Year 5 Written Methods of Calculation

ADDITION	SUBTRACTION	MULTIPLICATION	DIVISION

ADDITION

Written method used in addition calculations in Year 5 are outlined below.

Expanded Partitioning Method

879 + 345 = 1224

```
    800 + 70  + 9
    300 + 40  + 5
   1100 + 110 + 14
```

Standard Method of Column Addition

```
    3587
  +  675
    4262
    111
```

This would be extended to numbers with any number of digits. It would also be used to add decimal numbers with 1, 2 or 3 decimal places.

```
    13.86
  +  9.481
    23. 341
    11  1
```

SUBTRACTION

Written method used in subtraction calculations in Year 5 are outlined below.

Expanded Partitioning Method
643— 298 = 345

```
    500   ¹30
    600 + 40 + ¹3
    200 + 90 +  8
    300 + 40 +  5
```

Standard Method of Subtraction (decomposition)

```
   5 13                3  9
   6 4 6 7          4 0 0 9
  - 2 6 8 4        - 2 7 6 4
    3 7 8 3          1 2 4 5
```

This would be extended to numbers with any number of digits. It would also be used to subtract decimal numbers with 1, 2 or 3 decimal places.

```
   0  7 ¹5
  13.8 6 ⁰0
  -  9.481
     4.379
```

For numbers which need to be subtracted but are close together, children would be encouraged to count on in their heads, maybe with jottings.

MULTIPLICATION

Written method used in multiplication calculations in Year 5 are outlined below.

Expanded Partitioning method

```
      87
   X   6
      42  ( 7 x 6 )
     480  ( 80 x 6 )
     522
      1
```

Standard Short Multiplication Method

```
      87
   X   6
     522
      4
```

DIVISION

Written method used in division calculations in Year 5 are outlined below.

Remind children about using their times tables and about dividing by 10.

Standard Method of Short Division (Bus Stop)

```
        4  7  r 2
     ┌─────────────
   5 │ 2 ²3 ³7
```

Usually used when the divisor is a single digit number.

Year 5 Maths Evening

Thank you for joining us tonight. We hope that by the end of the evening you will feel more able to support your child in their maths work.

How do I help my child with maths?

Do more of what they have been doing, rather than racing ahead – we time the introduction of methods carefully.

If they are stuck on a homework, talk through it – resist the temptation to show them how it is done.

Encourage them to practice maths!
- Tables practice in the car
- Add up prices in a shop (mass, capacity)
- Play on websites

Maths Websites

The following websites are really useful for improving mental maths skills…

Maths Magician   www.tiny.cc/lgjs1

Choose operation type and level – gives an exciting certificate at the end!

Powerlines   www.tiny.cc/lgjs3

Mathematical reasoning and addition skills.

Speed addition   www.tiny.cc/lgjs4

Excellent mental addition.

Speed Subtraction   www.tiny.cc/lgjs5

Just like speed addition, but with subtraction.

Crazy Taxi   www.tiny.cc/lgjs6

A reckless but fun game for practising multiples!

Maths Lines   www.tiny.cc/lgjs7

A game practising multiplication and division facts.

Woodlands   www.tiny.cc/lgjs8

A primary school site with lots of useful games.

Hit the Button   www.tiny.cc/lgjs9

An excellent site for practising multiples.

Who wants to be a mathionaire?   www.tiny.cc/lgjs10

Mental maths version of Who wants to be a millionaire?

1 x 4 = 4
2 x 4 = 8
3 x 4 = 12
4 x 4 = How Mummy drives me to school