Maths

Addition and Subtraction Y4

Knowledge

- Efficient subtractions
- Checking strategies

Skills

- Add and subtract 1s, 10s, 100s and 1000s
- Add two 4-digit numbers – no exchange
- Add two 4-digit numbers – one exchange
- Add two 4-digit numbers – more than one exchange
- Subtract two 4-digit numbers – no exchange
- Subtract two 4-digit numbers – one exchange
- Subtract two 4-digit numbers – more than one exchange
- Estimate answers

Vocabulary

Add, total, plus, sum, more, altogether, difference, subtract, less, minus, take away, column addition, exchange, estimate, inverse operation, solve, number, column subtraction

Addition Methods

When adding numbers together, we always start with the ones column and move into the following columns.

Method 1 Single exchange	Method 2 Multiple exchanges
5162 +3497 8659 1 6 tens + 9 tens = 15 tens = 1 hundred and 5 tens. We carry the 1 hundred over to the next column.	5864 +3497 9361 11 1 Exchange tens, hundreds and thousands. Don't forget to add the new ten, hundred or thousand.

Subtraction methods

When subtracting numbers, we always start with the ones column and move into the following columns.

Method 1 Single exchange	Method 2 Multiple exchanges
6 1 5749 - 3471 2278 You cannot subtract 7 tens from 4 tens so you have to exchange one hundred to make 14 tens.	6131 5742 - 3476 2266 Exchange tens, hundreds and thousands.

Estimate

To estimate the answer to calculations, we use near numbers.

This can be either the nearest thousand, hundred or the nearest ten.

782 - 521 =
800 - 500 = 300

782 - 521 =
780 - 520 = 260

253 + 649 =

253 + 649 =

Checking answers

3736 - 2321 = 1415
Check using
1415 + 2321 = 3736
2321 + 1415 = 3736
3736 - 1415 = 2321

To check our answers, we can use the inverse operation.

4154 + 2625 = 6779
Check using
6779 - 2625 = 4154
6779 - 4154 = 2625
2625 + 4154 = 6779

Inspirational Mathematician

Thomas Fuller (1710-1790)

Fuller was born between present-day Liberia and Benin. He was one of the millions of Black Africans kidnapped to America as a slave at the age of 14 and was a prodigy. Though he could never read or write, he could multiply seven into itself, that product by seven, and the products by seven, for seven times. He could give the number of months, days, weeks, hours, minutes, and seconds in any period of time, allowing in his calculation for all leap years that happened in the question. He would give the number of poles, yards, feet, inches, and barleycorns in any distance e.g. in the earth's orbit; and in every calculation he would produce the true answer in less time than ninety-nine men out of a hundred would calculate on paper.