

Diving into Mastery



Multiply 3 Digits by 2 Digits



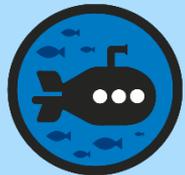
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Diving into Mastery Guidance for Educators

Each activity sheet is split into three sections, diving, deeper and deepest, which are represented by the following icons:



Diving



Deeper



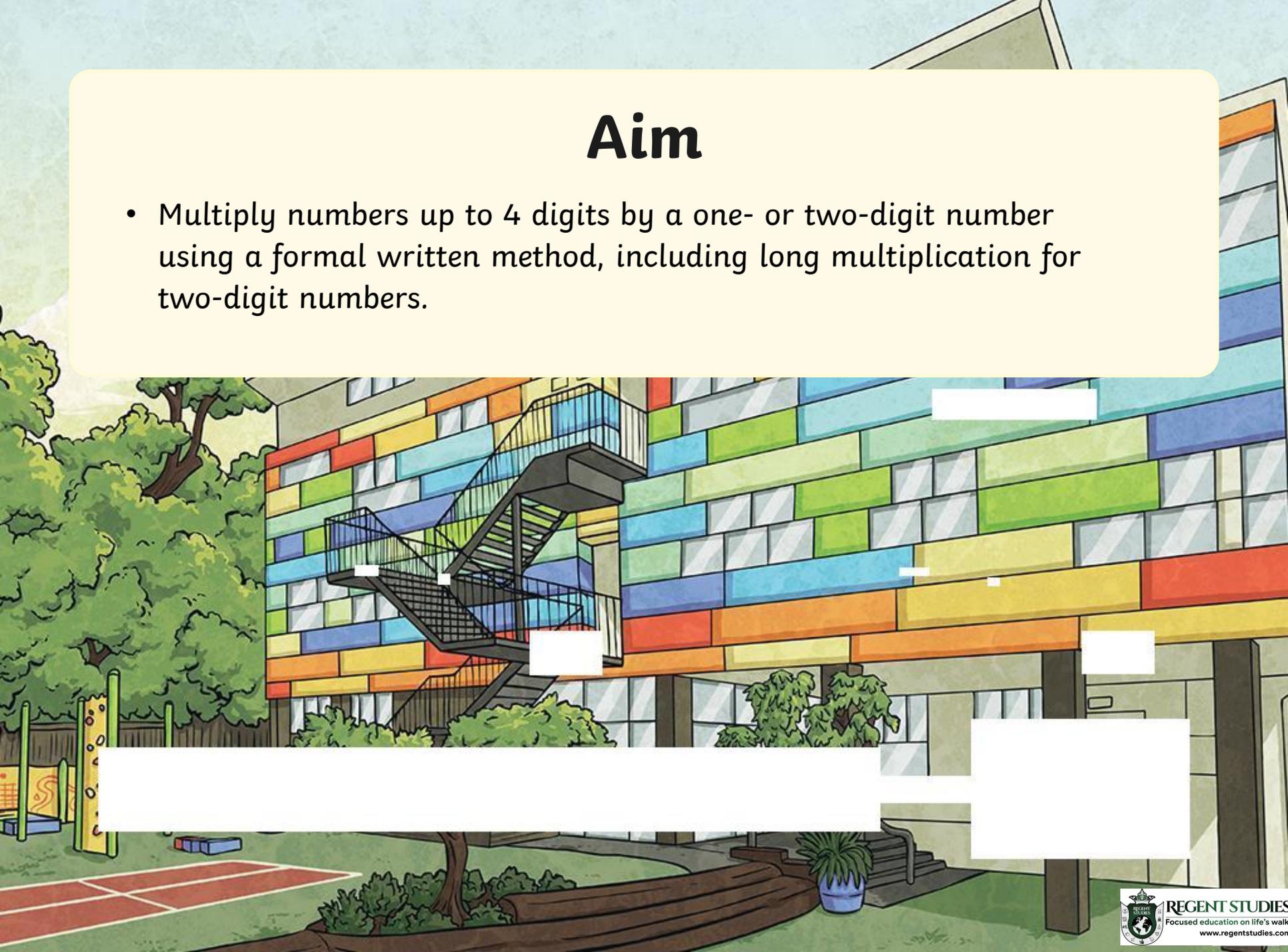
Deepest

These carefully designed activities take your children through a learning journey, initially ensuring they are fluent with the key concept being taught; then applying this to a range of reasoning and problem-solving activities.

These sheets might not necessarily be used in a linear way. Some children might begin at the 'Deeper' section and in fact, others may 'dive straight in' to the 'Deepest' section if they have already mastered the skill and are applying this to show their depth of understanding.

Aim

- 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.





Complete these calculations using long multiplication.

$$328 \times 73 = 23\,944$$

		3	2	8	
	×		7	3	
		9	8	4	
			2		
2	2	9	6	0	
	1	5			
		2	3	9	4
		1	1		

(328 × 3)

(328 × 70)

$$357 \times 21 = 7497$$

		3	5	7	
	×		2	1	
		3	5	7	
7	1	4	0		
	1	1			
		7	4	9	7

(357 × 1)

(357 × 20)



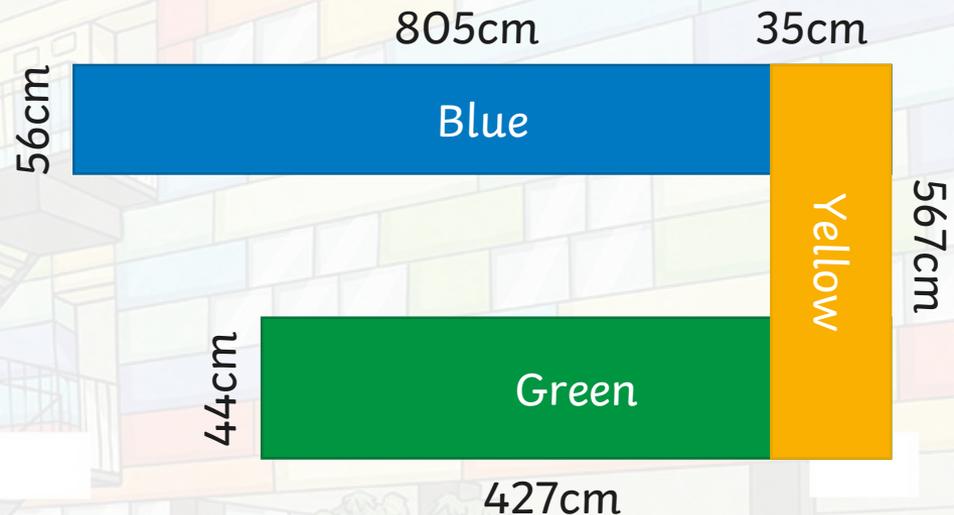
Ms Green, the Twinkl School site manager, is working out the area of the class flowerbeds ready for the children to plant some seeds.

What is the area of each flower bed?

Green = **18 788cm²**

Blue = **45 080cm²**

Yellow = **19 845cm²**



Multiply 3 Digits by 2 Digits

Deeper



Alex has been practising long multiplication. For each question, spot the mistake he has made and explain where he has gone wrong. Then, complete the calculation and work out the correct answer.

		4	3	5
	×		2	6
	2	6	1	0
		2	3	
	8	7	0	0
		1		
1	1	3	1	0

Alex has not used zero as a placeholder when calculating 5×20 , so the answer to this has been recorded as 10 rather than 100.

		2	4	5
	×		7	3
		7	3	5
		1	1	
1	7	1	5	0
	3	3		
1	7	8	8	5

Alex did not record the regrouped ten from 5×3 .

Multiply 3 Digits by 2 Digits

Deeper



Twinkl Primary School is ordering stationery ready for September.

357 boxes of pencils and 223 boxes of pens are ordered. Pens come in boxes of 26 and pencils come in boxes of 34.

How many pencils have they ordered altogether?

$$357 \times 34 = 12\,138$$

What is the total number of pens that they ordered?

$$223 \times 26 = 5798$$



Identify the missing digits in these calculations.

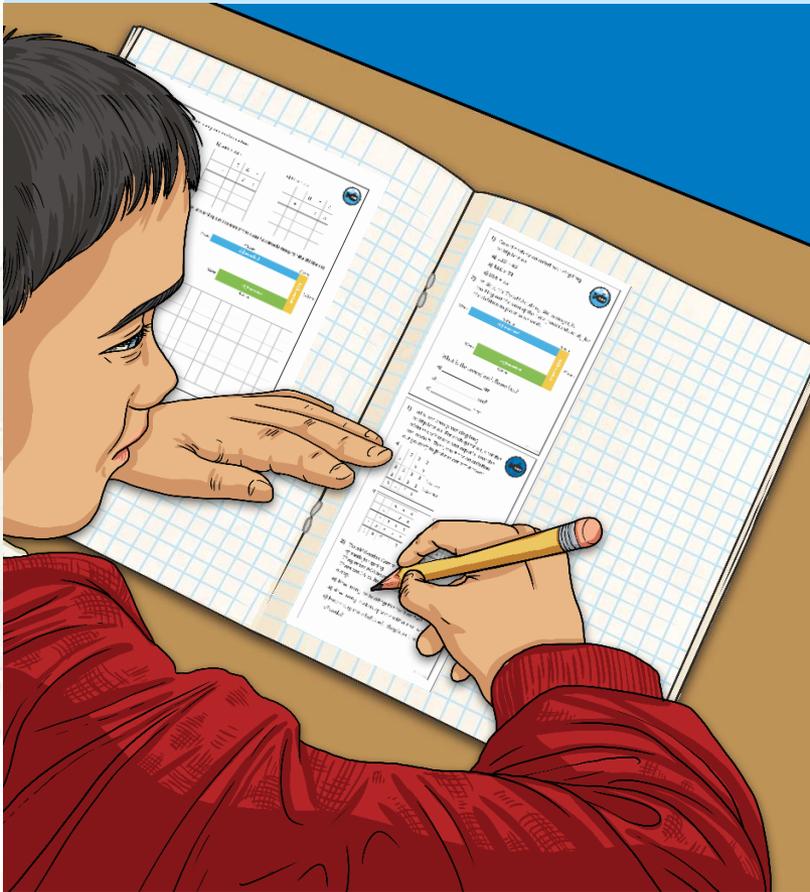
	2	4	5
×		3	6
1	4	7	0
	2	3	
7	3	5	0
1	1		
8	8	2	0

1

		6	2	7
	×		4	2
	1	2	5	4
		1		
2	5	0	8	0
1	1	2		
2	6	3	3	4

Multiply 3 Digits by 2 Digits

Dive in by completing your own activity!



1) Identify the missing numbers in the following multiplication problems.

a) $\begin{array}{r} \square \times \square \\ 1 \ 2 \\ 1 \ \square \end{array}$

b) $\begin{array}{r} \square \times \square \\ 1 \ 2 \\ 1 \ 2 \\ 1 \ 2 \end{array}$

2) Each letter represents a different digit. Solve the following multiplication problems.

a) $\begin{array}{r} \square \times \square \\ D \ C \\ D \ B \end{array}$

b) $\begin{array}{r} \square \times \square \\ 1 \ 2 \\ 1 \ 2 \\ 1 \ 2 \end{array}$

3) Complete these calculations using long multiplication.

a) $238 \times 43 =$

	2	3	8
x	4	3	

b) $564 \times 73 =$

	5	6	4
x	7	3	

c) $856 \times 35 =$

	8	5	6
x	3	5	

4) Mr Star, the Twinkl Academy site manager, is working out the area of the class flower-beds ready for the children to plant some seeds.

What is the area of each flower-bed?

a) $37\text{cm} \times 934\text{cm} =$ $\square \text{cm}^2$

b) $87\text{cm} \times 147\text{cm} =$ $\square \text{cm}^2$

c) $87\text{cm} \times 87\text{cm} =$ $\square \text{cm}^2$

Twinkl Guarantee: They are here to help you.

a) How many...
b) How many...
c) How many...



Need Planning to Complement this Resource?

National Curriculum Aim

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.

For more planning resources to support this aim, [click here](#)

Short Circuit
Use a range of the time machine for different scenarios. It is essential to get the correct order of time machines.

Journey through Time

Regrouping Checkup
Let's check up on our regrouping skills. Can you check that your calculations are correct?

Multiplication and Division: Journey through Time

Tropped in Time

Updated Mastery Content

Sydney the Sausage Dog
Let's take a look at Sydney the sausage dog.

Canine Calculations

Checkup
Let's take a look at our multiplication calculations. Can you check that your calculations are correct?

Multiplication and Division: Canine Calculations

Canine

Canine

Canine Calculations

plant

