Use number sense

Rounding numbers to estimate
2467 + 1729 is approximately
2500 + 1700

Partition numbers
732 – 137 (by partitioning the second number and counting back; -100, -32, -5)

Find the difference rather than subtract
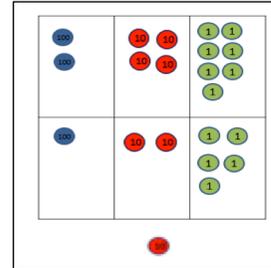607 – 288 (by counting up from 288, bridging the hundreds boundary; +12, +400, +7)

Calculate and adjust
1487 – 199 (by subtracting 200 and adding 1)

Check using inverse operations
check 564 – 150 = 414 with
414 + 150 = 564

Representations to support addition

We can use equipment to find the total of two numbers. This builds on the expanded method from Y3 into the compact method.
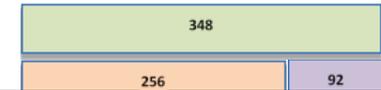
H   T   O

H	T	O
200	40	7
+ 100	20	5
300	60	12 = 372

H	T	O
200	40	7
+ 100	20	5
300	70	2 = 372

Understand the inverse relationship between addition and subtraction.

256+92=348   92+256=348
348=256+92   348=92+256
348-256=92   348-92=256
92= 348-256   256=348-92

Recognise that **256 + 92 is equal to 92 + 256**
Addition is commutative (order doesn't matter)

Recognise that subtraction is not commutative (order affects the calculation)
348 – 92 is not equal to 92 - 348

Understand that missing number problems can often be solved by working backwards

Prove it!
Addition and subtraction are the inverse (opposite) of each other

A Problem with Measures
The perimeter of a rectangle is 40cm. What could the sides measure? Are there different solutions?

Use the correct vocabulary
Partition, recombine, calculate, plus, add total, decrease, sum, altogether, how much /many

Investigate
Always, sometimes, never true

A four digit number plus a 4 digit number equals a four digit number

The sum of 3 odd numbers is even.

Representations to support subtraction

We can use equipment to find the difference between two numbers. This builds on the expanded method from Y3 into the compact method.

40 and 5   →   30 and 15

45 - 26
Partition 45 into 30 and 15
Subtract ones   15 – 6 = 9
Subtract tens   30 – 20 = 10
                              19

T	O
30	15
- 20	6
10	9

T	O
30	
40	15
- 20	6
10	9

T	O
3 4	15
- 2	6
1	9