

Adding Up

Begin with some old favourites that you have been doing in mental arithmetic:

$$\begin{array}{r} 5 \\ + 4 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ + 2 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ + 6 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ + 5 \\ \hline \\ \hline \end{array}$$

Once you have completed a few sheets of these and you are sure that your child knows where, and how, to write the answer, you can move on to more difficult adding up sums:

$$\begin{array}{r} 23 \\ + 42 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 17 \\ + 32 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 43 \\ + 25 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 31 \\ + 54 \\ \hline \\ \hline \end{array}$$

The next big problem involves ‘carrying’ to the next column. When you add numbers in a column that come to more than ten, you have to put down the units and carry the tens.

Don’t expect a child to understand an explanation of this – if they are good at mental arithmetic it will make sense to them because they will see that it leads to the right answer.

The diagram shows the addition of 28 and 34. The sum is written as 28 + 34 = 62. A box above the 8 and 4 says 'Eight and four make twelve.' An arrow points from the 12 to the 2 in the tens column, with a box below it saying 'Carry the one.' Another arrow points from the 2 in the tens column to the 6 in the tens column of the sum, with a box below it saying 'Put down the two.'

This idea of carrying a number over to the next column represents a huge step in a child’s mathematical progress. They are being introduced to the fact that they can use techniques with a pencil and paper that will allow them to work out sums that are too difficult for them to do in their heads.

If you have managed to wait until your child is ready for this sort of work before introducing it, you will now find that they have an insatiable desire to explore the potential of this new skill. You may be surprised to discover how rapidly children can progress in mathematics when they are enjoying themselves.

Answers

$5 + 4 = 9$
 $3 + 2 = 5$

$5 + 6 = 11$
 $7 + 5 = 12$

$23 + 42 = 65$
 $17 + 32 = 49$

$43 + 25 = 68$
 $31 + 54 = 85$