Year 5 – Spring Block 1 – Multiplication and Division – Multiply 3-Digits by 2-Digits

About This Resource:

This PowerPoint has been designed to support your teaching of this small step. It includes a starter activity and an example of each question from the Varied Fluency and Reasoning and Problem Solving resources also provided in this pack. You can choose to work through all examples provided or a selection of them depending on the needs of your class.

National Curriculum Objectives:

Mathematics Year 5: (5C6a) Multiply and divide numbers mentally drawing upon known facts
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

More Year 5 Multiplication and Division resources.

Did you like this resource? Don't forget to review it on our website.

Step 4: Multiply 3-Digits by 2-Digits

Introduction

Write a story for the following multiplication:

142 x 12

Then solve the calculation.

Introduction

Write a story for the following multiplication:

142 x 12 = 1,704

For example:

Bill the baker has received an order for 142 dozen muffins. There are 12 muffins in a dozen. How many muffins does he have to bake?

Tanya is organising the art cupboard. 142 paint brushes will fit in a box. She fills 12 boxes. How many paint brushes does she have?

Varied Fluency 1

Use the grid method to complete the calculation below.

x	40	2
100		
10		
2		

112 x 42 = ☐

Varied Fluency 1

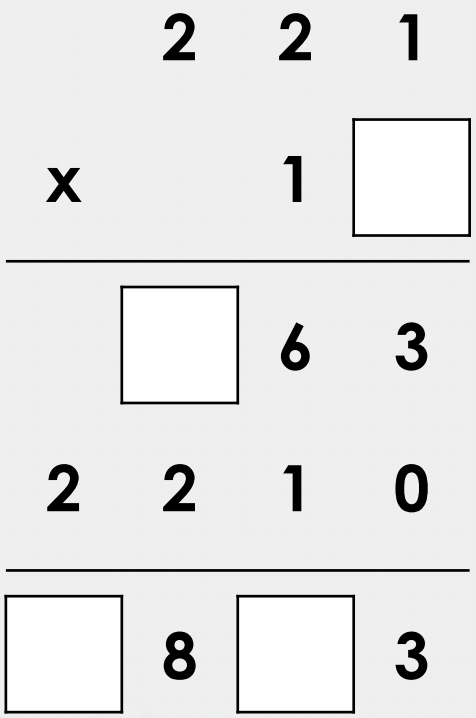
Use the grid method to complete the calculation below.

x	40	2
100	4,000	200
10	400	20
2	80	4

112 x 42 = 4,704

Varied Fluency 2

Fill in the missing numbers in the calculation below.



Varied Fluency 2

Fill in the missing numbers in the calculation below.

	2	2	1	
x		1	3	
	6	6	3	(221 x 3)
2	2	1	0	(221 x 10)
2	8	7	3	

Varied Fluency 3

Complete the calculations below.

	1	0	1
x		4	2

	3	1	6
x		1	2

Which has the larger answer?

Varied Fluency 3

Complete the calculations below.

	1	0	1
x		4	2
	2	0	2
4	0	4	0
4	2	4	2

	3	1	6
x		1	2
	6	3	2
		1	
3	1	6	0
3	7	9	2

Which has the larger answer?

101 x 42 has the larger answer.

Varied Fluency 4

Use <, > or = to complete the statements.

221 x 13 ☐ **313 x 13**

102 x 42 ☐ **302 x 22**

Varied Fluency 4

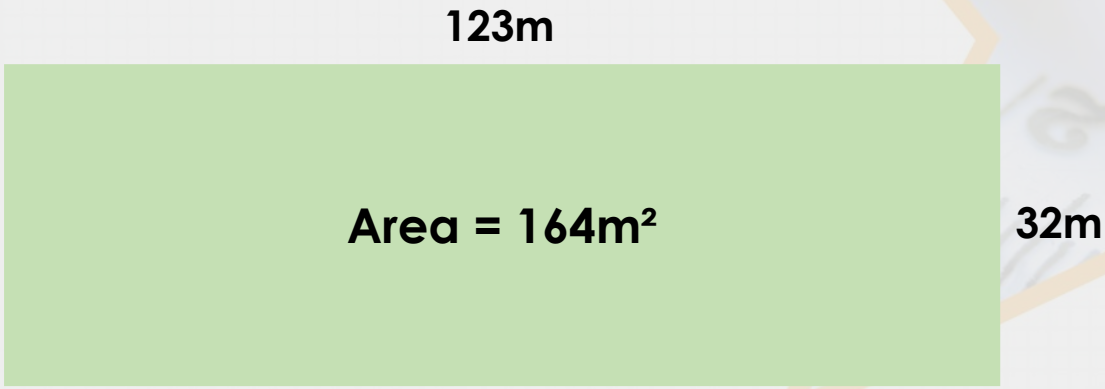
Use <, > or = to complete the statements.

2,873 [<] 4,069

4,284 [<] 6,644

Reasoning 1

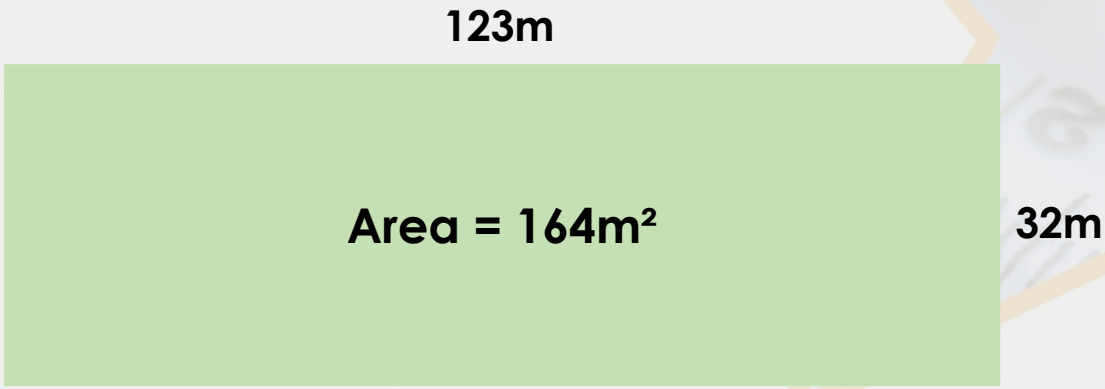
A zookeeper wants to work out the area of the zoo. He does the calculation 132 + 32. Explain his mistake.



What is the correct area of the zoo?

Reasoning 1

A zookeeper wants to work out the area of the zoo. He does the calculation 132 + 32. Explain his mistake.



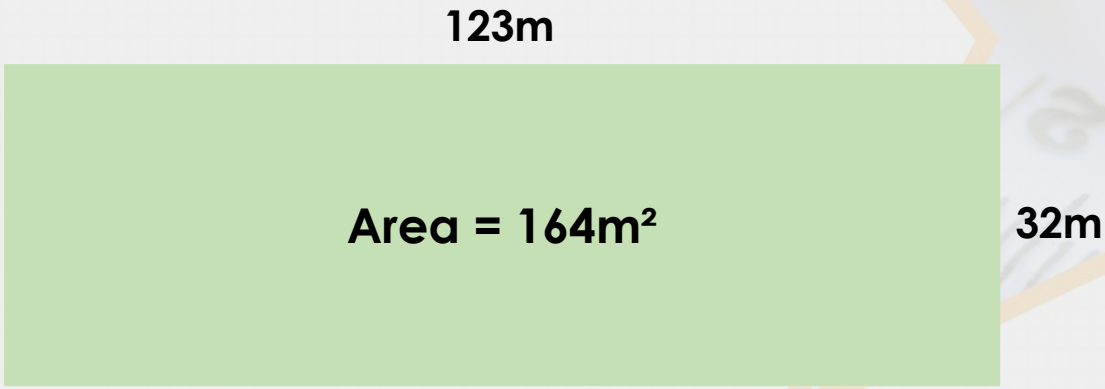
The zookeeper has used the wrong numbers…

What is the correct area of the zoo?

123m x 32m =

Reasoning 1

A zookeeper wants to work out the area of the zoo. He does the calculation 132 + 32. Explain his mistake.



The zookeeper has used the wrong numbers and he has added them instead of multiplying them together.

What is the correct area of the zoo?

123m x 32m = 3,936m²

Problem Solving 1

A restaurant owner wants to work out which item on the menu was most profitable last week.

Item	Number of sales	Price per item (£)
Pizza	412	12
Soup	179	10
Pasta	613	13

How much money did she make from each item on the menu?

Problem Solving 1

A restaurant owner wants to work out which item on the menu was most profitable last week.

Item	Number of sales	Price per item (£)
Pizza	412	12
Soup	179	10
Pasta	613	13

How much money did she make from each item on the menu?

Pizza: 412 x £12 = £4,944

Soup: 179 x £10 = £1,790

Pasta: 613 x 13 = £7,969

Rosie and Yusef are discussing multiplication.

Rosie

I think that 142 x 12 is bigger than 14 x 121.

I think that 14 x 121 is bigger than 142 x 12.

Yusef

Who is correct? How do you know?

Reasoning 2

Rosie and Yusef are discussing multiplication.

Rosie

I think that 142 x 12 is bigger than 14 x 121.

I think that 14 x 121 is bigger than 142 x 12.

Yusef

Who is correct? How do you know?

Rosie is correct because…

Reasoning 2

Rosie and Yusef are discussing multiplication.

Rosie

I think that 142 x 12 is bigger than 14 x 121.

I think that 14 x 121 is bigger than 142 x 12.

Yusef

Who is correct? How do you know?

Rosie is correct because 14 x 121 = 1,694 and 142 x 12 = 1,704.