

13.1.21

Multiplication and Division

Learning Objective:

We are learning to multiply a 4 digit number by a 2 digit number.

I will be successful if:

- I can set out my calculation correctly, remembering to add the zero.
- I can use times tables facts to help solve calculations.
- I can discuss my method.

Key Vocabulary

multiplication

exchanging

multiple groups of 10

product

value

digit

Flashback 4

Year 5 | Week 2 | Day 3



- 1) Multiply 34 by 27
- 2) A book costs £19
How much do 9 books cost?
- 3) Complete the sentence.
8 is a factor of
- 4) What is $48 \div 3$?



Challenge

- 5) How many g are in 2kg and a half?
- 6) How many mm are in 3.25m?
- 7) How many ml are in 4.8l?
- 8) How many m are in 5.5km?

Flashback 4

Year 5 | Week 2 | Day 3

1) Multiply 34 by 27 **918**

2) A book costs £19
How much do 9 books cost? **£171**

3) Complete the sentence.
8 is a factor of **e.g 16, 24...**

4) What is $48 \div 3$? **16**



Challenge

5) How many g are in 2kg and a half? **2500g**

6) How many mm are in 3.25m? **3250mm**

7) How many ml are in 4.8l? **4800ml**

8) How many m are in 5.5km? **5500m**

Recap from yesterday:

$$826 \times 24 =$$

$$\begin{array}{r} 826 \\ \times 24 \\ \hline \\ \hline \\ \hline \\ \hline \end{array}$$

Can you explain each of the steps to complete this calculation?

What is different when multiplying a 4 digit number, compared to a 3 digit number?

Grid method

$$2,313 \times 32 =$$

\times	2,000	300	10	3
30	60,000	9,000	300	90
2	4,000	600	20	6

$$60,000 + 9,000 + 4,000 + 300 + 90 + 20 + 6 =$$

74,016

Column method

$$\begin{array}{r} 2313 \\ \times \quad 32 \\ \hline 4626 \\ 69390 \\ \hline 74016 \\ 111 \end{array}$$

Have a go completing these now.

$$\begin{array}{r} 2556 \\ \times \quad 42 \\ \hline \\ \hline \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 1978 \\ \times \quad 14 \\ \hline \\ \hline \\ \hline \\ \hline \end{array}$$

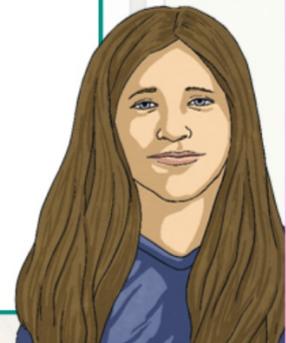
$$\begin{array}{r} 2093 \\ \times \quad 28 \\ \hline \\ \hline \\ \hline \\ \hline \end{array}$$

Niamh has answered some calculations using long multiplication but she has not recorded her working out.

Tick the correct answers and cross the incorrect ones.

For each incorrect answer, explain the mistake she has made. You may need to work the calculations out yourself to help with this.

$2087 \times 65 = 22\ 957$	$4260 \times 35 = 149\ 100$	$6748 \times 27 = 47236$
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



Answers

Niamh has answered some calculations using long multiplication but she has not recorded her working out.

Tick the correct answers and cross the incorrect ones.

For each incorrect answer, explain the mistake she has made. You may need to work the calculations out yourself to help with this.

$2087 \times 65 = 22\ 957$	$4260 \times 35 = 149\ 100$	$6748 \times 27 = 47236$
Incorrect. The correct answer is 135 655. Niamh has not inserted a placeholder so has calculated 2087×60. She has calculated 2087×6 instead.	Correct.	Incorrect. The correct answer is 182 196. Niamh has multiplied 6748 by 7 but she has forgotten to multiply 6748 by 20.
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>



13.1.21

Have a go at the calculations below.

1) $2123 \times 17 =$

2) $3316 \times 12 =$

3) $2816 \times 13 =$

4) $4135 \times 23 =$

5) $1926 \times 16 =$

6) $1048 \times 22 =$

7) $44 \times 1290 =$

8) $26 \times 7012 =$

9) $38 \times 6128 =$

10) $29 \times 8312 =$

Extension - reasoning problems

Prove it!

True or False?

Multiply 4-digits by 2-digits
- basic practice

		5	2	0	1	
×				3	4	
	2	0	8	0	4	
	1	5	6	0	3	
	3	6	4	0	7	
			1			

$5,201 \times 34 = 36,407$

White Rose Maths

Teddy has spilt some paint on his calculation.

		2		6	9
×				2	
	2	2	5	9	7
	1	5	7	1	3
			0	3	3
					2

What are the missing digits?

What do you notice?