Mathematics

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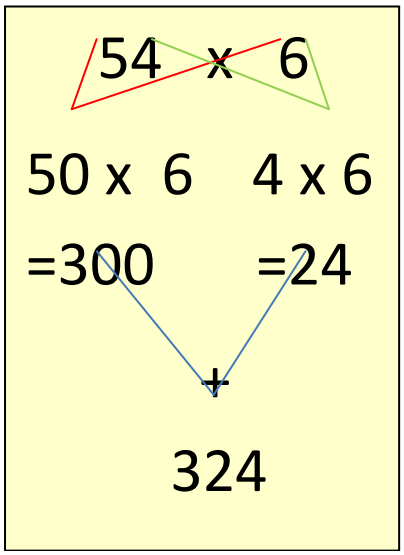
Understanding the strategies of Ann Baker's Secret Code

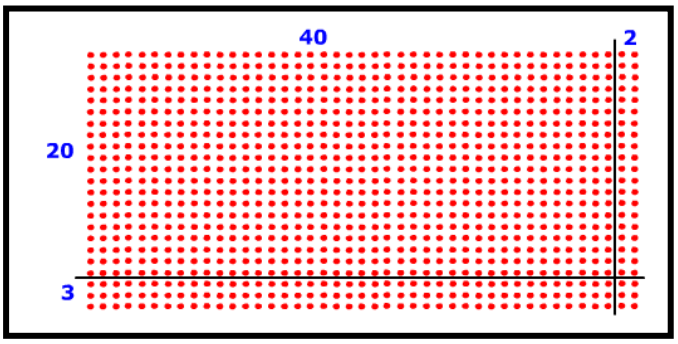
Chunking For Multiplication (ch)

You can use chunking for multiplication. It involves splitting the number to by multiplied into its tens and ones. These chunks are then both multiplied. To get the answer you add the two products together. The example 54 x 6 is shown here:-
You start by chunking the number into tens and ones. As shown in the example, 54 is chunked into 50 and 4. It is really important students see the 5 in 54 as 50 (5 tens). A good understanding of place value is needed. These two numbers can then easily be multiplied by 6. 50 multiplied by 6 is 300.
4 multiplied by 6 is 24. 300 + 24 = 324
Answer: 54 x 6 = 324
http://naturalmaths.com.au



The Grid Method

The Grid Method is used when multiplying larger numbers. It is based on the idea of splitting both numbers being multiplied, into their tens and units. Let's use the example of 23 x 42; the 23 becoming 20 + 3 and the 42 becoming 40 + 2. To understand fully what we are doing we look at the rectangular array of counters, with dimensions 23 x 42. The total number of counters laid out will equal the multiplication of the two numbers. We split the array into four segments, as shown below:



x	40	2
20	800	40
3	120	6

920 + 46 = 966

We calculate the number of counters in each segment, and add the results together, as follows:

40 x 20 = 800, 40 x 3 = 120, 2 x 20 = 40, 3 x 2 = 6

800 + 120 + 40 + 6 = 966

The grid method can also be used with larger numbers. →

Try some for yourself and you'll see how easy they are!