



KS2 Maths – Working Together

Calculation methods

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Addition: Column additions should always start at the right and work left; 2 lines for the answer, with carrying figures under the bottom line. Decimal points should always be lined up. Mental strategies should include number bonds, adding eg. tens first

$$\begin{array}{r} 38 \\ + 93 \\ \hline 131 \\ \hline 1 \end{array}$$

Subtraction: Column subtraction should always start at the right and work left; 2 lines for the answer, with neat crossing out and the moving forward of eg. a ten at the top. Decimal points should be lined up. Language used for subtraction does not include the word 'borrowing'. Mental strategies should include 'adding on', subtracting eg. hundreds first

$$\begin{array}{r} 6 \cancel{7} 12 \\ - 56 \\ \hline 16 \\ \hline \end{array}$$

Multiplication: Once the pupils have moved on from simple sums, the number being used to multiply by should be lined up with the right side of the number being multiplied. This should still be the case when multiplying a decimal by a decimal. The decimal points should not be lined up. The grid method is occasionally used to support long multiplication as it is also a good example of a carroll diagram. Formal long multiplication should be introduced by first multiplying by tens/hundreds. The next step is to introduce a 2 digit number by a 2 digit number showing in brackets at the side of each working line the sum eg. (23x30). As soon as the pupil is secure in the process, they should be encouraged to just use the formal written method. The answer should have a ruled line above and below. Carrying figures should be small.

$$\begin{array}{r}
 238 \\
 \times \quad 4 \\
 \hline
 952 \\
 \hline
 13
 \end{array}$$

Division: After simple division, the divisor should always be at the left and the answer written above the number being divided in to. The lines should be ruled in pencil. It is acceptable to divide by number larger than 12 using the short division method; just carry the remainder forward. The traditional long division method is only suitable for upper KS2. If dividing a decimal by a whole number, line the decimal point up on the answer line before starting the sum.

$$\begin{array}{r}
 142 \\
 3 \overline{) 4126}
 \end{array}$$