Addition and Subtraction – Year 4

Key Vocabulary

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Add
Total
Plus
Sum
More
Altogether
Difference
Subtract
Less
Minus
Take away
Mentally, Orally
Column Addition
Column Subtraction
Exchange
Estimate
Inverse operation
Solve problems
Number facts

Addition and Subtraction Methods

Add 4-digit numbers

No exchange

```
  5162
+ 3427
------
  8589
```

Starting with the ones, add each column in turn.

One exchange

```
  5162
+ 3497
------
  8659
  1
```

Starting with the ones, add each column in turn. When adding 6 tens + 9 tens = 15 tens = 1 hundred + 5 tens Place 1 hundred under the hundreds answer and 5 tens in the answer.

Multiple exchanges

```
  5864
+ 3497
------
  9361
  11 1
```

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

Subtract 4-digit numbers

No exchange

```
  5789
- 3421
------
  2368
```

Starting with the ones, subtract each column in turn.

One exchange

```
    6 1
  5749
- 3471
------
  2278
```

Starting with the ones, subtract each column in turn. When subtracting 4 tens -7 tens, exchange 1 hundred to make: 14 tens – 7 tens = 7 tens

Multiple exchanges

```
   6131
  5742
- 3476
------
  2266
```

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

Efficient subtraction

Calculate 6000 – 3617 = 2383

3   80   300   2000

3617 3620 3700   4000   6000

Add and Subtract 1s, 10s, 100s, 1000s

Here is the number 3124

| 1000 | 100 | 10 | 1 | 1 |
| 1000 | 1000 | 10 | 1 | 1 |
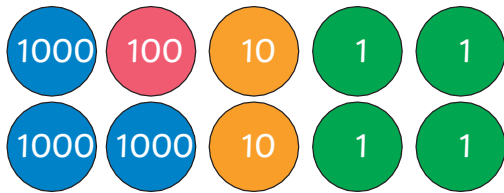
Add 2 thousands = 5124

Add 5 hundreds = 5624

Subtract 2 tens = 5604

Add 5 ones = 5609

Here is the number 6708

Thousands	Hundreds	Tens	Ones
6	7	0	8

Add 3 thousands = 9708

Subtract 4 hundreds = 9308

Add 5 tens = 9358

Subtract 7 ones = 9351

Crossing ones, tens or hundreds

5392 + 4 tens = 5432   crossing tens

5126 – 600 = 4526   crossing hundreds

When crossing ones, tens or hundreds, more than one digit will change.

Round to Estimate

1635 + 386 = 2021

Round to the nearest ten

1640 + 390 = 2030

Round to the nearest hundred

1600 + 400 = 2000

Both give a reasonable estimate, but rounding the nearest ten is more accurate.

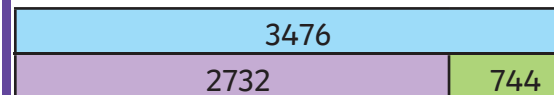9362 – 5729 = 3622

Round to the nearest hundred

9400 – 5700 = 3700

Round to the nearest thousand

9000 – 6000 = 3000

Rounding to the nearest hundred is much more accurate in this case.

Checking Strategies

Using Inverse

| 3476 | |
| 2732 | 744 |

3476 – 744 = 2732 can be checked using

2732 + 744 = 3476

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

4237

1549   2688

| 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 =

As 420 + 280 = 700

(because 42 + 28 = 70)

420 + 280 + 372 = 700 + 372 = 1072