

Baseline Assessment
 L1 - Add and Subtract 1s, 10s, 100s, 1000s
 L2 - Add up to two 4 digit numbers - no exchange
 L3 - Add two 4 digit numbers - one exchange
 L4 - Add two 4 digit numbers - more than one exchange
 L5 - Subtract two 4 digit numbers - no exchange
 L6 - Subtract two 4 digit numbers - one exchange
 L7 - Subtract two 4 digit numbers - more than one exchange
 L8 - Efficient Subtraction
 L9 - Estimate Answers
 L10 - Checking Strategies
 Post Topic Test

Add 4-digit numbers

No exchange

$$\begin{array}{r} 5162 \\ +3427 \\ \hline 8589 \end{array}$$

Starting with the ones, add each column in turn.

One exchange

$$\begin{array}{r} 5162 \\ +3497 \\ \hline 8659 \\ 1 \end{array}$$

Starting with the ones, add each column in turn. When adding

$$6 \text{ tens} + 9 \text{ tens} = 15 \text{ tens}$$

$$= 1 \text{ hundred} + 5 \text{ tens}$$

Place 1 hundred under the hundreds answer and 5 tens in the answer.

Multiple exchanges

$$\begin{array}{r} 5864 \\ +3497 \\ \hline 9361 \\ 111 \end{array}$$

Starting with the ones, add each column in turn. Exchange tens, hundreds and/ or thousands as required.

Subtract 4-digit numbers

No exchange

$$\begin{array}{r} 5789 \\ -3421 \\ \hline 2368 \end{array}$$

Starting with the ones, subtract each column in turn.

One exchange

$$\begin{array}{r} 61 \\ 5749 \\ -3471 \\ \hline 2278 \end{array}$$

Starting with the ones, subtract each column in turn. When subtracting 4 tens - 7 tens, exchange 1 hundred to make:

$$14 \text{ tens} - 7 \text{ tens} = 7 \text{ tens}$$

Multiple exchanges

$$\begin{array}{r} 6131 \\ 5749 \\ -3476 \\ \hline 2266 \end{array}$$

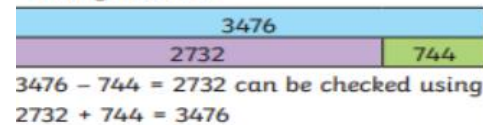
Starting with the ones, subtract each column in turn. Exchange tens, hundreds and/ or thousands as required.

VOCABULARY

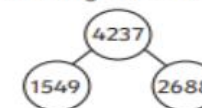
Digit - a single symbol used to make a numeral.	Estimate - to find a value that is close enough to the right answer, usually with some thought or calculation involved.
Addition - the method of adding numbers for a total.	Subtraction - the method of taking away numbers for a total.
Total - The final amount after a calculation.	Partition - finding the value of each digit.
Exchange - swapping digits for sum	Difference - using subtraction to find the total.
Pictorial Representation - Using images to show calculations.	Column - the way in which we organise our calculation.

Efficient Subtraction

Using Inverse



This part whole shows the inverse calculations using these three numbers.



$1549 + 2688 = 4237$	$2688 + 1549 = 4237$
$4237 - 1549 = 2688$	$4237 - 2688 = 1549$

Adding in a different order

$$420 + 372 + 280 =$$

Change to

$$420 + 280 + 372 =$$

$$\text{As } 420 + 280 = 700$$

(because $42 + 28 = 70$)

$$420 + 280 + 372 = 700 + 372 = 1072$$