



Key Vocabulary	
Add	
Total	
Make	
Plus	
Sum	
More	
Altogether	
Difference	
Subtract	
Less	
Minus	
Take away	
Column addition	
Column subtraction	
Estimate	
Inverse operation	
Number facts	
Place value	
Complex	

Addition		Subtraction	
Place Value Grid: $3274 + 5601 = 8875$		Place Value Grid: $35\ 727 - 6313 = 29\ 414$	
Th		TTh	
H		Th	
T		H	
O		T	
	Column Method Starting with the ones, add each column in turn. Regroup tens, hundreds, thousands, ten thousands and/or as required.		
	$\begin{array}{r} 45864 \\ +23497 \\ \hline 69361 \\ \hline 111 \end{array}$		Column Method Starting with the ones, subtract each column in turn. Exchange tens, hundreds, thousands and/or ten thousands as required.
			$\begin{array}{r} 35727 \\ - 6313 \\ \hline 29414 \end{array}$

Estimate and Approximate

Rounding to Estimate

$$41\ 635 + 7386 = 49\ 021$$

Round to ten:

$$41\ 630 + 7380 = 49\ 010$$

$$41\ 630 + 7390 = 49\ 020$$

$$41\ 640 + 7390 = 49\ 030$$

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	To check $53\ 476 - 32\ 732 = 20\ 744$
32 732	use $32\ 732 + 20\ 744 = 53\ 476$
20 744	

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	£20 is used to buy 2 books costing	
£3.75	£8.49	?
		£3.75 and £8.49.
£12.24	£7.76	How much change is given?

$$\begin{aligned} \pounds 3.75 + \pounds 8.49 &= \pounds 12.24 \\ \pounds 20.00 - \pounds 12.24 &= \pounds 7.76 \end{aligned}$$