

Multiplying a 3-digit number by a 1-digit number

When multiplying a 3-digit number by a 1-digit number, we use both mental and written methods.

$$465 \times 7 = (400 \times 7) + (60 \times 7) + (5 \times 7)$$

$$= 2800 + 420 + 35$$

$$= 3255$$

	400	60	5	
7	2800	420	35	= 3255

$$\begin{array}{r} 465 \\ \times 7 \\ \hline 3255 \end{array}$$

1 For each of these multiplication calculations:

- estimate the answer
- work out the answer
- use a different method to check your answer.

	1st calculation	2nd calculation
$167 \times 4 =$ <div style="text-align: center; color: blue; font-weight: bold;">Estimate</div> <div style="text-align: center; border: 1px solid blue; border-radius: 50%; width: 150px; height: 50px; margin: 10px auto;"></div>		
$384 \times 6 =$ <div style="text-align: center; color: blue; font-weight: bold;">Estimate</div> <div style="text-align: center; border: 1px solid blue; border-radius: 50%; width: 150px; height: 50px; margin: 10px auto;"></div>		
$693 \times 7 =$ <div style="text-align: center; color: blue; font-weight: bold;">Estimate</div> <div style="text-align: center; border: 1px solid blue; border-radius: 50%; width: 150px; height: 50px; margin: 10px auto;"></div>		

2 Arrange each set of digits to make a multiplication calculation, then work out the answer.

2	<div style="display: flex; align-items: center; justify-content: center;"> <div style="border: 1px solid blue; width: 30px; height: 30px; margin-right: 5px;"></div> <div style="border: 1px solid blue; width: 30px; height: 30px; margin-right: 5px;"></div> <div style="border: 1px solid blue; width: 30px; height: 30px; margin-right: 5px;"></div> <div style="margin: 0 10px;">×</div> <div style="border: 1px solid blue; width: 30px; height: 30px; margin-right: 5px;"></div> <div style="margin: 0 10px;">=</div> <div style="border: 1px solid blue; width: 30px; height: 30px;"></div> </div>
3	
7	
9	









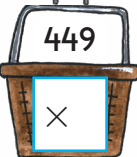
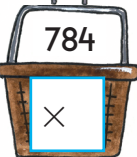
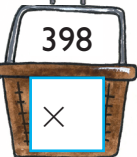
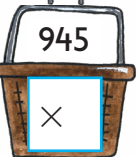
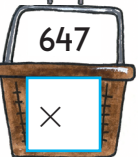
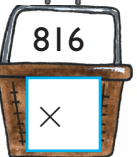
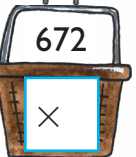
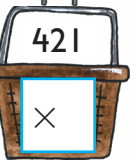
4	<div style="display: flex; align-items: center; justify-content: center;"> <div style="border: 1px solid blue; width: 30px; height: 30px; margin-right: 5px;"></div> <div style="border: 1px solid blue; width: 30px; height: 30px; margin-right: 5px;"></div> <div style="border: 1px solid blue; width: 30px; height: 30px; margin-right: 5px;"></div> <div style="margin: 0 10px;">×</div> <div style="border: 1px solid blue; width: 30px; height: 30px; margin-right: 5px;"></div> <div style="margin: 0 10px;">=</div> <div style="border: 1px solid blue; width: 30px; height: 30px;"></div> </div>
5	
6	
8	

3 Multiply each blue number by a red number to give an answer that is a green number. Draw lines to link the red number to the blue number and the green number.

4	672	2565
7	855	1992
8	498	3360
3	907	2568
5	321	6349

4 Use the digits 2 to 9 to complete each of the calculations on the baskets so that the answers are correct on the balloons. Each digit can only be used once.

2	3	4	5	6	7	8	9
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×	×	×	×	×	×	×	×

Ask your child to write down a 3-digit number and a 1-digit number, e.g. 538 and 6. Then ask them to estimate the product of these two numbers. Ask: 'If you multiply 538 by 6, approximately what is the answer? How did you get that approximation? What digit will be in the units place? Why?'