

## KS 2 Addition and Subtraction

By KS 2 it is expected that all children will be confident with mental strategies in adding single digit numbers, calculating doubles and near doubles as well as number bonds to 10 and 20 at least. This needs to move into number bonds for 100 and 1000.

### **Written Methods for Addition.**

In year 3 we start with the expanded method :

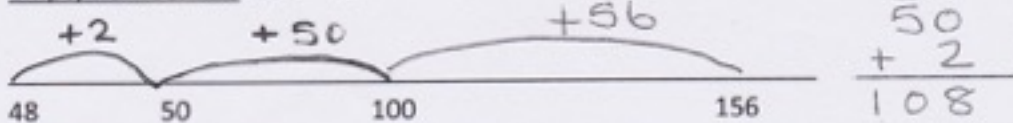
$$\begin{array}{r} 389 \\ + 248 \\ \hline 17 \\ 120 \\ \hline 500 \\ 637 \end{array}$$

Then we move to the compact method- this only happens if the child is completing confident and has a good understanding of place value.

$$\begin{array}{r} 389 \\ + 248 \\ \hline 637 \end{array}$$

### **Written methods for Subtraction:**

Empty number line:  $156 - 48 = 108$



### Expanded method:

$$563 - 278 =$$

$$\begin{array}{r} 400 \ 150 \\ - 500 \ 60 \ 13 \\ \hline - 200 \ 70 \ 8 \\ 200 \ 80 \ 5 \end{array}$$

### Compact method

$$\begin{array}{r} 563 \\ - 278 \\ \hline 285 \end{array}$$

For some large calculations like subtract 70 from 1 million we would still suggest that children use an empty number line or for numbers which are close together such as :

$$200056 - 198880 = 176$$

We use the compact method to add and subtract decimals remembering to keep the decimal point in the correct place and line the digits up correctly.