



oxford
maths × **matific**
 for australian schools

Your complete hybrid differentiation solution

oup.com.au/oxfordxmatific

Oxford Maths x Matic

Oxford Maths x Matic combine the best of offline and online instruction to offer a complete differentiation solution for F–6, ensuring every student can experience success at their own level.

Oxford Maths has joined forces with Matic to offer a powerful hybrid learning solution that develops student understanding. This new collaboration offers seamless continuity of education from school to home with individual learning pathways that are designed to adapt to students' level of need.



Contact your local Oxford Education Consultant for more information.

Maths success for every student

- ✓ SAVES TIME ON PLANNING
- ✓ DESIGNED BY EXPERTS
- ✓ TARGETED TEACHING
- ✓ CURRICULUM ALIGNED

Get started with your 14-day free trial!

oup.com.au/oxfordxmatic



DIGITAL PRIMARY MATHEMATICS RESOURCE

- ✓ Designed by pedagogical experts
- ✓ Expertly aligned with state and national curriculum
- ✓ Develops problem-solving and conceptual understanding
- ✓ Increases student's engagement and interest in mathematics
- ✓ Supports differentiation within the classroom

Oxford Maths at a glance

TEACHING AND LEARNING APPROACH

- Differentiation, also known as ‘targeted teaching’
- Incorporates key elements of inquiry

HOW?

- Uses pre- and post-tests to address students at their point of need
- Offers multiple pathways for students
- Supports the ‘gradual release of responsibility’ approach

WHAT SORT OF ACTIVITIES ARE INCLUDED?

- Direct instruction
- Hands-on activities
- Small-group and whole-class tasks
- Practice exercises
- Open-ended problem-solving opportunities

LEARNING OUTCOMES

The balanced approach helps students make connections with mathematics in the real world and encourages higher-order thinking and reasoning.

STUDENT MATERIALS

- Student Books
- Assessment Books
- Practice and Mastery Books
- Student Dashboards

TEACHER DASHBOARDS

The Teacher Dashboards provide online access to a wealth of resources and support material for Foundation to Year 6, including:

Teaching resources

- Interactive teaching tools to introduce concepts
- Blackline masters, activity sheets, mastery tasks
- Support and extension activities
- Videos to explore potential difficulties around topics

Planning and assessment material

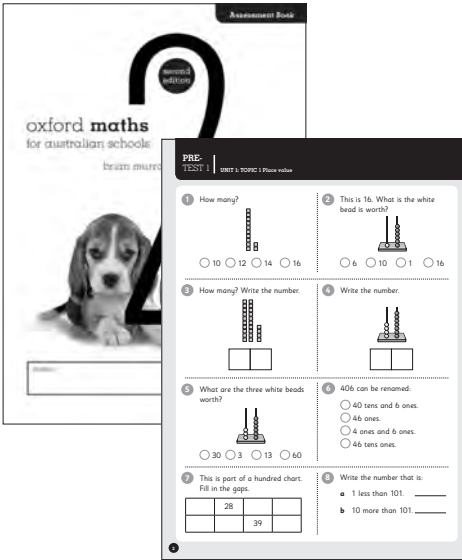
- Curricula and planning documents
- Pre- and post-tests
- Learning sequences and suggested pathways
- Assessment grading guide
- Answers

Markbook

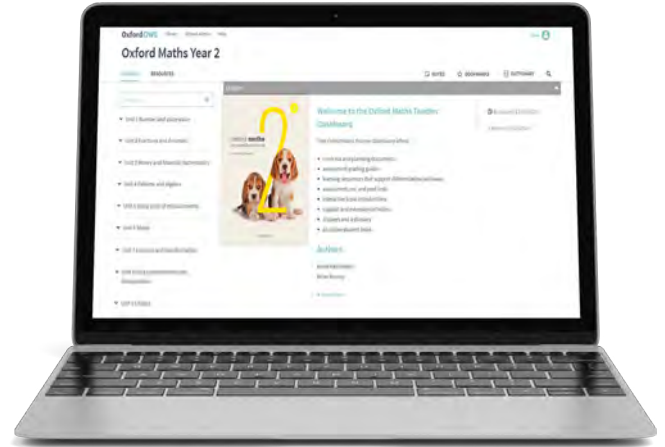
- Online assessment, tracking and reporting

CURRICULUM ALIGNMENT

The series is fully aligned with the Australian and Victorian Curricula and the NSW Syllabus.



Access the topic pre-test via the Assessment Books or the Teacher Dashboards, or direct students to the adaptive pre-test on the Student Dashboards.



Choose the appropriate learning sequence for each student via the Teacher Dashboards.

1

Assess and identify

Use the topic pre-test to quickly identify the level of each student's understanding.

2

Choose the pathway

Identify the learning pathway for each student based on the pre-test result and your own observations.

4

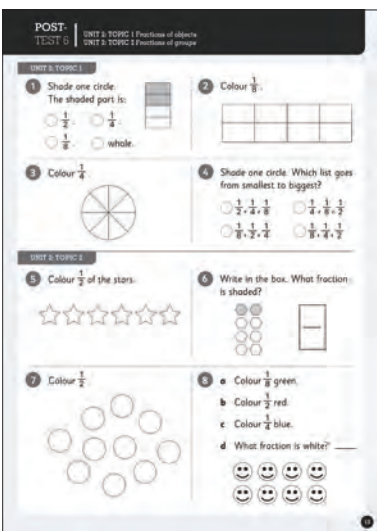
Assess the results

Use the topic post-test to measure student growth and identify areas of further need.

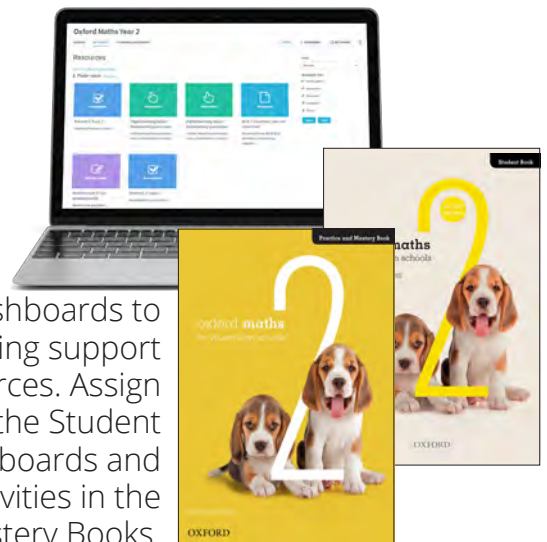
3

Plan and implement teaching

Choose and prepare activities to effectively support student learning at their point of need.



Access the topic post-test via the Assessment Books or the Teacher Dashboards, or direct students to the post-test on the Student Dashboards.



Use the Teacher Dashboards to access lesson plans, learning support and teaching resources. Assign topic-based activities in the Student Books or Student Dashboards and additional practice activities in the Practice and Mastery Books.

MATIFIC WORKS IN ALL SETTINGS



CLASSROOMS WITH NO INTERNET OR TECHNOLOGY

Students have access outside of the classroom. This includes offline on personal tablets and smartphones.



CLASSROOMS WITH DIGITAL WHITEBOARDS

Teachers can incorporate Matific content into lessons as a whole class activity or group work.



CLASSROOMS WITH ONLINE ACCESS LAPTOPS & TABLETS

Teachers can set and monitor individual and group work to be completed in class or at home.

10 REASONS TO IMPLEMENT MATIFIC

1

Carefully translated to the language/s of instruction.

6

Comprehensive professional development for all teachers.

2

Expertly aligned with state and national curriculum.

7

Implementation can be entirely virtual.

3

Locally-based implementation managers and support.

8

2,000+ of digital maths activities, worksheets, word problems, and more

4

Out-of-the-box functionality.

9

Field-tested and academically proven to help increase results.

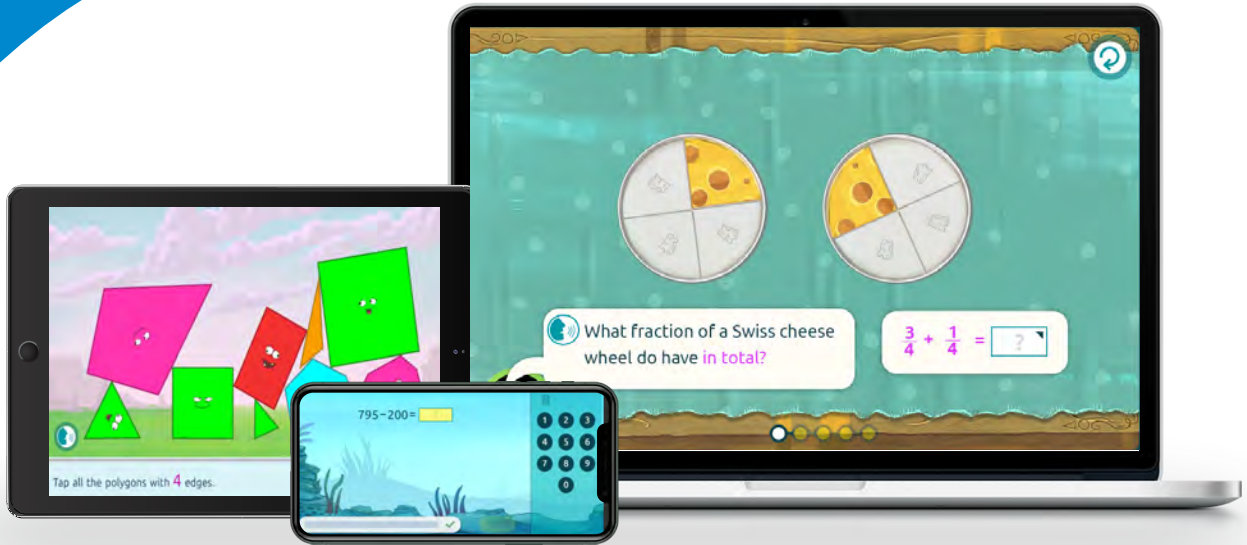
5

Works across all connectivity and device settings.

10

Schools, Teachers, and Students love Matific.

Designed to empower teachers and engage students



Complement your **mathematical instruction**



Innovative teaching tool

Matific provides effective and creative ways to introduce maths concepts. Matific also comes with predefined and easily customisable scope & sequences ensuring students are automatically assigned the right activities at the right time



Engage students

With thousands of interactive activities, worksheets, word problems and many more combined with a rigorous pedagogy, Matific keeps students engaged while exploring core maths skills.



Improve learning outcomes

Matific is developed by pedagogical experts to improve critical thinking and build deep conceptual understanding in mathematics.



Matific is a **multi-award winner**



//CODiE//
2019 SIIA CODIE WINNER



TED
IDEAS WORTH SPREADING

UNIT 7: TOPIC 1 Position



The cat is **on** the chair.

The mouse is **under** the chair.

The dog is **in** the box.





What other words can you use to describe the position of something?



Guided practice

1 Where is:



- | | | | | | |
|---|------------|---|--------------|-------------|------------------|
| a | the bird? |  | on the bench | in the tree | under the car |
| b | the car? |  | in the shed | in the tree | on the bench |
| c | the cat? |  | on the car | in the shed | next to the tree |
| d | the snake? |  | on the bench | in the tree | under the car |

Independent practice

1 In the box below, draw:

a a cat **under** the table.



How would you describe where I am sitting on the page?

b a ball **on** the rug.



c a chair **next to** the ball.



d a book **in** the bookshelf.



e a person **between** the table and the bookshelf.





How many different ways can you describe where the train is?



2 What is:

a next to the brown bear?

b under the robot?

c between the boat and the drum?

d above the ball?

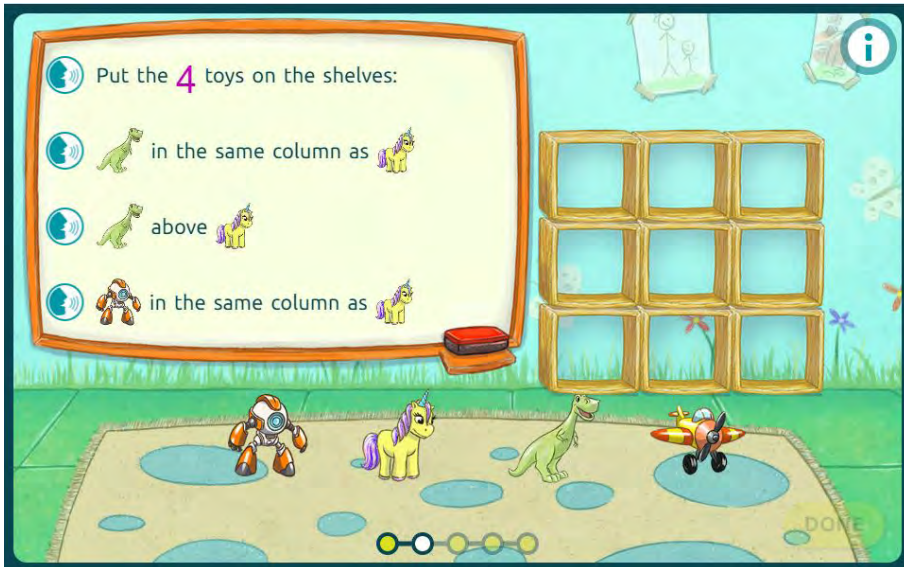
3 Where is:

a the panda?

b the drum?

Matific for Oxford Maths Year 1

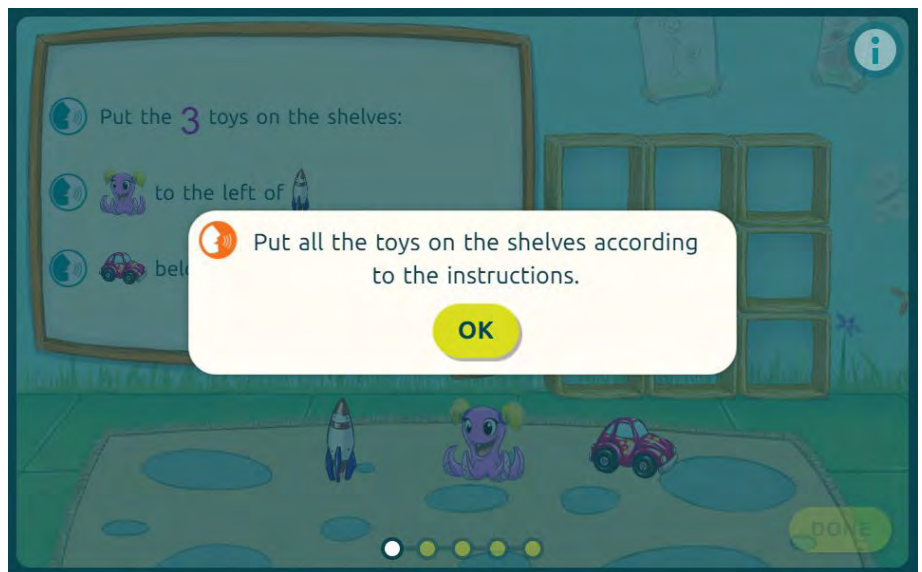
Supporting activity example
Arranging Toys



After completing a topic in *Oxford Maths*, teachers can assign the aligned Matific activity for students to practice what they have learnt in the classroom.

Early Primary activities include voice recordings that will read out the instructions so students can complete the task.

Students can also click on the audio icons next to each task for step-by-step instruction.



Responsive feedback provides hints for students to grow and learn independently.

When students answer a question incorrectly, just-in-time interventions encourage students to identify their mistakes, keep trying, and achieve their learning goals.

UNIT 2: TOPIC 1 Fractions

The **numerator** tells us how many parts we are dealing with.



The **denominator** tells us how many parts a whole or group is divided into.

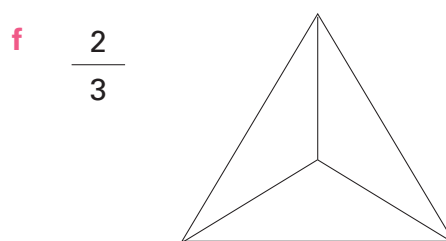
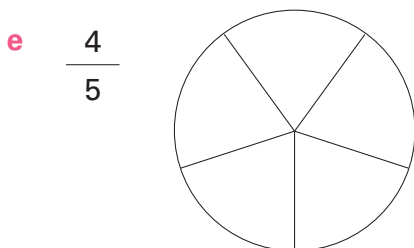
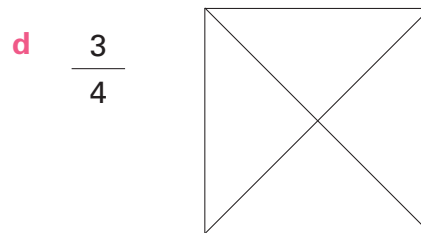
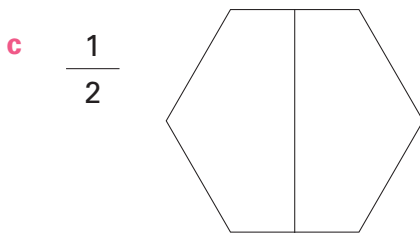
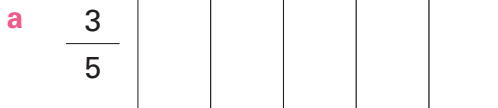


Two-fifths or **2** parts out of **5** are shaded.

The numerator is the top number of the fraction. The denominator is the bottom number of the fraction.

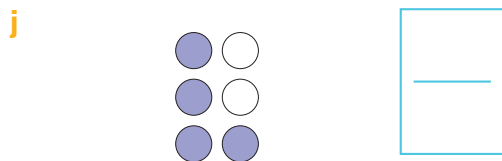
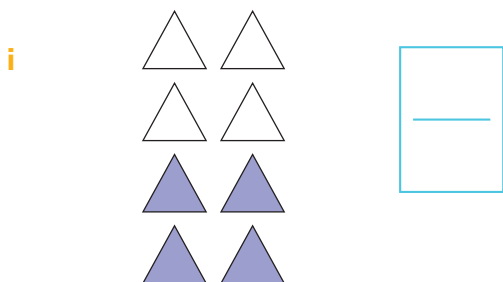
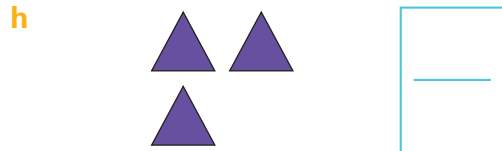
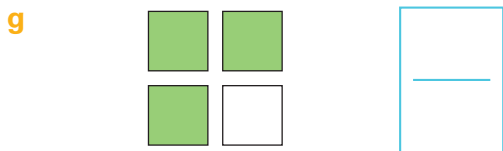
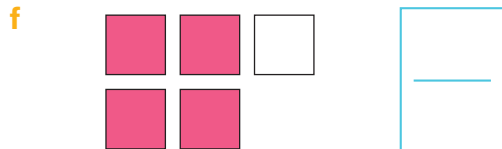
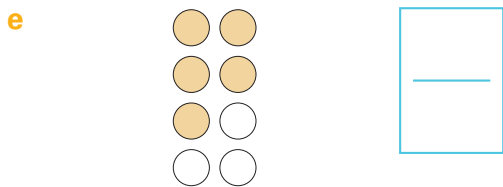
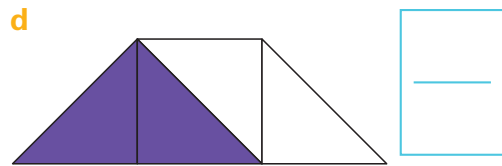
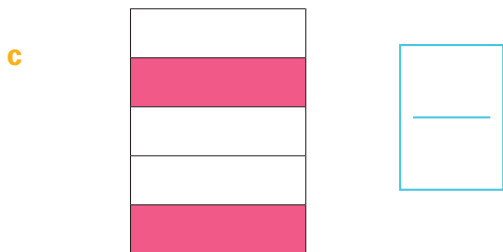
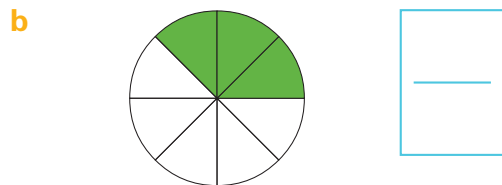
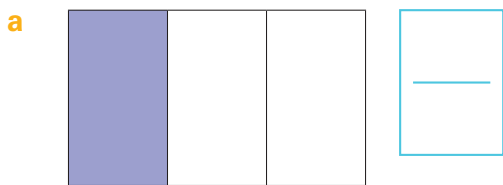
Guided practice

1 Shade the fractions.



Independent practice

1 What fraction is shaded?



2 Draw lines to match each fraction with its picture.

$$\frac{1}{2}$$

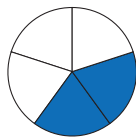
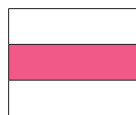
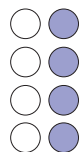
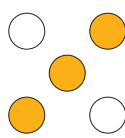
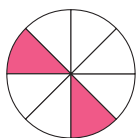
$$\frac{1}{3}$$

$$\frac{3}{4}$$

$$\frac{2}{8}$$

$$\frac{3}{5}$$

$$\frac{2}{5}$$



Remember that the parts of a fraction need to be equal in size.



3 Divide each rectangle into the fraction shown.

a



quarters

b



fifths

c



thirds

d



halves

4 Which fraction in question 3 has:

a the most parts? _____

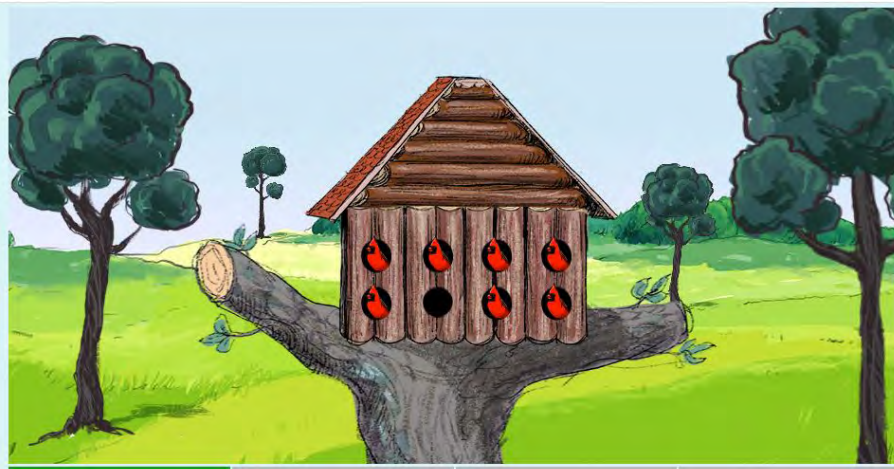
b the least parts? _____

c the smallest parts? _____

d the biggest parts? _____

Matific for Oxford Maths Year 3

Supporting activity example
Birdhouse Fractions

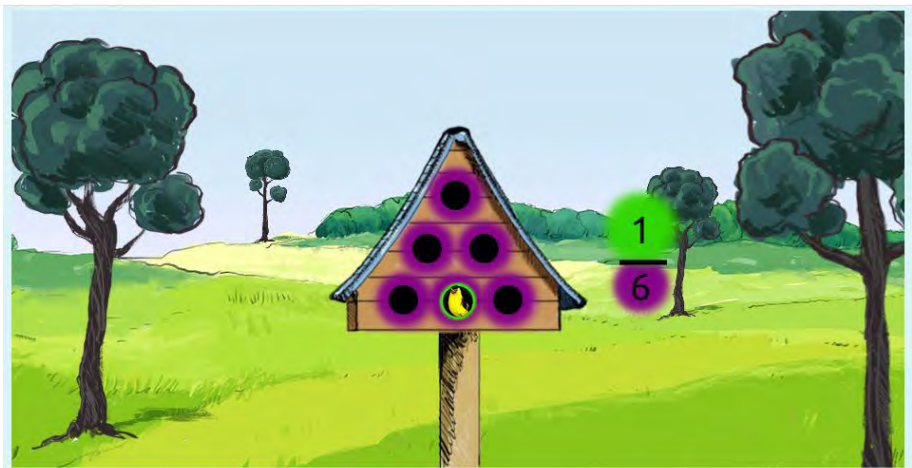


What fraction of the cells have birds in them?

Activities in Matific have been carefully mapped to *Oxford Maths* to ensure that students are undertaking activities that directly support their classroom instruction.

Friendly guidance is always available to help every student experience success in maths.

In this example, students are being shown how to figure out what fraction of the cells have birds in them.



What fraction of the cells have birds in them?

NEXT ▶



Students can play activities over and over again, with fresh questions each time.

Matific activities offer unlimited opportunities for students to focus their efforts and hone their skills.

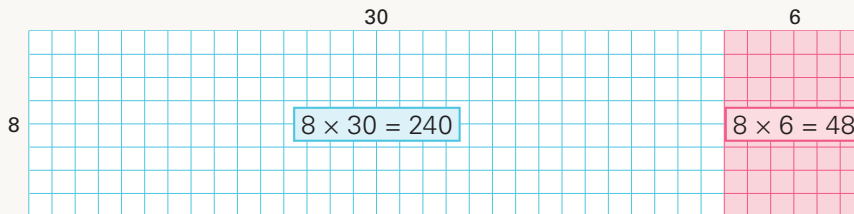
UNIT 1: TOPIC 7

Multiplication written strategies

Area model

You can work out multiplication problems by breaking the numbers down by place value and marking them off on grid paper.

This is called an area model, because as you calculate the total number of squares marked off, you are finding the area of the rectangle.

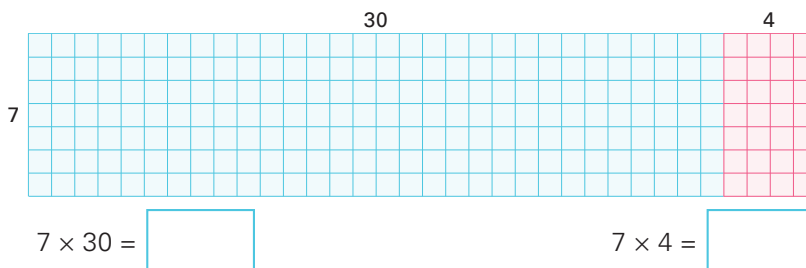


$$\begin{aligned} 36 \times 8 \\ 8 \times 36 &= 8 \times 30 + 8 \times 6 \\ &= 240 + 48 \\ &= 288 \end{aligned}$$

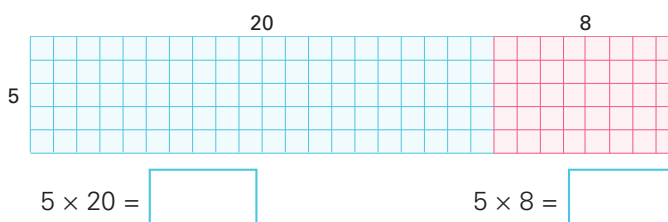
Guided practice

1 $7 \times 34 = 7 \times \underline{\quad} + 7 \times \underline{\quad}$
 $= \underline{\quad} + \underline{\quad}$
 $= \underline{\quad}$

Would I get the same answer if I multiplied by the ones first?



2 $5 \times 28 = 5 \times \underline{\quad} + 5 \times \underline{\quad}$
 $= \underline{\quad} + \underline{\quad}$
 $= \underline{\quad}$



Independent practice

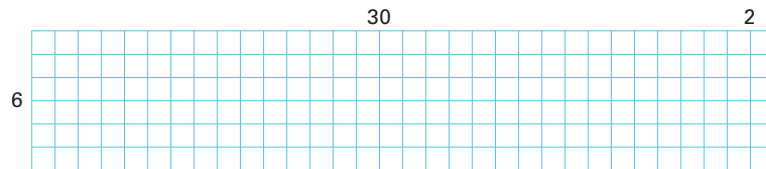
Shade the model and fill in the blanks.

1 6×32

$$= \underline{\quad} \times \underline{\quad} + \underline{\quad} \times \underline{\quad}$$

$$= \underline{\quad} + \underline{\quad}$$

$$= \underline{\quad}$$

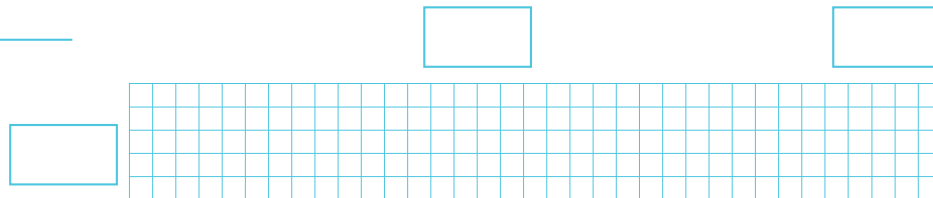


2 5×35

$$= \underline{\quad} \times \underline{\quad} + \underline{\quad} \times \underline{\quad}$$

$$= \underline{\quad} + \underline{\quad}$$

$$= \underline{\quad}$$

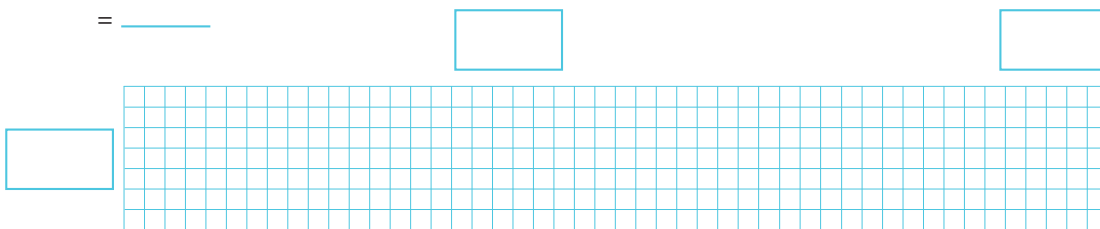


3 7×48

$$= \underline{\quad} \times \underline{\quad} + \underline{\quad} \times \underline{\quad}$$

$$= \underline{\quad} + \underline{\quad}$$

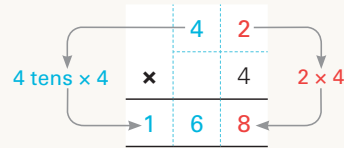
$$= \underline{\quad}$$



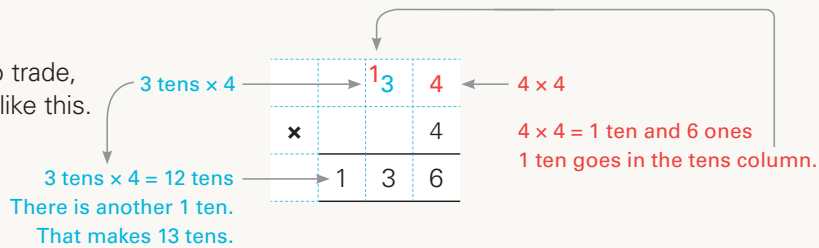
Guided practice

Contracted (short) multiplication

42×4 is the same as 2×4 and $4 \text{ tens} \times 4$, so the answer is 8 plus 16 tens (160). You can make written multiplication short by writing a contracted algorithm. You start with the ones and then multiply each column in turn.



If you need to trade, you can do it like this.



1 Complete the algorithms. Trade if necessary.

a $\begin{array}{r} 143 \\ \times \quad 4 \\ \hline \end{array}$

b $\begin{array}{r} 65 \\ \times \quad 3 \\ \hline \end{array}$

c $\begin{array}{r} 29 \\ \times \quad 2 \\ \hline \end{array}$

d $\begin{array}{r} 92 \\ \times \quad 7 \\ \hline \end{array}$

e $\begin{array}{r} 38 \\ \times \quad 4 \\ \hline \end{array}$

2 Solve these problems in the same way.

a $\begin{array}{r} 125 \\ \times \quad 2 \\ \hline \end{array}$

b $\begin{array}{r} 142 \\ \times \quad 4 \\ \hline \end{array}$

c $\begin{array}{r} 253 \\ \times \quad 3 \\ \hline \end{array}$

d $\begin{array}{r} 325 \\ \times \quad 3 \\ \hline \end{array}$

e $\begin{array}{r} 415 \\ \times \quad 6 \\ \hline \end{array}$

f $\begin{array}{r} 348 \\ \times \quad 2 \\ \hline \end{array}$



It works the same with larger numbers. Start at the ones, and complete each column in turn.

h $\begin{array}{r} 1623 \\ \times \quad 4 \\ \hline \end{array}$

i $\begin{array}{r} 1272 \\ \times \quad 5 \\ \hline \end{array}$

j $\begin{array}{r} 2173 \\ \times \quad 4 \\ \hline \end{array}$

k $\begin{array}{r} 1232 \\ \times \quad 8 \\ \hline \end{array}$

Matific for Oxford Maths Year 5

Supporting activity example
Distributive Stickers

$6 \times 4 = (3 \times 4) + (3 \times 4) = [?]$

Interactive, game-based activities nurture and guide students through a journey of discovery, encouraging students to develop a love for maths.

Spaced repetition is built into an adaptive algorithm so that students review and refresh skills they have already mastered, helping them to consolidate their understanding of mathematical concepts.

$5 \times 6 = (5 \times 3) + (5 \times 3) = [30]$

$8 \times 8 = [?]$

Matific's intelligent algorithm analyses each student's performance and offers them a personalised, adaptive experience, supporting them with remediation, extension, and motivation to help them succeed at their own level of need.

It all starts here

Your next steps

Get started with a 14-day free trial or contact your local Oxford Education Consultant to learn more. Visit:

oup.com.au/oxfordxmatific

Customer Support

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OMXM Evaluation Pack 0122