

# ORIGO RESOURCE CATALOGUE

**NEW!** ORIGO Mathematics Program and Digital Teaching Resource



Foundation–Year 6  
Mathematics

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# We are ORIGO Education

...and we make the best primary mathematics resources around.

We help educators teach maths with ease and with peace of mind.

You can trust we've done our research and know what works best in today's classrooms.

Our simple approach builds on your students' natural language to develop understanding and number sense. It will help you avoid misconceptions; promote confidence with efficient thinking strategies, without using gimmicks, cement concepts and skills with games and practical applications, and the technology used throughout our approach is there to support you rather than replace your instruction.

With ORIGO resources, maths will not only become your students' favourite subject, but it will quickly become *your* favourite subject!

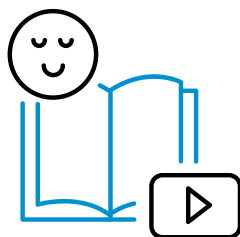
## Our mission

We make learning mathematics *meaningful*, *enjoyable*, and *accessible* for all.

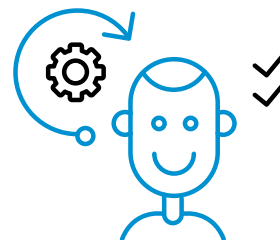
## Our beliefs



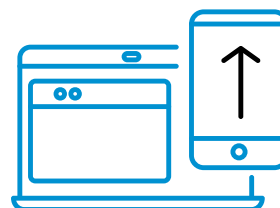
**Learning** is a social process that requires language and discourse.



**Content** taught in a logical, coherent, and learner-friendly sequence inspires student engagement and success.



**Students** who develop strong thinking, problem-solving, and communication skills grow into productive, innovative members of society.



**Technology** empowers rather than replaces educators.

# ORIGO<sup>®</sup> mathematics

Confidently teach across  
learning levels and topics with  
**ORIGO Mathematics.**

Find and teach the right  
mathematics experience for  
every student.



Designed to support differentiated teaching



Engaging lessons that foster depth of learning



Founded on ORIGO's proven teaching approach



**ORIGO Mathematics** is a flexible lesson library of ~1000 learning experiences for Years F-6.

With concise teacher notes, real-world learning experiences, guides for teaching with digital tools, answer keys, and engaging student experiences.



Aligned to the latest curriculums and syllabuses



Easy to use, easy to teach



Works with existing programs and assessment tools



# How does ORIGO Mathematics work?



## **Find.**

**Find the learning experiences you need.**

Search ~1000 learning experiences by topic, year level, curriculum standard, keyword, and more.



## **Individualise.**

**Create unique learning sequences and unit plans.**

Combine learning experiences into targeted lesson plans that meet your teaching goals and the needs of every student.

Or you can use ORIGO's proprietary pre-set learning sequences.



## **Succeed.**

**Start teaching.**

With clearly laid out teacher notes, and engaging student experiences, you will be set up and teaching in no time.



Request a free trial at  
[origoeducation.com.au/origo-mathematics](https://origoeducation.com.au/origo-mathematics)

# Peek inside ORIGO Mathematics

**ORIGO Mathematics** is a digital teaching resource that covers number, algebra, measurement, space, statistics and probability for F–6.

All content is aligned to the latest curriculum and syllabuses.

Each learning experience includes four sections (see below) for teachers, plus print or digital experiences for students.

## Learning Overview

Describes what students will be doing during the learning experience.

Explains real-world and/or mathematical models they will use.

Gives an approximate timing.

## Prerequisites

Outlines the required skills from the General Capability progressions and any prior Learning Experiences that will build knowledge for this lesson.

## Answer Key

Provides the answers for the printable or digital student experience.

## Learning Experience

The screenshot shows the digital interface for a learning experience titled 'FE014 Use Multiples to Generate Equivalent Fractions (Common Denominators)'. The interface is divided into four main sections: Learning Overview, Prerequisites, Resources, and Learning Experience. The Learning Overview section includes a description of the activity and a timing of up to 45 minutes. The Prerequisites section lists General Capabilities: Numeracy (Interpreting fractions Level 6 (P6)) and Critical and Creative Thinking (Draw conclusions and provide reasons Level 3 (P3)). The Resources section lists materials needed: 2 dice and 1 copy of SFE014: Student Experience. The Learning Experience section includes a list of steps for the activity, such as writing shapes, number lines, and multiples across the board, and a question about equivalent fractions. Below the Learning Experience section is an Answer Key section with a printable student experience sheet. The student experience sheet is a grid of fractions with missing numerators or denominators, and students are asked to write the missing values to show equivalent fractions. The grid is divided into four rows, each with a different denominator (10, 12, 15, 20). The fractions are arranged in a way that allows students to find equivalent fractions by multiplying or dividing the numerator and denominator by the same number. For example, in the first row, the fractions are 3/10, 6/10, 9/10, 12/10, 15/10, 18/10, 21/10, 24/10, 27/10, and 30/10. The missing values are circled in red in the original image.

**FE014 Use Multiples to Generate Equivalent Fractions (Common Denominators)**

**Learning Overview** (up to 45 minutes)

Students use multiples to list equivalent fractions for two given fractions, then identify those that share the same denominator. In each example, the first common denominator is less than the product of the two given denominators.

**Prerequisites**

**General Capabilities**

- Numeracy**
  - Interpreting fractions Level 6 (P6)
- Critical and Creative Thinking**
  - Draw conclusions and provide reasons Level 3 (P3)

**Learning Experience**

- Use Multiples and Factors to Find Equivalent Fractions with the Same Denominator [FE013](#)

**Resources**

Each group of students will need:

- 2 dice

Each student will need:

- 1 copy of SFE014: Student Experience

**Learning Experience**

- Write shapes (rectangles), number line, and multiples across the board. Ask, **Who can show  $\frac{1}{4}$  is equivalent to  $\frac{3}{12}$  using each of these representations?** Invite volunteers to show their thinking on the board.
- Have one student in each group roll the dice to generate a fraction less than 1. For example, a roll of 3 and 1 generates the fraction  $\frac{3}{4}$ . The same step is repeated by others in the group until another fraction with a different denominator is formed. Students then work independently to rewrite the two fractions so they share a common denominator.
- Invite volunteers to share their fractions and the strategies they used to find common denominators. Model the strategy of recording equivalent fractions for each fraction until a common denominator is found. Examples are shown in the answer key.
- Students complete SFE014 then discuss their answers. Refer to the Question a. Have students multiply the denominators of  $\frac{1}{4}$  and  $\frac{3}{4}$  and compare the product to the denominators of those fractions they circled. Ask students to share what they notice. Repeat for the other pairs of fractions.

**Answer Key**

For each pair of fractions, write the missing multiples to show equivalent fractions. Then circle the fractions that have the same denominator.

Pair	Fraction 1	Fraction 2	Missing Numerators	Missing Denominators
1	$\frac{1}{4}$	$\frac{3}{12}$	2, 3, 4, 5, 6, 7, 8, 9, 10, 11	8, 16, 24, 32, 40, 48, 56, 64
2	$\frac{1}{6}$	$\frac{2}{12}$	3, 4, 5, 6, 7, 8, 9, 10, 11	18, 24, 30, 36, 42, 48, 54, 60
3	$\frac{1}{8}$	$\frac{3}{24}$	2, 3, 4, 5, 6, 7, 8, 9, 10, 11	16, 24, 32, 40, 48, 56, 64, 72
4	$\frac{1}{10}$	$\frac{2}{20}$	3, 4, 5, 6, 7, 8, 9, 10, 11	30, 40, 50, 60, 70, 80, 90, 100

## Resources

Lists the materials needed and which student experience to use.

**Learning Experience**  
Includes key questions to encourage thinking and classroom discussion.

Appropriate, hands-on activities to deepen understanding.

A reflection to monitor progress and connect to real world or cross-curricula applications.



# ORIGO STEPPING STONES

Welcome to  
**ORIGO Stepping Stones**

*Stepping Stones* has been developed by a team of experts, working with educators, to create a comprehensive program for Years F–6.

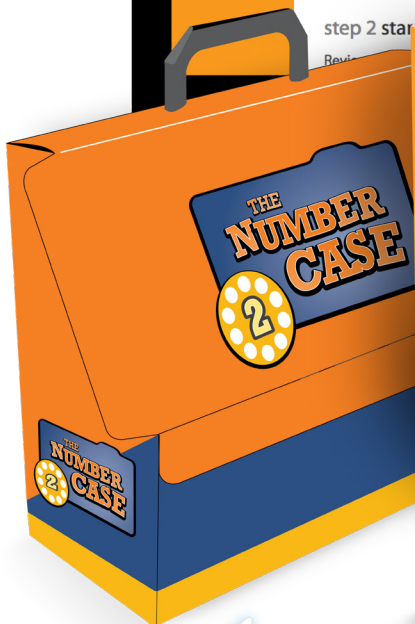
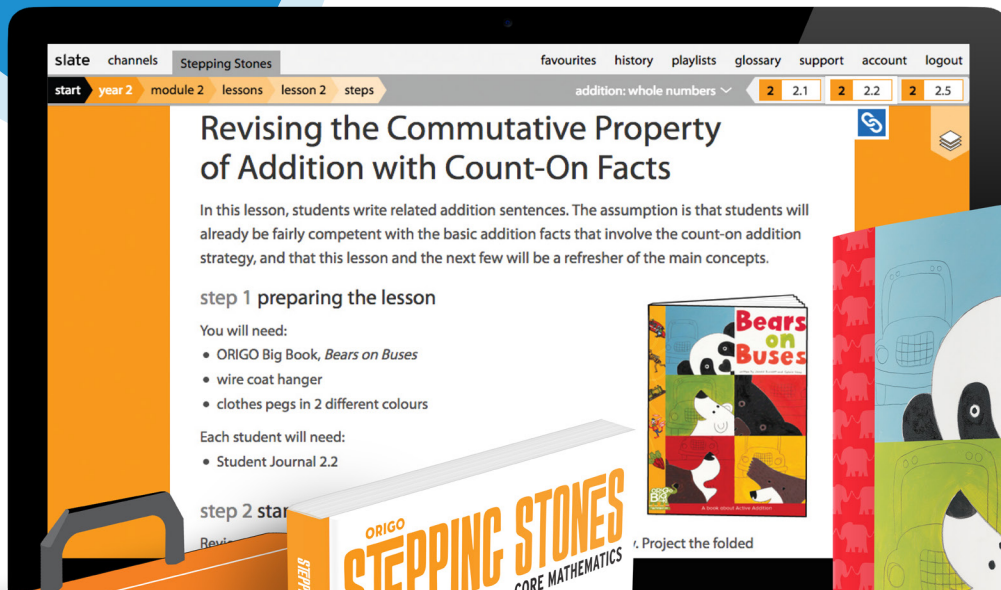




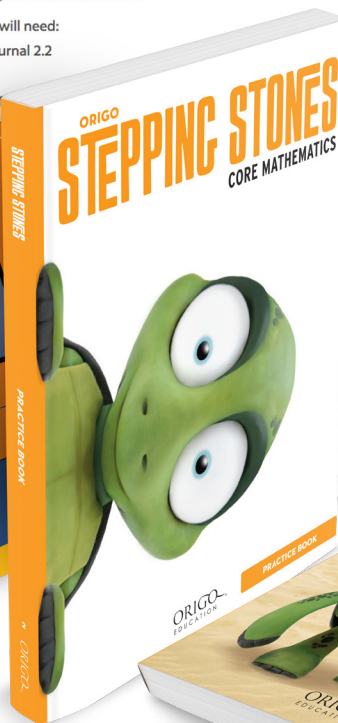
Award-winning  
digital curriculum and  
instructional resources

Digital  
Teacher Edition  
Years F–6

ORIGO Big Books  
Years F–2



The  
Number Case  
Years F–6



Printed  
Practice Book  
Years F–6



Printed  
Student Journal  
Years F–6





$$74 \div 2 =$$





### FOCUS ON LANGUAGE

Start with students' natural language and build over time to the abstract language and symbols of mathematics.

- *ORIGO Big Books*
- *ORIGO Big Book Tools and Tunes*
- Language development activities

### VISUAL MODELS AND TOOLS

Build conceptual understanding through powerful visual models and ready-to-use tools, games, and images.

- *The Number Case*
- *Flare* online tools
- *Fundamentals* game boards

### ENGAGING APPLICATIONS

Support number sense and computational fluency with extendable strategies and meaningful practice.

- Investigations
- Cross-curricula links
- Problem-solving

### RICH ASSESSMENT OPTIONS

Leverage both formative and summative assessment opportunities to quickly assess students' knowledge and skills.

- Interviews
- Observations
- Check-ups
- Performance tasks
- Quarterly tests

### PROFESSIONAL LEARNING

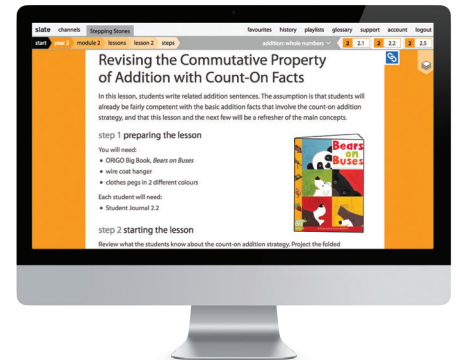
Support teacher efficacy and consistent instruction across and between grades.

- Comprehensive implementation training
- Support for administrators and coaches
- *ORIGO Mathedology* videos
- *ORIGO ONE* videos
- Maths Focus tab

# Teacher experience

## Digital Teacher Edition

- Classroom-ready for **on-demand access** and **interactive displays**
- Intuitive navigation on **any device, anywhere, anytime**
- Instant access to **all Foundation Year to Year 6 content** with your digital subscription



### Year 2, Module 2, Lesson 2 — online at [www.origoslate.com](http://www.origoslate.com)

A screenshot of the digital teacher interface. The interface has a top navigation bar with 'slate', 'channels', 'Stepping Stones', 'favourites', 'history', 'playlists', 'glossary', 'support', 'account', and 'logout'. Below this is a sub-navigation bar with 'start', 'year 2', 'module 2', 'lessons', 'lesson 2', and 'steps'. The main content area is titled 'Revising the Commutative Property of Addition with Count-On Facts'. It includes a box for 'NA030' with the text 'Use the commutative property of addition to write related addition sentences. The assumption is that students will be familiar with the basic addition facts that involve the count-on addition strategy, and that this lesson and the next few will be a refresher of the main concepts.' Below this are four steps: 'step 1 preparing the lesson', 'step 2 starting the lesson', 'step 3 teaching the lesson', and 'step 4 reflecting on the work'. Each step has a list of materials or instructions. A red line points from the 'step 1 preparing the lesson' section to the 'You will need:' list. Another red line points from the 'step 2 starting the lesson' section to the 'Review what the students know about the count-on addition strategy...' paragraph. A third red line points from the 'step 3 teaching the lesson' section to the 'Display pages 6-7 of Bears on Buses...' paragraph. A fourth red line points from the 'step 4 reflecting on the work' section to the 'Discuss the students' answers to Student Journal 2.2...' paragraph. A fifth red line points from the 'step 4 reflecting on the work' section to the 'Ask students to give an example of a turnaround fact...' paragraph. A sixth red line points from the 'step 4 reflecting on the work' section to the 'Cement student understanding with intentional closure conversations.' text at the bottom left.

Identify the learning target/s covered in the lesson.

Review the list of lesson materials to ensure a quick start to instruction.

Launch the lesson with the content of previous learning and great questioning strategies for engaging classroom discussion.

Build conceptual understanding through language-rich learning, visual models, and engaging student-centred activities.

Cement student understanding with intentional closure conversations.

# Student experience

The consumable Student Journals provide written reflection on the lessons and a consumable Practice Book further cements knowledge. Each year level provides 12 modules of instruction and includes a student glossary with written definitions, examples, and visual representations. Available in print and digital.



## Years 1–6 instructional design

### Lessons

**Step In** provides teachers with guided discussion points that set the scene for the lesson. The Step In can be projected from the Digital Teacher Edition so each point or question can be discussed one step at a time with the whole class.

**Step In** Revising the Commutative Property of Addition with Count-On Facts

Look at these clotheshangers. What do you notice?

What addition facts could you write to match?

What do you call a pair of facts like this?

These are called turnaround facts. Turnaround facts have the same parts and the same total.

**Step Up** I. Write two addition facts to match each picture.

a.  $4 + 2 =$   $2 + 4 =$

b.  $3 + 1 =$   $1 + 3 =$

c.  $5 + 1 =$   $1 + 5 =$

d.  $4 + 1 =$   $1 + 4 =$

**Step Ahead** Write the turnaround facts.

a.  $14 + 2 = 16$  b.  $3 + 9 = 12$  c.  $6 + 2 = 8$

Is the turnaround for  $0 + 5 = 5$   $12 + 9 = 3$   $4 + 4 = 8$

d.  $4 + 1 = 5$  e.  $2 + 8 = 10$  f.  $0 + 3 = 3$

Is the turnaround for  $1 + 4 = 5$   $4 + 4 = 8$

**Step Ahead** provides an additional task for students to develop higher-order thinking skills.

**Step Up** provides work for students to complete individually, or with guidance, based on the discussion that was generated in the Step In.

### Practice Book

Opportunities for practice after every lesson:

- **Computation Practice** for fluency
- **Ongoing Practice** for maintaining concepts and skills

I. Complete each fact family. Write the matching fact family.

a.  $11$   $2$

b.  $9$   $7$

c.  $2$   $5$

2. Count back in steps of 10. Write the numbers you say.

a. 67 57

b. 51 41

c. 85 75 65

d. 99 89 79

3. Add the groups. Then write an addition number fact to match.

a.  $4 + 3 = 7$

b.  $2 + 3 = 5$

ORIGO

# Stepping Stones Resources



Resources that support and strengthen  
the Stepping Stones experience



# ORIGO Big Books and Online Tools

YEARS F–2

*ORIGO Big Books* are large-format story books that develop and reinforce mathematical language and understanding.

*ORIGO Big Book Online Tools* bring to life characters and concepts from the books. Easy-to-use tools set the stage for purposeful play and learning.

*ORIGO Big Books and Online Tools* provide:

- 12 books for each year, Foundation to Year 2
- a language-rich approach to introduce and engage children with maths concepts
- seamless use of rhythm, rhyme, and repetition to support key literacy skills
- concise teacher notes, which include a variety of activities to accommodate all classrooms
- digital teaching tools that enhance 21st century learning



Easy-to-use online tools accessible on all digital devices

For a complete list of *Big Books* titles and topics, visit: [origoeducation.com.au](http://origoeducation.com.au) and search for *Big Book* sets

# The Number Case

YEARS F–6

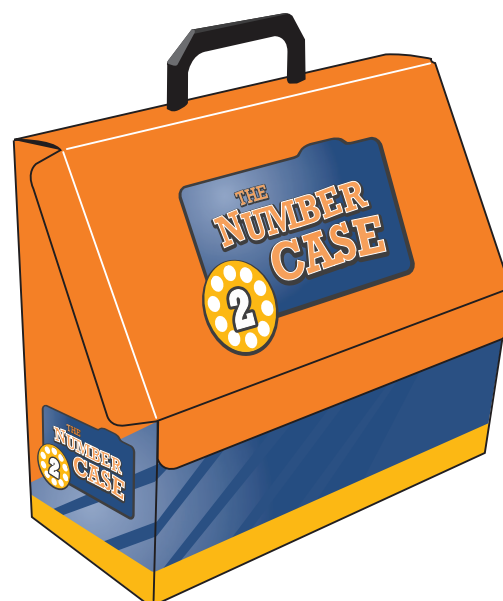
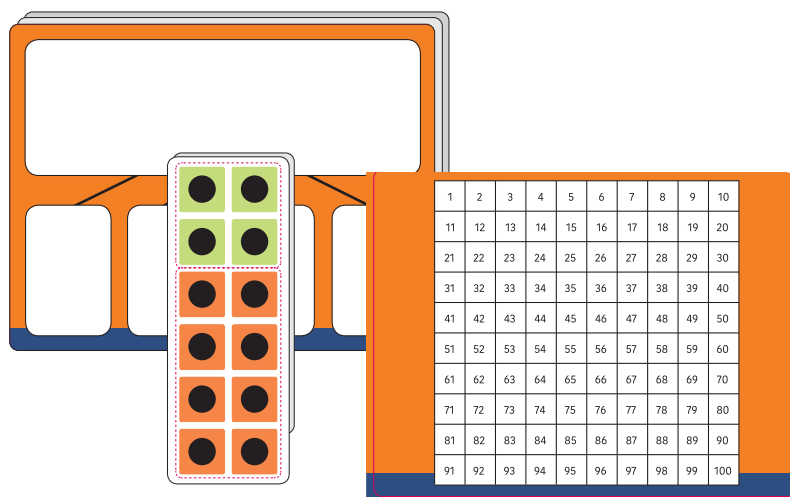
*The Number Case* gives teachers ready-made resources to help students develop an understanding of number and operations. Some of these resources, like ten-frames, may be well known but *The Number Case* also comprises of many other visual models which develop thinking strategies for computation and are unique to ORIGO Education.



\*product packaging may differ to pictured above

*The Number Case* includes:

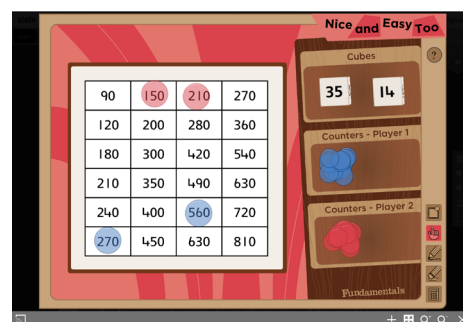
- demonstration cards for whole-group discussion
- mix-and-match cards
- cards for concept development
- cards for practice and reinforcement
- some cards have a write on/wipe off finish.



For a complete list of  
*The Number Case* components, visit:  
**[origoeducation.com.au/  
the-number-case-sample](http://origoeducation.com.au/the-number-case-sample)**

# Fundamentals

**Fundamentals** games are an easy and fun way for students to develop computational fluency. These engaging activities help you differentiate instruction while students make meaningful maths connections before, during, and after each game.



# Flare

*Flare* is an online interactive whiteboard collection of mathematics teaching tools. Each tool is easily customised to enhance any maths lesson and can be used on a single computer or projected.

# Mathedology

*Mathedology* is a growing library of maths professional development sessions on contemporary primary school mathematics.

This invaluable resource gives you unlimited access to 60 mathematical workshops (10–20 minutes in length). These dynamic sessions will provide you with the practical skills to help you develop deeper understanding in the classroom.





# Animated Big Books

## ***Bring maths instruction to life with Animated Big Books!***

ORIGO Animated Big Books for Foundation–Year 2 are designed to teach maths skills conceptually and in a logical, learner-friendly sequence that develops deep understanding and success.

Now you can share the love of reading in the classroom and at home. Our earliest learners are engaged in discourse and discussion about mathematical ideas like never before!



## **Use a language approach to develop conceptual understanding of mathematics with narrated big books featuring embedded guiding questions**

The Animated Big Books feature an avatar of teachers, one of which is ORIGO Education co-founder and co-author of the Big Book series, James Burnett.

The avatars not only read the stories, but they pause after each page to engage learners with thoughtful questions.

Children begin by using their own natural language to describe mathematical concepts. As we share and act out the stories in the Big Books, we add to their language and mental picture of the concept.



Then we add more mathematical and symbolic language to build a deeper and more comprehensive understanding of the concept. Because language is the tool that learners use to connect new ideas to existing ideas, the *Animated Big Books* provides extensive opportunities with engaging visuals, rich questions, and catchy tunes.

*"I've been using the Animated Big Books in my second stage of learning which is my reinforcement and practice stage. I find the Animated Big Books to be a powerful teaching tool – with minimal prep, creating a relevant and enjoyable lesson with great learning engagement. The books are a big hit in the classroom – every child is engaged during those particular lessons."*

**Tina Barron, QLD**



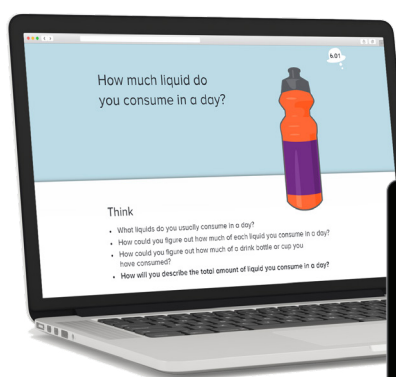
# Thinking Caps

YEARS 1–6

*Thinking Caps* is a sequence of maths investigations designed to foster primary students' abilities to *think* about mathematics.

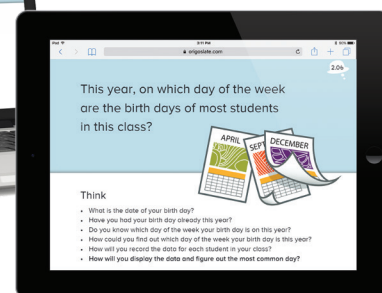
Each investigation includes projectable questions to get students solving problems, communicating, reasoning, and understanding the mathematics they are learning and applying it to the world outside the classroom.

Delivered online, *Thinking Caps* provides teachers with easy access to a library of 140 investigations covering a range of concepts aligned to the Australian Curriculum.



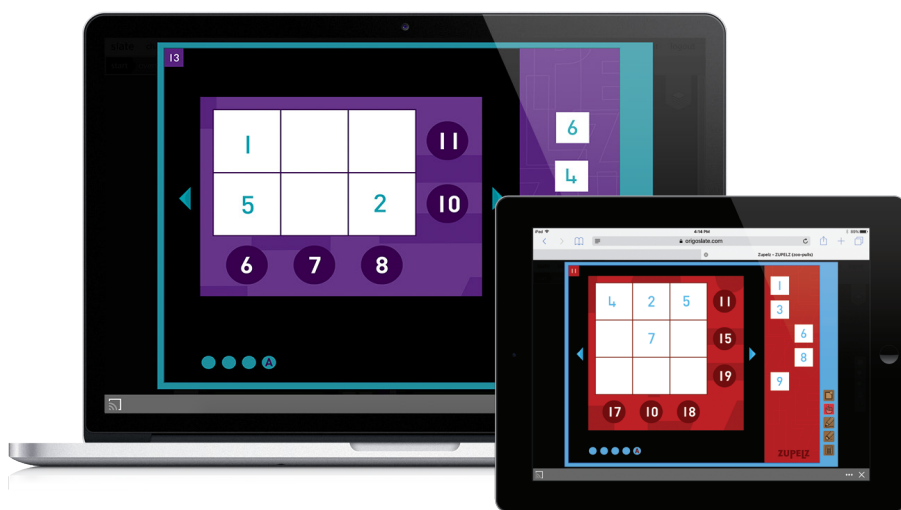
*Thinking Caps*

Using an inquiry approach to foster mathematical thinking



YEARS F–6

# Zupelz (“zoo-pulls”)



These carefully sequenced puzzles develop the logical thinking important to students' number sense. Use this online tool to stimulate whole-class discussion, to provide collaborative opportunities for small groups, and to challenge individuals. Clues can be revealed during the problem-solving process to scaffold learning. *Zupelz* gives access to all 600 puzzles across all year levels.

# CueThink

CueThink® is a leading educational technology brought to you from the USA. This problem-solving application methodology is based on Professor George Polya's four phases of problem-solving: understand, plan, solve, and review. The phases encourage students to take the time to explain their thinking.



# ORIGO EARLY LEARNING RESOURCES



Mathematics Resources  
for Children aged 3-5

# Early Learning Resources

Ideal for children aged 3-5, our Early Years products are intended for educators looking to teach mathematics conceptually and striving to build strong foundations.

Student-centred, hands-on learning experiences coupled with our unique approach to developing mathematical concepts through language, define each product.

ORIGO Education's Early Years Learning products are for educators who truly value quality.



**Develop school readiness with ORIGO Education's Early Years products.**

## Early Learning Big Books

*ORIGO Big Books for Early Learning* build on children's natural love for learning and stories to introduce key mathematical concepts. These large-format storybooks develop and reinforce mathematical language and understanding.

Encourage your little learner's love of rhyme, rhythm and engaging stories with Big Books and Tunes for Early Learning.

The Animated Big Books use captivating language and pictures to introduce key maths language and ideas, while encouraging participation through accompanying tunes and interactive online activities.



## Early Learning Big Book Tools and Tunes

*ORIGO Big Books for Early Learning Teaching Tools and Tunes* bring to life characters and concepts from the books. These engaging and easy-to-use interactive tools make the most of young students' enthusiasm for play and learning. The series is also supported by teacher notes, which will help you reinforce and extend new learning through classroom activities – some using the interactive tools.



## Early Learning Big Poster Book

The *Early Learning Big Poster Books* are engaging short stories that use rich language, vibrant pictures, and accompanying songs to introduce key mathematical concepts. The unique design of these resources allows educators to share each story, like a book, then expand the pages to display them as a poster.

This series is also supported by play-based activities that help educators reinforce and extend new learning through classroom interaction and discourse.



## Early Learning Big Poster Book Tools and Tunes

*ORIGO Big Books for Early Learning Teaching Tools and Tunes* bring to life characters and concepts from the books to build a deeper and more comprehensive understanding of the concept. Because language is the tool that learners use to connect new ideas to existing ideas, ORIGO Animated Big Books provides extensive opportunities with engaging visuals, rich questions, and catchy tunes.



## Big Cubes and Cards

*ORIGO Big Cubes and Big Cubes Cards* are the perfect resource to help children generate random outcomes for mathematical discussions. As children engage with these large-format cubes, the cards inserted into the soft-pocket sides provide rich opportunities for mathematical language and child-centred discourse.

With 39 sets of image, number, and language-based card sets, *ORIGO Big Cubes and Cards* can be scaled to different levels and early learning environments.

By placing the cards inside the clear pockets of cubes, educators can create an inspiring, interactive and fun activity that seamlessly introduces opportunity for structured discussion around the random outcomes the *Big Cubes and Cards* deliver.



Visit [origoeducation.com.au/early-learning/](http://origoeducation.com.au/early-learning/)  
or call 1300 674 461 to find out more.



# ORIGO SUPPLEMENTAL RESOURCES



Foundation–Year 6  
**Mathematics**

# The Think Tanks

YEARS 1–6

The *Think Tanks* provide ready-to-use opportunities for Year 1 to Year 6 students to apply learning, foster thinking skills, and increase procedural fluency. Students engage in problem situations requiring them to reason mathematically and quantitatively.

The *Think Tanks* are split into four distinct categories to effectively cover mathematical practices and processes and builds concepts and reinforces operational skills for number sense and mental maths skills.

This great classroom teaching resource for core maths programs comes in four categories and is organised into 12 sets of 20 cards in each box.

The activities on each card increase in difficulty from one set to the next for scaffolded independence. These flexible and powerful exercises are suitable for whole group, small group, or independent work and complement any core mathematics program. A Teacher Notes card is provided to offer implementation support.

## Each box contains:

- 240 laminated problem cards
- a reproducible student progress chart
- key problems for student portfolios
- teacher notes
- answer cards



**1**  
**Measurement and  
Geometric Thinking**  
builds spatial reasoning  
and precision.



**2**  
**Computation and  
Number Sense**  
reinforces  
mental maths  
and reasoning.



**3**  
**Reasoning with  
Fractions**  
builds concepts and skills  
of fractions, decimals, and  
ratios.



**4**  
**Thinking  
Mathematically and  
Problem-Solving**  
develops thinking and  
reasoning skills across  
the maths curriculum.

## There is so much thinking *INSIDE* a box!

**Meaningful opportunities for students to apply learning, foster thinking, and increase procedural fluency**

- All mathematical strands represented.
- Focused on thinking mathematically through fractions, problem-solving, number sense, computation, measurement, and geometry exercises.
- Engaging and fun for students with imaginative categories: Quick Thinkers, Speedy Starters, Brain Builders, Mental Teasers, Mind Benders, Head Sharpeners, Pace Setters, Fast Figures, Number Jugglers, Wise Workers, Super Solvers, and Grand Masters.



**Easy preparation for teacher:**

- Flexible implementation.
- Support and application of/with mathematical practices.
- Available for Years 1–6.

**5**

Place counters on pairs of numbers that **add to 10**.

Which number is **not** covered?

Computation and Number Sense © ORIGO Education Yellow Tank

COMPUTATION AND  
NUMBER SENSE, Year 1

**9**

Which stack of cubes matches these 3 views?

MEASUREMENT AND GEOMETRIC THINKING, Year 6

MASTER MINDS

**19**

Linda has more than 6 sports cards.  
When she puts the cards in groups of 4,  
she has no cards left.  
When she puts the cards in groups of 5,  
she has 2 cards left.

a. What is the least number of sports cards Linda could have?  
b. Write how you figured it out.

Thinking Mathematically and Problem Solving © ORIGO Education Green Tank

THINKING MATHEMATICALLY AND  
PROBLEM SOLVING, Year 3

**3**

Look at these sale items.

Pretend you had a coupon for **5%-off** the marked price.  
Figure out how much you would **save** if you bought the

a. camera. b. skateboard.  
c. in-line skates. d. watch.

Computation and Number Sense © ORIGO Publications Blue Tank



# The Book & Box of Facts Strategies

The new and improved *Book and Box of Fact Strategies* series seamlessly builds the foundational understanding and skills of fact fluency. Engaging **print and digital** activities are organised into an easy-to-use teaching sequence designed to promote effective retention. Students build confidence as they use the powerful visual models to develop fluency with the number facts.

This resource can be easily integrated into any core mathematics program. It can be used for general instruction, intervention, or remediation with the whole group, small groups, or individuals.

The *Book and Box of Fact Strategies* is a collection of ready-made visual aids to assist teachers in helping students to develop mathematical thinking strategies for basic facts in addition and subtraction. The use of these visual aids reinforces student practice of the basic facts with larger numbers.

The math strategies chosen for the *Book and Box of Fact Strategies* are efficient, effective, and extensively researched in how students learn best.

The *Book and Box of Fact Strategies* provides a variety of engaging activities and games. They are organised into an easy-to-use teaching sequence that is designed to help students build fluency with number facts.



## The Box of Facts sets includes:

- Fact Cards – 55 fact cards
- Hundred charts (1-100: empty) – 15 cards
- Number lines (0-100: empty) – 30 cards
- Sharing mats and grouping mats – 15 cards
- Sharing mats – 15 cards
- Strategy cards – 14 cards
- Step-by-step instructions on how to use the cards

## Addition and Subtraction



### COUNT-ON STRATEGY CARDS

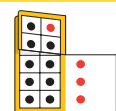


Strategy cards to develop and reinforce the 64 count-on facts.

### SUBTRACTION FLASH CARDS

$$7 - 2 = \underline{\quad}$$

Subtraction flash cards for essential practice.



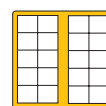
Strategy cards to develop and reinforce 24 bridge-to-ten facts.

### MISSING-ADDEND SUBTRACTION CARDS

$$9 + \underline{\quad} = 12$$

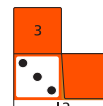
Strategy cards to develop and reinforce the think-addition strategy.

### BRIDGE-TO-TEN FRAMES



A class set of ten-frames (30) to develop and reinforce the bridge-to-ten strategy.

### THINK-ADDITION SUBTRACTION STRATEGY CARDS



Strategy cards to develop and reinforce the think-addition strategy.



# The Book of Facts

The *Book of Facts* series develops thinking strategies for the addition, subtraction, multiplication, and division number facts. Students expand their skills and confidence by engaging in activities and games that introduce, reinforce, practice, and extend their thinking strategies.

The *Book of Facts* series also compliments the resources included in *The Box of Facts*. Use these with ready-made *Box of Facts* cards, or make your own cards with the blueprints provided.

## Included in each book, for each strategy are:

- mathematical background and definitions of terms
- prerequisite activities
- introduction, reinforcement, practice, and extension activities
- reproducible blackline masters
- assessment and recording options



*Help students readily learn basic number facts with the lessons and powerful visual models in The Box and Book of Fact Strategies.*

# Multiplication and Division



### USE-TENS STRATEGY CARDS



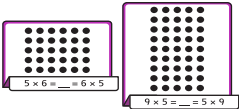
Strategy cards to develop and reinforce all the fives facts and their turnarounds.

### MISSING-FACTOR DIVISION CARDS



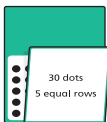
Strategy cards to develop and reinforce the think-multiplication strategy.

### BUILD-UP/DOWN STRATEGY CARDS



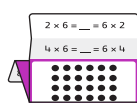
Strategy cards to develop and reinforce all the sixes and nines facts, and their turnarounds.

### THINK-MULTIPLICATION DIVISION STRATEGY CARDS



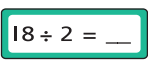
Strategy cards to develop and reinforce the think-multiplication strategy.

### DOUBLING STRATEGY CARDS



Strategy cards to develop and reinforce all the twos, fours and eights facts, and their turnarounds.

### DIVISION FLASH CARDS



Division flash cards for essential practice.

# Algebra for All

YEARS 1–6

The *Algebra for All* activity books are a set of six books filled with teacher instructions and sequenced algebra activities for Year 1 to Year 6. This set is the perfect companion resource for any mathematics curriculum or program, and is excellent for extension activities.

Each book features four chapters that focus separately on the main ideas of early algebra: equivalence and equations, properties, patterns and functions, and representations.

Each *Algebra for All* activity book includes:

- 30 activities
- 30 reproducible blackline resources
- answers for the activity sheets
- informal assessment guidelines
- individual assessment record



# Mathematics for Young Minds

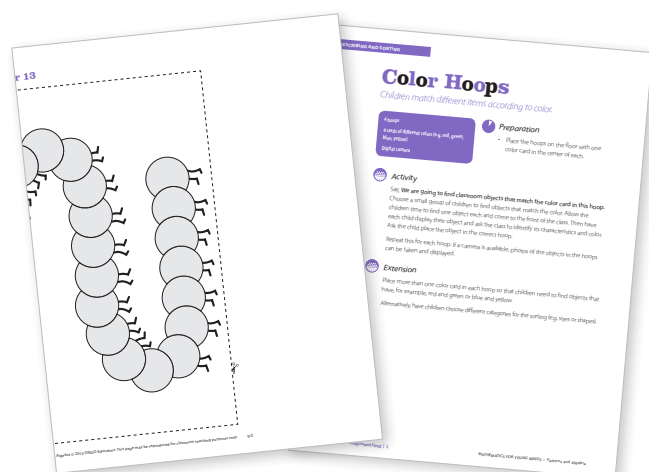
YEARS F–1

The *Mathematics for Young Minds* set is a collection of six teacher instruction activity books for Foundation Year to Year 1. The books cover the following topics:

- patterns in algebra
- data and chance
- measurement
- space and shape
- numbers
- beginning processes

Each book in the *Mathematics for Young Minds* set includes:

- individual, small-group, and whole-class activities
- reproducible blackline masters
- mathematical background and research base
- informal assessment guidelines



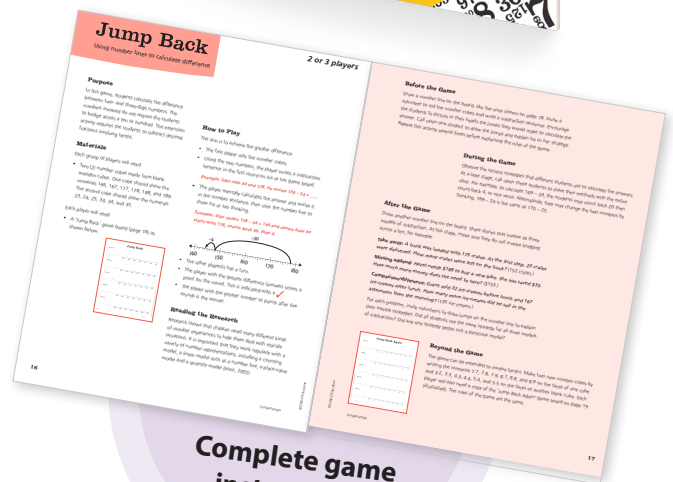
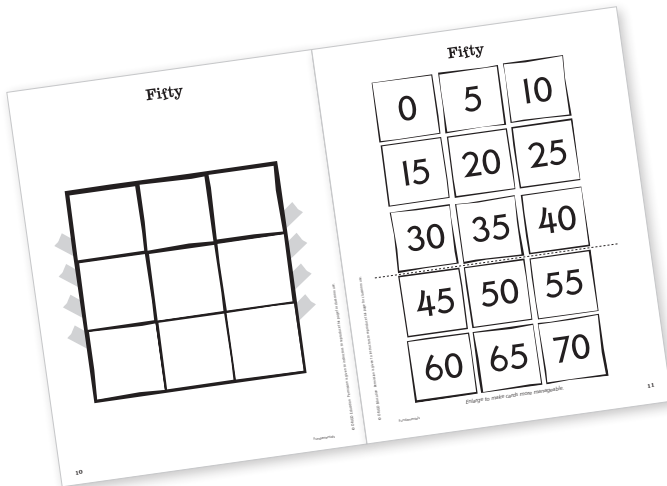
# Fundamentals

YEARS F–6

*Fundamentals* games are an easy and fun way for students to develop computational fluency. These engaging activities help differentiate instruction for any core maths program and students make meaningful maths connections before, during, and after each game.

Each printed *Fundamentals* book includes:

- 14 year-level-appropriate games plus variations and extensions for 2, 3, and 4 players
- 28 reproducible blackline masters
- implementation and maths connection tips for teachers



Complete game instructions



# Step It Up!

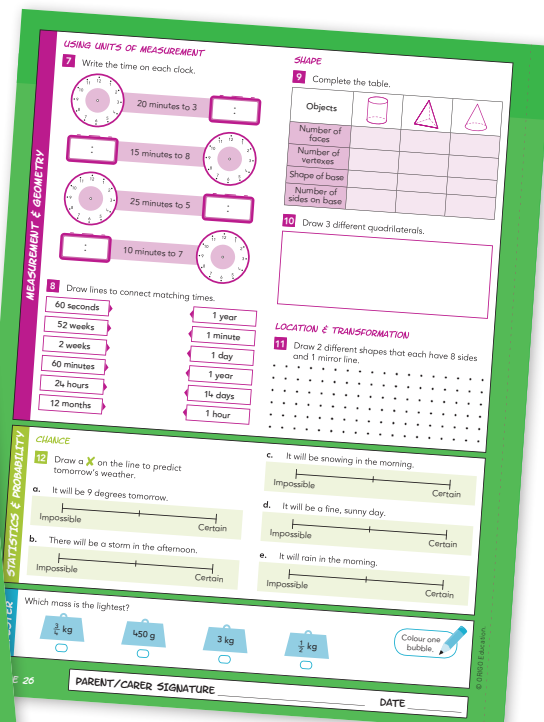
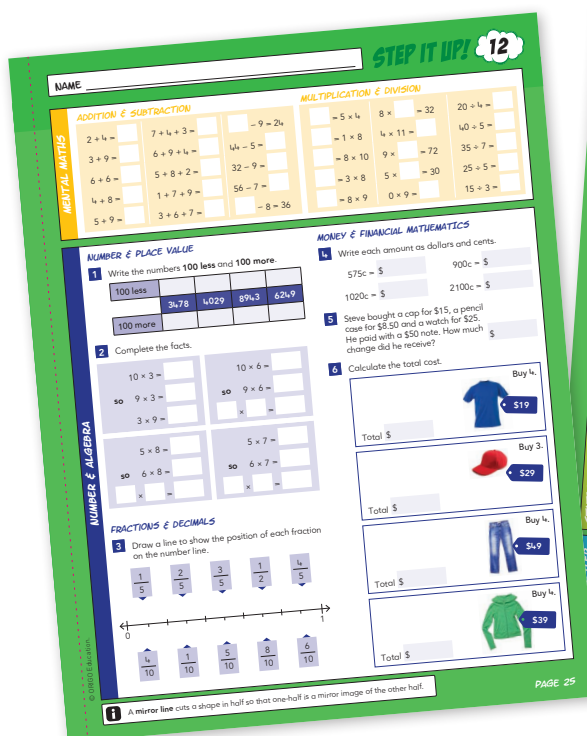
YEARS 2–6

*Step It Up!* workbooks give students the extra mathematics practice required to develop their understanding of the concepts and fluency of mathematic skills.

*Step It Up!* addresses all three strands of the curriculum and includes essential number fact and mental practice.

The *Step It Up!* resource has the following key features:

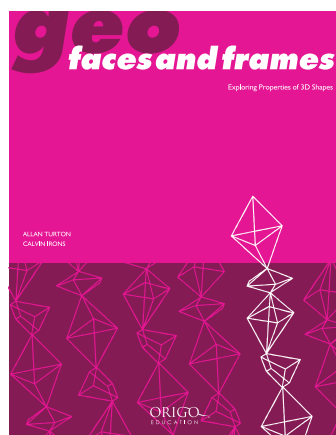
- 32 double-sided worksheets
- perforated pages to facilitate ongoing practice at home
- 1 NAPLAN practice question on each worksheet
- 1 double-sided review worksheet for each quarter
- Years 3 and 5 include an 8-page practice test for NAPLAN
- ‘Mental Maths’ and useful tips to assist students and parents
- online answer keys for quick and easy marking
- engaging full colour design with a page of stickers and labels in each book



# GEO Series

YEARS 3–6

*GEO Series* for Year 3 to Year 6 is a collection of four teacher activity books for developing skills and understanding in geometry. The *GEO Series* is designed to help teachers make geometry an essential part of their mathematics curriculum and supports STEM understanding of spatial relationships—teaching students to look and think about structural objects in a more creative way.

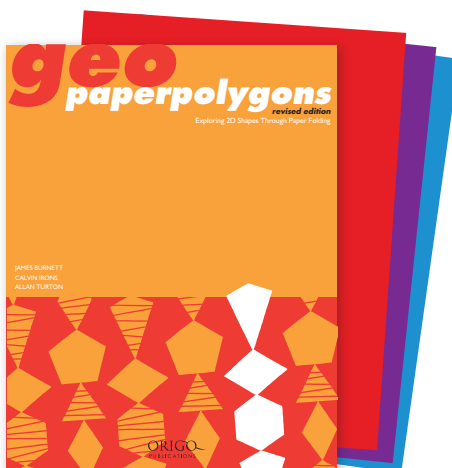


The set includes 4 activity books covering the following topics:

- faces and frames
- all about angles
- plane puzzles
- paper polygons

and includes this resource:

- GEO metric paper (available with the paper polygons activity book set)



Each activity book includes:

- whole-class, small-group, and individual activities
- reproducible blackline masters
- glossary of geometry terms

A unique design using three-fold kites  
from *GEO Paperpolygons*



# Dominoes Series

YEARS F–6

*Dominoes* are ideal for strengthening knowledge through games and discussions. Students benefit greatly from exposure to these different visual representations of number.

Our *Dominoes* suite includes:


- Double-nine dot dominoes set
- Five-and-ten-frame dominoes
- Word, symbol, and dot dominoes set
- *A Little Book of Big Ideas* (activities for double-nine dot dominoes)
- *ORIGO Dominoes Activity Book* (activities for word, symbol, and dot dominoes and five-and-ten-frame dominoes)



More available at  
**[origoeducation.com.au/shop](https://origoeducation.com.au/shop)**

# ORIGO PROFESSIONAL LEARNING

ORIGO Education offers tailored comprehensive professional learning programs that are built from the latest research on mathematics teaching and learning. Our team of learning service educators offer coaching sessions, strategies to leverage supplemental resources, and embedded on-demand support to meet the unique needs of each school with whom we work. Check out the below options for both free and paid professional learning opportunities.

A man with glasses and a dark suit is holding a ten-frame and a multiplication card. The ten-frame is a 2x5 grid of dots. The multiplication card shows the equations 4 x 10 = and 10 x 4 =.

**James Burnett**  
Founder, ORIGO  
Education

Your partner in primary mathematics professional learning opportunities.



# Webinars

ORIGO Education regularly holds webinar series which educators are invited to attend in person or watch the recording. We are proud to offer free webinars that provide attendees with a brief dive into a mathematics topic as well as a longer, more in-depth webinar series which are designed to provide educators with a higher level of professional learning.

Our webinars are hosted by our Senior Authors who are experts in primary mathematics.



# Free Resources



## ORIGO Mathedology instructional videos

*ORIGO Mathedology* is an online professional learning library featuring over 100 sessions on contemporary topics in primary mathematics. These short sessions explain instructional strategies designed to deepen content understanding, and easy-to-follow facilitator notes guide peer collaboration. This key resource for improving teaching skills is included within the *ORIGO Stepping Stones* digital teacher licence.

## ORIGO ONE videos

These animated one-minute videos can refresh teacher's knowledge, help student understanding, and links can be shared at home to grow family connections and support in mathematics learning.



## edWeb Webinars

Conducted by curriculum and content specialists, our webinars cover approaches to mathematics and their application in the classroom. Sign up to edWeb now to access this valuable professional learning resource. [www.edweb.net/mathlearners](http://www.edweb.net/mathlearners)



# Your Facilitators

## James Burnett

Over the past two decades James Burnett has authored and co-authored more than 300 mathematics resources for teachers and students aged 5 to 12 and regularly speaks to audiences across Australia and North America.

James aims to lift the profile of mathematics through dynamic professional learning and the development of quality print and innovative digital resources for the classroom.



## Dr Calvin Irons

Calvin Irons has been involved in mathematics education for over 50 years. He started his career as a specialist teacher of mathematics in Iowa after completing his BA, and MA at the University of Northern Iowa in 1967. Dr. Irons received his PhD from Indiana University in 1975 (his dissertation topic was the teaching of division).

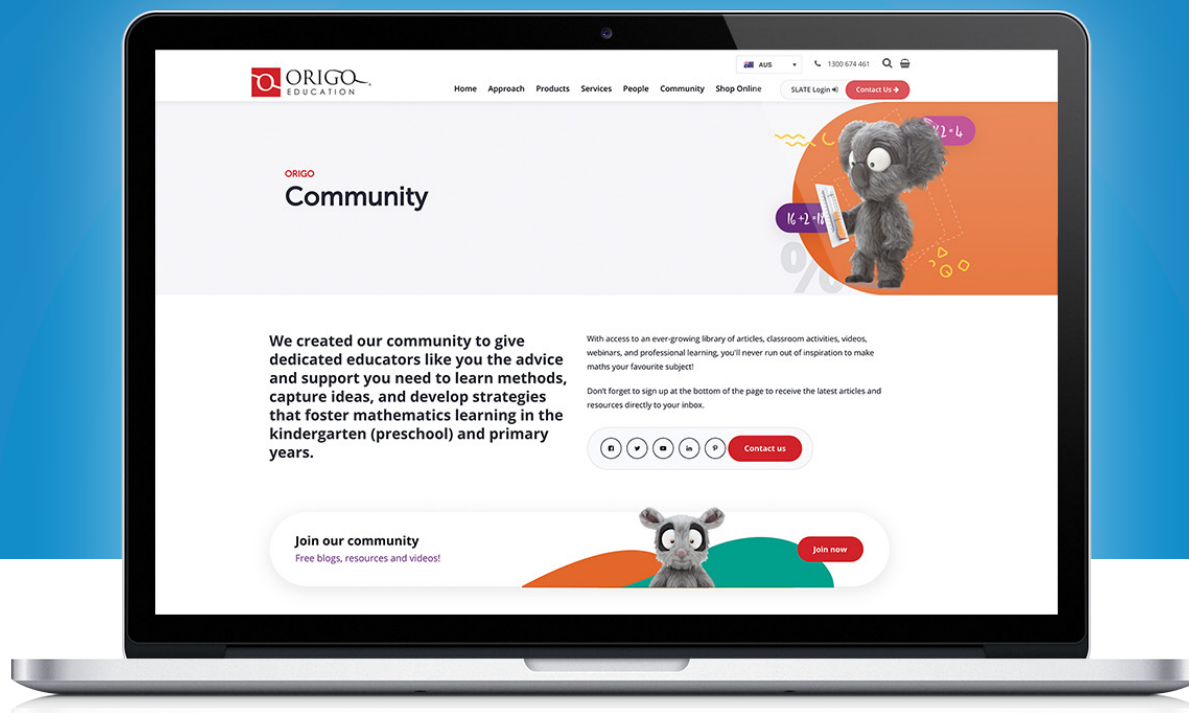
He has received outstanding achievement awards throughout his career and is the author/co-author of over 600 books and articles.



Register your interest in a session at your school online at **[origoeducation.com.au/contact](https://origoeducation.com.au/contact)** or call **1300 674 461**

# JOIN OUR COMMUNITY

FREE BLOGS, RESOURCES, AND VIDEOS!



## Community Newsletter

Sign up to receive a monthly newsletter.



## ORIGO Resources

Free resources and activities that connect to the articles on the *ORIGO Insights* blog.



## Honey Pot

Ready-to-use printable math worksheets that include maths games, maths activities, and blackline masters.



## ORIGO ONE

A series of engaging and fun one-minute videos which show you how to create light bulb moments for your students.



## edWeb.net

A collection of webinars by ORIGO Education's thought leaders on approaches to mathematics and practical application.



## ORIGO At Home

Guidance and instruction for continuing maths learning at home for Years F-6.



## ORIGO Blog

ORIGO Education's blog, giving advice, ideas, and strategies to support primary learners.



## GemStones

Watch Gemma Burnett teach some of the best 'Aha!' moments in mathematics!

[www.origoeducation.com.au/community/](http://www.origoeducation.com.au/community/)

# What our customers are saying...

"*Stepping Stones* gives you an explicit step by step guide for your lessons supported by manipulatives, differentiation, games, assessment, fluency, investigations and problem-solving. It is well researched, sequenced, supported and aligns with the Australian Curriculum.

It provides students with strategies that build on each other year to year and because of this, students all experience success (and look forward to maths!)

**Sharni Silvestri, Teacher, WA**

I love the deep understanding *Stepping Stones* gives kids. My students have a true understanding of each maths subject they have learned. ORIGO Education teaches deep, not wide. I'm so excited that each lesson/module follows the concrete, pictorial, abstract progression of learning. This progression is crucial to students development and I don't have to supplement anything to accomplish that progression. Those are just a few of the ways my kids and I have benefitted from *Stepping Stones*.

**C Meagher, Foundation Teacher**

We are loving ORIGO Education. I have discovered in just the short time of using *Stepping Stones* that my students have a deeper understanding of every math concept. The spaced learning is making a huge difference in the deep understanding of math concepts. The sequencing of *Stepping Stones* has led many of my students to set their own challenges and independently move to higher-level thinking during a lesson. I can't say enough about the games! They absolutely love them. I used to find it difficult to get 100 percent engagement from my students during a math lesson; now, it's a given! My students look forward to math and are excited for the next mathematical challenge. The materials are easy to use, enhance the lessons, and are easy to store!

**M Earley, Year 3 teacher**

Mathematics has always been one of my favourite subjects to teach, particularly in recent years when I discovered and began using ORIGO Educations *Stepping Stones* program. *Stepping Stones* changed my whole thinking about mathematics and how it needs to be presented to children. When I was a student, I was taught by rote and therefore I've always been determined to teach maths in a more thinking and reasoning way to my students.

**Joanne Bowman, Teacher QLD**

I have been so impressed with *Stepping Stones* and all it has to offer! Since beginning with this curriculum at the start of the school year, I have noticed a huge change in the way my students approach and think about maths. They are excited for maths each day and many times, after a fun interactive, hands-on activity will say, "Was that really maths!?" It is so refreshing to teach with a curriculum that encourages "out of the box" thinking, allowing students to think critically, and many times, differently about math. As a first grade teacher, number sense is essential to my student's mathematical reasoning and *Stepping Stones* does a phenomenal job at making sure number sense is embedded in every lesson. In less than two months, I have seen the confidence of my student's maths "minds" blossom beyond anything I have ever experienced. They are excited and willing to talk about math, how they arrived at a solution, and work together collaboratively.

The digital platform *Stepping Stones* has to offer is just the icing on the cake. Teaching a generation of students that are so technologically savvy, this component of the program has just added to their learning experience and engagement. They love the games and the digital delivery of the lessons. As a teacher, I love having my teacher's manual 100 percent online and find it extremely easy to navigate. I'm so excited to continue with this new program and to see my student's mathematical minds and confidence flourish!

**K Downing, Year 1 Teacher**

An as experienced teacher with a passion for teaching mathematics, I don't think I could do a better job at organising a maths program for my kids! *Stepping Stones* makes my teaching life so much easier and I know I am giving my kids a great maths education. Huge fan!!

**Ann-Marie Meredith, Teacher, WA**

We have been using *Stepping Stones* across all F-6 classes for the last three years. *Stepping Stones* works brilliantly with our stage based classes through its seamless differentiated delivery, range of resources and online content. The program is rich and rigorous and is continually updated, refined and improved. Excellent support and professional development is built into the program and we have great confidence in its research-based foundations. We are committed to continuing with the *Stepping Stones* program and look forward to reaping its rewards!

**Kim Hawgood, Teacher, NSW**

**This resource was published in July 2023.**

ORIGO Education is an Australian based publishing company that produces mathematics resources and supplementals for Primary School mathematics (Years F-6).

Established in South East Queensland in 1995, ORIGO Education publishes and covers all facets of primary mathematics education from traditional printed products to digital interactive resources.

Our products are written and designed by teachers, for teachers.



We make learning mathematics  
*meaningful, enjoyable, and accessible* for all.

