

Homework/Extension

Step 3: Multiply 4 Digits by 1 Digit

National Curriculum Objectives:

Mathematics Year 5: (5C7a) [Multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers](#)

Differentiation:

Questions 1, 4 and 7 (Varied Fluency)

Developing Identify who has correctly answered the calculation using knowledge of multiplying 4-digit numbers by 1-digit numbers. No use of zero as a place holder and no exchanges. Formal written method with pictorial support.

Expected Identify who has correctly answered the calculation using knowledge of multiplying 4-digit numbers by 1-digit numbers. Some use of zero as a place holder and including exchanges. Formal written method with pictorial support.

Greater Depth Identify who has correctly answered the calculation answer using knowledge of multiplying 4-digit numbers by 1-digit numbers. Use of zero as a place holder and including exchanges. Formal written method with some pictorial support.

Questions 2, 5 and 8 (Varied Fluency)

Developing Match the calculation to the correct answer using knowledge of multiplying 4-digit numbers by 1-digit numbers. No use of zero as a place holder and no exchanges. Formal written method with pictorial support.

Expected Match the calculation to the correct answer using knowledge of support multiplying 4-digit numbers by 1-digit numbers. Some use of zero as a place holder and including exchanges. Formal written method with pictorial support.

Greater Depth Match the calculation to the correct answer using knowledge of multiplying 4-digit numbers by 1-digit numbers. Use of zero as a place holder and including exchanges. Formal written method with some pictorial support.

Questions 3, 6 and 9 (Reasoning and Problem Solving)

Developing Identify and explain whether the comparison statement has been completed correctly using knowledge of multiplying 4-digit numbers by 1-digit numbers. No use of zero as a place holder and no exchanges. Formal written method with pictorial support.

Expected Identify and explain whether the comparison statement has been completed correctly using knowledge of multiplying 4-digit numbers by 1-digit numbers. Some use of zero as a place holder and including exchanges. Formal written method with pictorial support.

Greater Depth Identify and explain whether the comparison statement has been completed correctly using knowledge of multiplying 4-digit numbers by 1-digit numbers. Use of zero as a place holder and including exchanges. Formal written method with some pictorial support.

More [Year 5 Multiplication and Division](#) resources.

Did you like this resource? Don't forget to [review](#) it on our website.

Multiply 4 Digits by 1 Digit

1. Lee and Joan are discussing the calculation $3,213 \times 3$.



The answer is 6,939.



The answer is 9,639.

	3	2	1	3
x				3

1,000	1,000	1,000	100	100	10	1	1	1
1,000	1,000	1,000	100	100	10	1	1	1
1,000	1,000	1,000	100	100	10	1	1	1

Who is correct?

VF
HW/Ext

2. Select the correct answer to complete the calculation $1,221 \times 4$.

1,000	100	100	10	10	1
1,000	100	100	10	10	1
1,000	100	100	10	10	1
1,000	100	100	10	10	1

	1	2	2	1
x				4

4,884

8,844

8,484

VF
HW/Ext

3. Jack has completed the comparison statement:

$2,413 \times 2$

>

$2,122 \times 3$

Th	H	T	O	Th	H	T	O
●●	●●●●	●	●●●	●●	●	●●	●●
●●	●●●●	●	●●●	●●	●	●●	●●
●●	●●●●	●	●●●	●●	●	●●	●●

x				2

x				3

Is he correct? Explain your answer.

RPS
HW/Ext

Multiply 4-Digits by 1-Digit

4. James and Lottie are discussing the calculation $4,325 \times 3$.



The answer is 12,975.



The answer is 12,965.

	4	3	2	5
x				3

1,000	1,000	1,000	1,000	100	100	100	10	10	1	1	1	1	1
1,000	1,000	1,000	1,000	100	100	100	10	10	1	1	1	1	1
1,000	1,000	1,000	1,000	100	100	100	10	10	1	1	1	1	1

Who is correct?

VF
HW/Ext

5. Select the correct answer to complete the calculation $2,512 \times 6$.

Th	H	T	O
●●	●●●●●●	●	●●
●●	●●●●●●	●	●●
●●	●●●●●●	●	●●
●●	●●●●●●	●	●●
●●	●●●●●●	●	●●
●●	●●●●●●	●	●●

	2	5	1	2
x				6

15,172

15,072

1,572

VF
HW/Ext

6. Inaya has completed the comparison statement:

$3,114 \times 5 > 3,041 \times 6$

Th	H	T	O	Th	H	T	O
●●●	●	●	●●●●	●●●		●●●●	●
●●●	●	●	●●●●	●●●		●●●●	●
●●●	●	●	●●●●	●●●		●●●●	●
●●●	●	●	●●●●	●●●		●●●●	●
●●●	●	●	●●●●	●●●		●●●●	●
●●●	●	●	●●●●	●●●		●●●●	●

Is she correct? Explain your answer by using a formal written method.

RPS
HW/Ext

Multiply 4 Digits by 1 Digit

7. Sara and Dan are discussing the calculation $1,163 \times 6$.



Sara

The answer is
6,878.



Dan

The answer is
6,978.

	1	1	6	3
x				6

Th	H	T	O



Who is correct? You may need to extend the place value table to help you.

VF
HW/Ext

8. Select the correct answer to complete the calculation $2,047 \times 4$.
Complete the place value chart to help you.

Th	H	T	O

	2	0	4	7
x				4



8,118

8,881

8,188

VF
HW/Ext

9. Freya has completed the comparison statement below.

$$4,706 \times 3 = 3,153 \times 4$$

Th	H	T	O	Th	H	T	O

Is she correct? Explain your answer using a formal written method. You may need to extend the place value grids to help you.



RPS
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Homework/Extension

Multiply 4 Digits by 1 Digit

Developing

1. Joan is correct.
2. $1,221 \times 4 = 4,884$
3. Jack is incorrect because $2,413 \times 2 = 4,826$ and $2,122 \times 3 = 6,366$. The correct equation is: $2,413 \times 2 < 2,122 \times 3$.

Expected

4. James is correct.
5. $2,512 \times 6 = 15,072$
6. Inaya is incorrect because $3,114 \times 5 = 15,570$ and $3,041 \times 6 = 18,246$. The correct equation is: $3,114 \times 5 < 3,041 \times 6$.

Greater Depth

7. Dan is correct.
8. $2,047 \times 4 = 8,188$
9. Freya is incorrect because $4,706 \times 3 = 14,118$ and $3,153 \times 4 = 12,612$. The correct equation is: $4,706 \times 3 > 3,153 \times 4$.