Addition and Subtraction Knowledge Organiser				
Key Vocabulary	Addition	Subtraction		
Add	Place Value Grid: 3274 + 5601 = 8875	Place Value Grid: 35 727 – 6313 = 29	9 414	
Total				
Make	Th 1000 1000 1000	TTh 10 000 10 000 10 000	2 ten thousands left	
Plus	1000 1000 1000		5 thousands – 6	
Sum			thousands cannot	
More	100 100 100	Th 1000 1000 1000 1000 1000	be done. Exchange ten thousand for ten	
Altogether	H 100 100 100 100	1000 1000 1000 1000	thousands becoming 15	
Difference			thousands - 6 thousands = 9 thousands	
Subtract	10 10 10		, titousuitus	
Less	T 10 10 10	H 100 100 100 100	7 hundreds – 3 hundreds	
Minus		100 100 100	= 4 hundreds	
Take away				
Column addition		T 10	2 tens – 1 ten = 1 ten	
Column subtraction	Column Method			
Estimate	Starting with the ones, add each column in turn. Regroup tens, hundreds, thousands,	0	7 ones – 3 ones = 4 ones	
Inverse operation	ten thousands and/or as required.			
Number facts		Column Method		
Place value	45864	Starting with the ones, subtract each	6 13 1	
Complex	+23497 column in turn. Exchange tens, hundreds, - 3476			
twinkl visit twinkl.com	<u>69361</u> 1 1 1	thousands and/or ten thousands as required. 32266		

Estimate and Approximate

Rounding to Estimate

Round to ten:

Rounding is not as accurate when both numbers are rounded up. A better estimate comes from "rounding" one down and one up.

Estimating on a Number Line



The arrow is about $\frac{3}{4}$ of the way across the line so it is 40 000.



Inverse Operations

Use the inverse to check:

53 476

32 732

To check 53 476 – 32 732 = 20 744 use 32 732 + 20 744 = 53 476

Start with a number, subtract 409 and double. I end with 6264. To find the starting number use the inverse: halve, then add 409. Half of 6264 = 3132. 3132 + 409 = 3541. The starting number was 3541.

Multistep Problems

Using a Bar Model

The sum of two numbers is 25 567.

The difference is 1875.



Subtract 1875 from 25 567 = 23 692.

Halve 23 692 to find smaller number = 11 846.

Add 1875 to find larger number = 13 721.

£20			
£3.75	£8.49	?	
£12.24		£7.76	

£20 is used to buy 2 books costing £3.75 and £8.49.

How much change is given?

$$£3.75 + £8.49 = £12.24$$

$$£20.00 - £12.24 = £7.76$$

