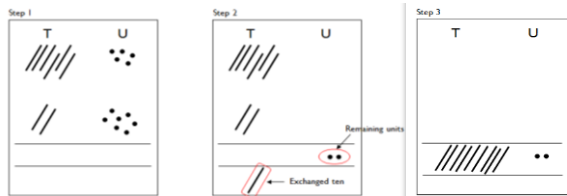
A ring is put around the units/ones not exchanged – this is the units part of the answer.

The tens are then added, including the exchanged ten, to complete the sum.



Willow

$65 + 27$



Written method

Step 1	Step 2	Step 3
$\begin{array}{r} \text{T} \quad \text{U} \\ 6 \quad 5 \\ + 2 \quad 7 \\ \hline \end{array}$	$\begin{array}{r} \text{T} \quad \text{U} \\ 6 \quad 5 \\ + 2 \quad 7 \\ \hline \quad 2 \end{array}$	$\begin{array}{r} \text{T} \quad \text{U} \\ 8 \quad 2 \\ + \quad \quad \\ \hline \end{array}$

This step included working with three-digit numbers. As well as....

HTU $\begin{array}{r} 625 \\ + 48 \\ \hline 673 \\ 1 \end{array}$	$\begin{array}{r} 367 \\ + 85 \\ \hline 452 \\ 11 \end{array}$	$\begin{array}{r} 321 \\ + 7 \\ + 48 \\ \hline 376 \\ 1 \end{array}$
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Beech

Year group expectation...

$\begin{array}{r} \text{HTU} \\ 625 \\ + 48 \\ \hline 673 \\ 1 \end{array}$	$\begin{array}{r} 3 \quad 3 \quad 6 \quad 4 \\ + 2 \quad 4 \quad 7 \\ \hline 3 \quad 6 \quad 1 \quad 1 \end{array}$	$\begin{array}{r} 3 \quad 1 \quad 2 \quad 1 \\ \quad \quad 3 \quad 7 \\ + \quad 1 \quad 4 \quad 8 \\ \hline 3 \quad 3 \quad 0 \quad 6 \end{array}$	$\begin{array}{r} 3 \quad . \quad 5 \quad 6 \\ + 2 \quad . \quad 4 \quad 7 \\ \hline 6 \quad . \quad 0 \quad 3 \end{array}$
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This is the final stage of the method, and should be continued to be used for all written addition calculations.

The example top left would be 'said' as follows:

$5 + 8 = 13$, put 3 down and carry the 10

$20 + 40 + 10$ that was carried over = 70 (7 written in the tens column)

$600 + 0 = 600$ (6 written in the hundreds column)

Children will be expected to use this method for adding numbers with more than 3 digits, numbers involving decimals and adding any number of amounts together.

Oak

Year group expectation...

$\begin{array}{r} 4 \quad 2 \\ 6 \quad 4 \quad 3 \quad 2 \\ 7 \quad 8 \quad 6 \\ + \quad \quad 3 \\ \hline 1 \quad 1 \quad 9 \quad 4 \quad 4 \\ \hline 1 \quad 1 \quad 2 \quad 1 \end{array}$	$\begin{array}{r} 4 \quad 0 \quad 1 \quad . \quad 2 \quad 0 \\ 2 \quad 6 \quad . \quad 8 \quad 5 \\ + \quad \quad 0 \quad . \quad 7 \quad 1 \\ \hline 4 \quad 2 \quad 8 \quad . \quad 7 \quad 6 \end{array}$
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When adding decimals with different numbers of decimal places, children should be taught and encouraged to make them the same through identification that 2 tenths is the same as 20 hundredths, therefore, 0.2 is the same value as 0.20.

This lays out the end of year expectation for each class. This will help prepare children to successfully access the expectation in the next year group.

Children should be encouraged to consider if a mental calculation would be appropriate before using written methods.

