

**14.1.2021 Quick Maths**

**A**

7m Area =

- $50 - 27 =$
- $8 \times 9 =$
- Value of 7 in 1718
- Find all factor pairs of 42

**B**

4m Perimeter =

- $24 \times 6 =$
- $5 \times 65 \times 2 =$
- $1320 \div 11 =$
- Find the factors of 96

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**Challenge** Use the most efficient multiplication method to calculate:

1.  $28 \times 7 =$       3.  $16 \times 8 =$

2.  $89 \times 9 =$       4.  $37 \times 6 =$

Explain your reasoning.

Flashback 4

Year 4 | Week 2 | Day 3

- 1) Work out  $26 \times 5$
- 2) Find the product of 12 and 10
- 3) Find  $13 \times 10$
- 4) What is  $8,000 + 120$ ?

*What did we do yesterday?*

**True or False?** Written methods

$34 \times 6$  can be represented like this

Hundreds	Tens	Ones
	●●●●	●●●●●●
	●●●●	●●●●●●
	●●●●	●●●●●●
	●●●●	●●●●●●
	●●●●	●●●●●●
	●●●●	●●●●●●

White Rose Maths

*Which methods of efficient multiplication have we looked at?*

## Column Multiplication



### Learning Objective:

Today I am learning to  
- use a written method  
of multiplication

### Success Criteria

I will be successful if I can  
- multiply 2-digit numbers by  
1-digit numbers  
- multiply 3-digit numbers by  
1-digit numbers  
- develop my reasoning skills

### Key Vocabulary

- column                      - place value  
- multiplication          - product  
- multiples                -  
- exchanging

WR Slides

### Column Multiplication

You can multiply numbers together using a number of techniques. One written method that we will focus on is column multiplication. It looks like this...

$$\begin{array}{r} 12 \\ \times 6 \\ \hline 72 \\ 1 \phantom{00} \end{array}$$

### Column Multiplication

The first step is to place your digits in the correct columns.

$$\begin{array}{r} \text{T O} \\ 12 \\ \times 4 \\ \hline 48 \end{array}$$

Then, like column addition, we begin with the Ones column. We multiply the Ones digits together (in this case,  $2 \times 4$ ), writing the answer in the Ones column inbetween the lines. Next, we multiply the Tens by the Ones ( $1 \times 4$ ), writing the answer in the Tens column.

$$21 \times 2 =$$

Written method

$$\begin{array}{r} 21 \\ \times 2 \\ \hline \\ \hline \end{array}$$

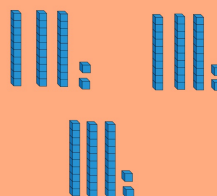


TENS	ONES

$$32 \times 3 =$$

Written method

$$\begin{array}{r} 32 \\ \times 3 \\ \hline \\ \hline \end{array}$$



TENS	ONES

Written method

$$\begin{array}{r} 35 \\ \times 3 \\ \hline \end{array}$$

TENS | ONES

TENS	ONES

Written method

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TENS | ONES

TENS	ONES

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TENS | ONES

TENS	ONES

Written method

$$\begin{array}{r} 35 \\ \times 3 \\ \hline \end{array}$$

TENS | ONES

TENS	ONES

Column Multiplication

Please present like this.

1.	1 3	2.	2 4	3.	3 2
x	2	x	2	x	3
<hr/>					
<hr/>					
4.	2 1	5.	1 1	6.	4 2
x	2	x	7	x	2
<hr/>					
<hr/>					

Column Multiplication

Please present like this.

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x	2	x	7	x	2
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<hr/>					

### Task

A

1.  $13 \times 2 =$

2.  $24 \times 2 =$

3.  $32 \times 3 =$

4.  $21 \times 4 =$

5.  $11 \times 7 =$

6.  $42 \times 2 =$

B

1.  $12 \times 3 =$

2.  $34 \times 2 =$

3.  $23 \times 3 =$

4.  $43 \times 3 =$

5.  $27 \times 4 =$

6.  $57 \times 6 =$

C

1.  $127 \times 3 =$

2.  $312 \times 3 =$

3.  $487 \times 4 =$

4.  $237 \times 5 =$

5.  $81 \times 9 =$

6.  $189 \times 8 =$

Attempt these questions at your level of confidence.

### Challenge

True or False?

Multiply 2-digits by 1-digit

Tommy has 8 boxes of cakes with 24 cakes in each box.

Eva has 4 boxes with 48 cakes in each box.

They have the same number of cakes.

Here are three incorrect multiplications.

	T	O
	6	1
$\times$		5
	3	5

	T	O
	2	6
$\times$		4
	8	2
	4	9

	T	O
	7	4
$\times$		7
	4	9
	8	8

Correct the multiplications.

## Column Multiplication



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- place value
- product
- 

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- I will be successful if I can
- multiply 2-digit numbers by 1-digit numbers
  - multiply 3-digit numbers by 1-digit numbers
  - develop my reasoning skills