

18 times table - wow!	Skill practised:								
<i>Children use the grid method to work out the 18 times table and look for patterns in the answers.</i>	Using the grid method to multiply 18 by single-digit numbers								
Conjecture: <i>There is a pattern in the 18 times table.</i>									
What to do: <i>Children work individually or in pairs.</i>									
1. Use the grid method to work out 3×18. <table><tr><td>$\times$</td><td>10</td><td>8</td><td></td></tr><tr><td>3</td><td>30</td><td>24</td><td>= 54</td></tr></table> 2. Add the digits together in the answer, i.e. $5 + 4 = 9$. 3. Now work together to work out the 18 times table from 1×18 to 10×18 or even beyond! 4. Each time add the digits of the answers together. What happens? Look at the pattern in your answers in order. What happens to the 10s digits? And the 1s digits? Does this help you to realise why the digit sums are as they are? Use a calculator to multiply any number you like by 18, then add the digits together. Does the same thing happen? If you get an answer with two digits, add them again until you get a one-digit answer, e.g. $27 \times 18 = 486$. $4 + 8 + 6 = 18$, $1 + 8 = 9$.		$\times$	10	8		3	30	24	= 54
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Aims: - Use the grid method and addition to work out the 18 times table - Look for patterns in the answers, and begin to explain the pattern	Minimum number of calculations expected 10								

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3. Now work together to work out the 18 times table from 1×18 to 10×18 or even beyond!
4. Each time add the digits of the answers together. What happens?

x	10	8	
3	30	24	= 54
	5 + 4 = 9		

Look at the pattern in your answers in order.

What happens to the 10s digits? And the 1s digits?

Does this help you to realise why the digit sums are as they are?

Use a calculator to multiply any number you like by 18, then add the digits together. Does the same thing happen?

If you get an answer with two digits, add them again until you get a one-digit answer, e.g. $27 \times 18 = 486$. $4 + 8 + 6 = 18$, $1 + 8 = 9$.