

White Rose Maths Edition

# Year 5 Practice Book 5B



Pearson

Series Editor: Tony Staneff





# Year 5 Practice Book **5B**



What did you learn last term in maths?

Draw or write one thing you remember.

This book belongs to \_\_\_\_\_ .

My class is \_\_\_\_\_ .

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This looks like a good challenge!



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It is time to do some practice!



# How to use this book

How does this Practice Book work?



Use the **Textbook** first to learn how to solve this type of problem.

**Unit 7: Multiplication and division (2), Lesson 2**

### Multiply 2-digit numbers (area model)

**Discover**

**Share**

a)  $20 + 8 = 28$  m  
 $10 + 5 = 15$  m  
 The length of the new supermarket will be 28 m.  
 The width will be 15 m.

b) To find the total area I needed to work out  $28 \times 15$  but I was not sure how to do that.

The area model looks like the grid method. I found the area of each part of the supermarket and added them together to get the total area.

	20 m	8 m																						
10 m	$20 \times 10 = 200 \text{ m}^2$	$8 \times 10 = 80 \text{ m}^2$	<table border="1"> <thead> <tr> <th>H</th> <th>T</th> <th>O</th> </tr> </thead> <tbody> <tr> <td>2</td> <td>0</td> <td>0</td> </tr> <tr> <td>1</td> <td>0</td> <td>0</td> </tr> <tr> <td>8</td> <td>0</td> <td></td> </tr> <tr> <td>+</td> <td>4</td> <td>0</td> </tr> <tr> <td>4</td> <td>2</td> <td>0</td> </tr> <tr> <td></td> <td></td> <td></td> </tr> </tbody> </table>	H	T	O	2	0	0	1	0	0	8	0		+	4	0	4	2	0			
H	T	O																						
2	0	0																						
1	0	0																						
8	0																							
+	4	0																						
4	2	0																						
5 m	$20 \times 5 = 100 \text{ m}^2$	$8 \times 5 = 40 \text{ m}^2$																						

The total area of the new supermarket will be  $420 \text{ m}^2$ .  
 This is the same as  $28 \times 15$ .

12

Date: \_\_\_\_\_ Unit 7: Multiplication and division (2), Lesson 2

### Multiply 2-digit numbers (area model)

1 a) Use the area model to work out  $26 \times 14$ .

$26 \times 14 = \square$

b) Use the area model to work out  $17 \times 42$ .

$17 \times 42 = \square$

c) Zac says, "On my area model, I put 42 along the top and 17 down the side." Will Zac still get the same answer? Explain why.

9

This shows you which **Textbook** page you need.

Have a go at questions by yourself using this **Practice Book**. Use what you have learnt.



Challenge questions make you think hard!

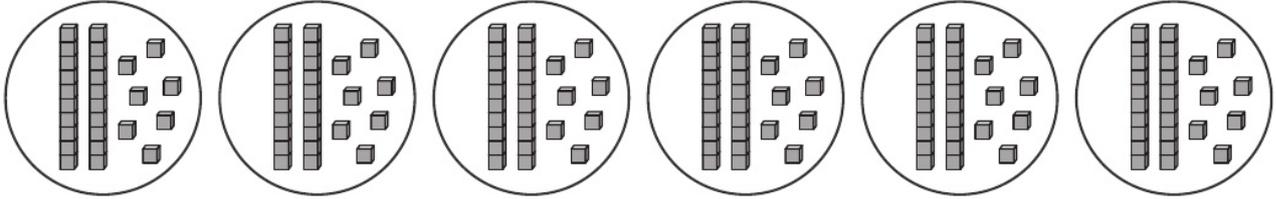


Questions with this light bulb make you think differently.



# Multiply a number up to 4-digits by a 1-digit number

1 Use base 10 equipment to help you work out  $6 \times 27$ .



$$6 \times 20 = \boxed{\phantom{00}}$$

$$6 \times 7 = \boxed{\phantom{00}}$$

$$\boxed{\phantom{00}} + \boxed{\phantom{00}} = \boxed{\phantom{00}}$$

$$\text{So, } 6 \times 27 = \boxed{\phantom{00}}$$

2 Work out  $5 \times 135$ .

H	T	O

$$5 \times 100 = \boxed{\phantom{000}} \quad 5 \times 30 = \boxed{\phantom{000}} \quad 5 \times 5 = \boxed{\phantom{000}}$$

$$\boxed{\phantom{000}} + \boxed{\phantom{000}} + \boxed{\phantom{000}} = \boxed{\phantom{000}}$$

$$\text{So, } 5 \times 135 = \boxed{\phantom{000}}$$

**3** Use the grid method to work out the multiplications.

a)  $32 \times 7 = \square$

7	30	×	2	=	
7	□	×	□	=	

		H	T	O
	+			

b)  $3 \times 314 = \square$

□	□	×	□	×	□	×	□	=	
□	□	×	□	×	□	×	□	=	

		H	T	O
	+			

**4** Work out the answer to each multiplication.

a)  $19 \times 6 = \square$

		H	T	O
			1	9
	×			6

c)  $235 \times 3 = \square$

		H	T	O
		2	3	5
	×			3

e)  $1,704 \times 5 = \square$

		Th	H	T	O
		1	7	0	4
	×				5

b)  $48 \times 6 = \square$

		H	T	O
			4	8
	×			6

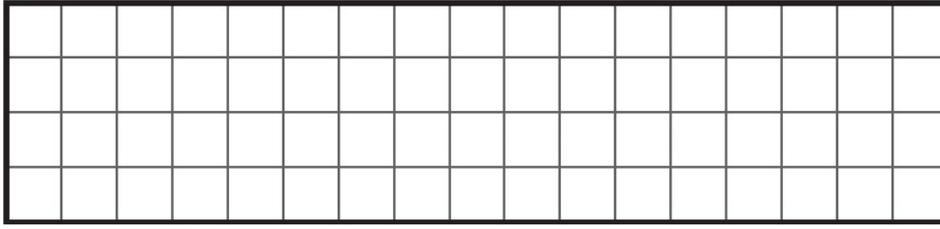
d)  $8 \times 711 = \square$

		Th	H	T	O
			7	1	1
	×				8

f)  $739 \times 9 = \square$

		Th	H	T	O
			7	3	9
	×				9

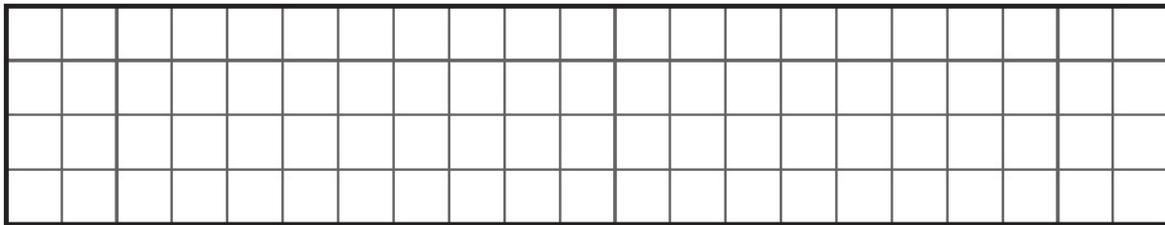
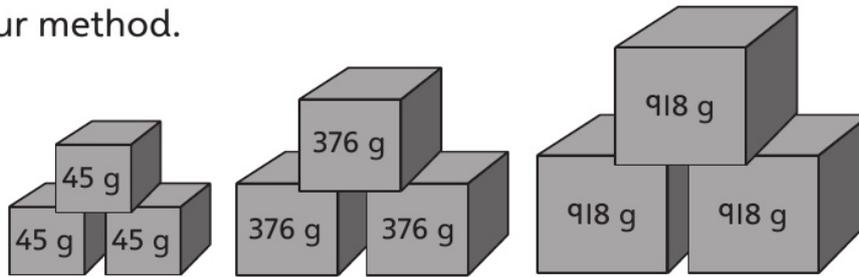
5 How many sweets are there in 8 jars?



There are  sweets in 8 jars.

6 What is the total mass of all of these boxes?

Explain your method.



## Reflect

Explain how to use short multiplication to work out  $127 \times 5$ .

- 
- 
- 
-

# Multiply 2-digit numbers (area model)

**1** a) Use the area model to work out  $26 \times 14$ .

26

20                      6

10

4

14

26 × 14 =

b) Use the area model to work out  $17 \times 42$ .

17

42

17 × 42 =

c) Zac says, 'On my area model, I put 42 along the top and 17 down the side.'  
Will Zac still get the same answer? Explain why.

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5 This is the method Gina used to work out  $23 \times 47$ .



- First, multiply 20 by 40, which is  $20 \times 40 = 800$ .
- Next, multiply 3 by 7, which is  $3 \times 7 = 21$ .
- Now add those answers together, which is  $800 + 21 = 821$ .

What mistakes has Gina made? Explain why her method does not work.

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6 Isla is trying to multiply two 2-digit numbers.

Here is her working so far. What numbers is she trying to multiply?

	<input type="text"/>	<input type="text"/>
<input type="text"/>	900	240
<input type="text"/>	<input type="text"/>	48

Complete Isla's working and give the answer to the multiplication.


**CHALLENGE**

## Reflect

Explain the method you would use to work out  $56 \times 21$ .




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# Multiply 2-digit numbers

- 1** a) Olivia and Jamilla are working out  $34 \times 12$ .  
They each use a different method. Complete their methods.

**Olivia's method**

	34
10	
2	

		H	T	O
+				

**Jamilla's method**

		H	T	O
		3	4	
×		1	2	
			0	

$34 \times 12 = \boxed{\phantom{000}}$

- b) Whose method did you prefer? Why?

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- 2** Complete the following column multiplications.

a)  $29 \times 23 = \boxed{\phantom{000}}$

		H	T	O
		2	9	
×		2	3	
			0	

- $29 \times 3$   
 $29 \times 20$   
 $29 \times 23$

b)  $37 \times 16 = \boxed{\phantom{000}}$

		H	T	O
		3	7	
×		1	6	
			0	

- $37 \times 6$   
 $37 \times 10$   
 $37 \times 16$

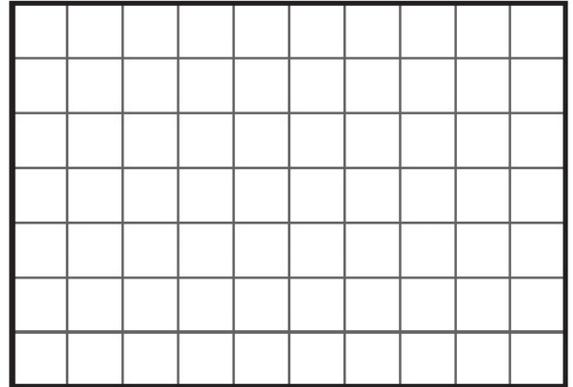
3 Complete these calculations.

a)  $45 \times 27 =$

	Th	H	T	O
			4	5
x			2	7
<hr/>				
				0
<hr/>				
<hr/>				

$45 \times 7$   
 $45 \times 20$   
 $45 \times 27$

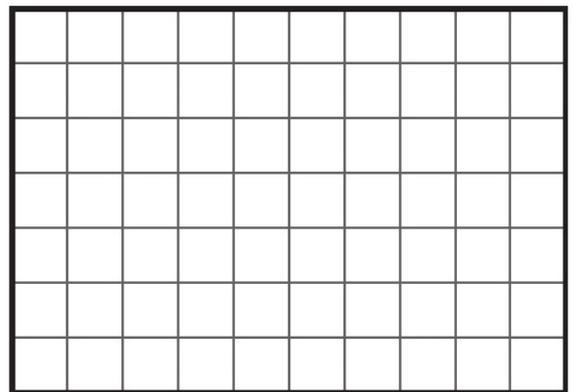
c)  $49 \times 34 =$



b)  $52 \times 17 =$

	H	T	O
		5	2
x		1	7
<hr/>			
			0
<hr/>			
<hr/>			

d)  $28 \times 76 =$



4 A snack bar weighs 85 grams.  
 How much does a pack of 24 snack bars weigh?

