7 Mental Maths Strategies that we use in Key Stage 2:

1. Counting on / counting back including counting in decimals, fractions and below zero:

This strategy is also very useful in money calculations where change can be worked out by counting on.

e.g. I buy a sandwich at £3.19, how much change do I get from £5?

£3.19 + 1p = £3.20
£3.20 + 80p =£4.00
£4.00 + £1 = £5.00
Therefore, the change is £1 + 80p + 1p = £1.81

2. Re-ordering numbers to make the calculations easier:

e.g. 9 + 14 + 9 + 6

Look for numbers to make multiples of 10:
14 + 6 = 20
20 + 9 + 9 = 38

3. Partitioning – this strategy involves splitting a number into hundreds, tens, units:

e.g. 470 + 220 is the same as
400 + 200 =600
70 + 20 = 90
600 + 90 = 690

4. Rounding and Adjusting:

This strategy is useful when adding or subtracting numbers that are close to a multiple of 10, 100 or 1000.

e.g. 870 + 190 is the same as 870 + 200 – 10

This strategy is also useful when multiplying

e.g. 7 x £1.95 is the same as 7 x £2, then subtract 7 x 5p (35p)

5. Using factors

When multiplying, knowing how to double and halve numbers can be very useful to help with mental calculations.

e.g. 33 x 4 is the same as 33 x 2 x 2 or 66 x2

6. Using Inverse Operations:

This strategy involves using the relationship between addition and subtraction, and also the relationship between multiplication and division.

e.g. 12 + 15 = 27so
27 – 15 = 12

And

45 x 9 = 405 so
405 ÷9 = 45

7. Using equivalence:

This strategy involves knowing the most suitable form of fractions, decimals or percentages to use for a calculation.

e.g. 25% of £2.40 is the same as 1/4 of £2.40