

06.01.2021Multiplication

LO: To multiply a 4 digit number by a 1 digit number.

Hook

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

James: The answer is 12,975.

Lottie: 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?



















Using your skills from yesterday's lesson, have a go at completing this calculation on your whiteboard!

Thousands	Hundreds	Tens		Ones		
1000		10	10	1	1	1
1000		10	10	1	1	1
1000		10	10	1	1	1

	Th	H	T	O
	1	0	2	3
x				3

What do you notice about this column?

Write the multiplication calculation represented and find the answer.

Thousands	Hundreds	Tens	Ones
 			     
 			     

Remember if there are 10 or more counters in a column you need to make an exchange.

Annie earns £1,325 per week.

How much would she earn in 4 weeks?

Thousands	Hundreds			Tens		Ones				
1000	100	100	100	10	10	1	1	1	1	1
1000	100	100	100	10	10	1	1	1	1	1
1000	100	100	100	10	10	1	1	1	1	1
1000	100	100	100	10	10	1	1	1	1	1

	Th	H	T	O
	1	3	2	5
×				4

Complete the calculation on your white boards!
The first two steps have been calculated for you.

$$\begin{array}{r} 4134 \\ \times \quad \quad 2 \\ \hline \square\square 68 \\ \hline \end{array}$$

It is important that we understand and continue to use mathematical vocabulary.

If my question said:

"What is the **product** of 2,941 and 9?"

What does the word **product** mean?

Have a go at working this out on your white board!

Try these questions on your whiteboards:

1. What is the product of 3,424 and 6?
2. 1,204 multiplied by 3 equals _____.
3. What is the product of 3,642 and 4?



Task oneTask One

- | | |
|---------------|----------------|
| 1. 6586 x 5 = | 7. 8292 x 8 = |
| 2. 6682 x 9 = | 8. 8940 x 8 = |
| 3. 9870 x 4 = | 9. 5512 x 5 = |
| 4. 1476 x 4 = | 10. 9706 x 8 = |
| 5. 4217 x 7 = | 11. 1268 x 5 = |
| 6. 1815 x 6 = | 12. 8139 x 3 = |

Task twoTask Two

Alex calculated $1,432 \times 4$

Here is her answer.

	Th	H	T	O
	1	4	3	2
\times				4
	4	16	12	8

$$1,432 \times 4 = 416,128$$

Can you explain what Alex has done wrong?

Task threeTask three

Can you work out the missing numbers using the clues?

$$\begin{array}{r}
 \boxed{} \boxed{} \boxed{} \boxed{} \\
 \times \boxed{5} \\
 \hline
 \boxed{} \boxed{} \boxed{} \boxed{} \boxed{}
 \end{array}$$

- The 4 digits being multiplied by 5 are consecutive numbers.
- The first 2 digits of the product are the same.
- The fourth and fifth digits of the answer add to make the third.

ExtensionExtension

$$\begin{array}{r} 1. \quad 497_ \\ \times \quad 3 \\ \hline 14919 \end{array}$$

$$\begin{array}{r} 7. \quad 3_69 \\ \times \quad 3 \\ \hline 11307 \end{array}$$

$$\begin{array}{r} 2. \quad _599 \\ \times \quad 3 \\ \hline 16797 \end{array}$$

$$\begin{array}{r} 8. \quad 3595 \\ \times \quad _ \\ \hline 10785 \end{array}$$

$$\begin{array}{r} 3. \quad 30_5 \\ \times \quad 3 \\ \hline 9045 \end{array}$$

$$\begin{array}{r} 9. \quad _881 \\ \times \quad 3 \\ \hline 5643 \end{array}$$

$$\begin{array}{r} 4. \quad 5_57 \\ \times \quad 3 \\ \hline 15471 \end{array}$$

$$\begin{array}{r} 10. \quad 55_9 \\ \times \quad 4 \\ \hline 22276 \end{array}$$

$$\begin{array}{r} 5. \quad 5924 \\ \times \quad _ \\ \hline 23696 \end{array}$$

$$\begin{array}{r} 11. \quad 585_ \\ \times \quad 3 \\ \hline 17550 \end{array}$$

$$\begin{array}{r} 6. \quad 180_ \\ \times \quad 4 \\ \hline 7232 \end{array}$$

$$\begin{array}{r} 12. \quad _404 \\ \times \quad 3 \\ \hline 13212 \end{array}$$

