## ORIGO STEPPING STORES 2.0 COMPREHENSIVE MATHEMATICS





Visit origoeducation.com/ss2.0 to learn more.

### OUR MISSION

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

### OUR BELIEFS

At ORIGO Education, we believe

- **learning** is a social process that requires language and discourse
- **students** who develop strong thinking, problem-solving, and communication skills grow into productive, innovative members of society
- **content** taught in a logical, coherent, and learner-friendly sequence inspires student engagement and success
- **technology** empowers rather than replaces educators.

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# Welcome to **ORIGO Stepping Stones 2.0**



**ORIGO Stepping Stones 2.0** for Grades K-6 is an innovative program that integrates print and digital technology to give educators a flexible and balanced mathematics solution. This world-class comprehensive instructional program has been developed for elementary teachers who are implementing college- and career-readiness standards.





**ORIGO Stepping Stones 2.0** for Grades K-6 balances the dimensions of rigor in a number of ways by:

- developing **conceptual understanding** using a range of powerful visual models
- creating rich opportunities for classroom **discourse** and **language** development
- fostering thinking skills and procedural fluency
- providing opportunities to **apply** learning across real problems, open investigations, and enrichment activities
- offering **multiple methods to assess** deep understanding, fluency of skills, and applications of mathematics



## The Stepping Stones Approach

### **ORIGO Stepping Stones 2.0** is a comprehensive mathematics program.

Use the core program and these accompanying resources to build conceptual understanding and drive the connections between and across concepts.



## **Grow** with ORIGO

### Video Support



ORIGO.

- Short sessions explain instructional strategies designed to deepen content understanding.
- Easy-to-follow facilitator notes guide peer collaboration.

### **ORIGO One Videos**

- Animated one-minute videos can refresh teachers' knowledge, help student understanding, and support family contribution to math learning.
- math learning. vimeo.com/channels/origo1

#### Steps in Action Classroom Videos

• See these at point of use within ORIGO Stepping Stones 2.0 Digital Teacher Edition.

## Research and Learning Support

Access this essential background information to explore the mathematics of each module:

- Focus summarizes the big math ideas of the module and how they connect across the curriculum.
- Research into Practice provides the research basis for the teaching approach, with references to literature so you can dig deeper.
- Common Misconceptions identifies ways children's thinking can go wrong and how to guard against problems.



#### **ORIGO MathEd Embedded Professional Learning Videos**

Select from our library of key topics in elementary math education:

- Show the "why" of big ideas in math:
- Links can go home to grow family connections and support for

Watch Stepping Stones lessons with real teachers and real students.

In the Digital Teacher Edition at origoslate.com

#### 61 > 16 is greater than

5 + 2 = 7 and 2 + 5 = 7

2 - 5 7 two hundred, fifty-seve

In QUICKsteps for ORIGO Stepping Stones 2.0 printed **Teacher Edition** 

**Program Overview** 

## Choose your **Teacher Experience**

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ARCBUSE

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Clever

#### **CHOOSE THE DIGITAL EXPERIENCE**

### **Digital Teacher Edition (K-6)**

Engage your students using the complete suite of digital content and teaching tools.

Online teacher resources

stevelaped

Nos will result

Each student will need

Student Journal 1.9

Step 1 Preparing the lesson

· ORGO Big Brock Been on Brass

Step 2 Starting the lesson

Step 3 Teaching the lesson

and bears that are getting on the bus.

. What do you are happening here!

What number shows the total?

· What numbers show the parts?

What do each of the symbols tell you?

Step 4 Reflecting on the work

\* What can see write about the two groups of board?

Review what the students know about addition. Then have the students work in parts to create their own addition word story.

siste statuts targang liters

start

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

Moncard General Genera

#### Grade 2, Module 1, Lesson 9 – online at www.origoslate.com

In this lesson, students review the add-to and put together models of addition. Skotybooks are then used to model and analyze addition stuations. The following mathematical practices are

 SMP2 — when students write an equation to match a picture (decontextualize a problem), and · SMP7 - when students analyss equations to explore concepts of equality.

Choose some of the more interesting examples to chara among the class. Ark, New can you tell

Construction of the second additional listing out the everyday language attached to each addition word story is up put with privat, combined, dropped is, flave user (Weter Studients are not expected to classify an addition second se

problem as add to or put together. What is important is recognizing the everyday language that is attached is each, such as knowing that along in and join both imply addition.)

· Display the cover of ORGO flip Back Jham on Buser and read the this. Encourage volument

to full the class what they leave about beam and to predict what the story might be about. Result the thory and then result is again. Ask, What happened in the story? What did you see in each picture? Bring out the loss that there are always five groups heart already on the bus

Encourage students to make suggestions and write equations such as \_\_\_\_\_add \_\_\_\_ and ary, volunteers can come to the Fight and count the number of bears in each group, and then the total number of bears. Repeat as time above, writing a new equation each time · Chanse over of the explations from the board and discuss the points below

Beinfacts that each emulation above: that has mark federate or an enaul to a total the this black of balance to charly that the total can be recorded on atther side of the equal tymbol. Report the discussion for the remaining equations.

the whole class. Read the Step Us and Step Ahead instructions with the students. Male sure

 Discuss the structure arrowers to Student Journal 1.8. Invite individuals to identify the parts and
the total in each part of Questions 2 and 3. Obcuss what the students notice about the number
facts in Stop Alexat. Reinforce that the equals symbol means a the same as and so can be plated anywhere in a number lact as long as the whole equation makes sense. Invite the Budents to try rewriting their addition facts horn Question 2 so that the equals symbol appears early in the equation (SVPV),

Project the Step In discussion from Student Journal 1.3 and work through the que

they know what to do and then have them work independently to complete the task.

Write 12-# + # and # + # + 12 on the locard. Ask, Do you think these addition facts

. Turn to pages 8-7, but do not read the text. Discuss the points below:

. What is a short way to use numbers to write about the beant?

· Does it matter if you recard the total first, and then the parts?

1.9 Addition: Reviewing concepts



Get the big ideas of the lesson at a glance

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

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

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

Cement student understanding with intentional closure conversations

Try our Digital Teacher Edition by subscribing to a FREE trial of Slate. 'isit origoeducation.com/ss2.0 for details.

Single sign-on is available through **Clever Instant Login** 

#### COMING SUMMER 2018

#### Printed Teacher Edition (K-5)

Teach with confidence using a no-fuss, all-in-one printed guide for each Stepping Stones 2.0 module.

QUICKsteps for ORIGO Stepping Stones 2.0

- The ORIGO approach to math instruction at your fingertips
- Convenient, ready-to-use resource for fast planning and smooth in-class instruction
- Includes the full library of reproducible resources for your grade level – including Spanish BLMs

Grade 2, Module 1, Lesson 9 - QUICKsteps printed teacher guide

#### 1.9 Addition: Reviewing concepts

In this lesson, students review the add-to and put-together models of addition. Storybooks are then used to model and analyze addition situations

Step 1 Preparing the lesson You will need: • ORIGO Big Book: Bears on Buses Each student will need: • Student Journal 1.9

Step 2 Starting the lesson Review what the students know about addition. Then have the students work in pairs to create their own addition word story. Choose some of the more interesting examples to share among the class. Ask, How can you tell that this story is about addition? What language or actions tell you that the story is about addition? Bring out the everyday language attached to each addition word story (e.g. put with, joined, combined, dropped in, flew over.) (Note: Students are not expected to classif pointed, contained, included in, new over, it wile. Students are not expected to class an addition problem as add to or put together. What is important is recognizing the everyday language that is attached to each, such as knowing that drop in and join both imply addition.)

#### Step 3 Teaching the lesson

Display the cover of OBIGO Big Book: Bears on Buses and read the title. Encourage volunteers to tell the class what they know about bears and to predict what the story might be about. Read the story and then read it again. Ask, *What happened in the* story? What did you see in each picture? Bring out he idea that there are always two groups: bears already on the bus and bears that are getting on the bus. Turn to pages 6-7, but do not read the text. Discuss the points below:

What do you see happening here? What can we write about the two groups of bears?

What is a short way to use numbers to write about the bears?

What is a short way to be induce to write equations such as \_\_\_\_\_dd\_\_\_ is \_\_\_\_\_ and \_\_\_\_\_e = \_\_\_\_\_on the board [SMP2. Work with the whole class to complete the equations. If necessary, volunteers can come to the front and count the number of bears in each group, and then the total number of bears. Repeat as time allows, writing a new equation each time.

What number shows the tota What numbers show the parts? What do each of the symbols tell you?

• 48

• 50

Does it matter if you record the total first, and then the part

QUICKsteps for ORIGO Stepping Stones - Grade 2 - 1.9	

QUICKsteps for ORIGO Stepping Stones - Grade 2 - 1.9

ELL Read the book slowly and clearly. As each page is read, invite the students to discuss what they heard with other students. Allow students to discuss the words total pa symbols, add, and ed

origoeducation.com/ss2.0



#### **CHOOSE THE PRINT EXPERIENCE**



2.0A.A.1 Solve addition world problems	Major clusters Represent and solve problems involving addition and subtraction.				
Student Journal 1.9, pp. 30–31					
<image/> <text><text><text><text></text></text></text></text>	<complex-block></complex-block>				
QUICKsteps for ORIGO Stepping Stones - Grade 2 - 1.9		49 •			
QUICKsteps for ORIGO Stepping Stones Grade 2 - 1.9		51 •			
Download a sample printable lesson online at origoeducation.com/ss2.0					

# STEPPING STONES ED

## **Student Experience**

AVAILABLE IN SPANISH

Grade K consumable materials consist of a Student Journal and a separate Practice Book. For Grades 1-6, the consumable Student Journals (both volumes A and B) include lessons and practice.

Each grade level provides 12 modules of instruction, as well as a student glossary with written definitions, examples, and visual representations.

## Grade K Instructional Design

#### **Grade K Student Journal**

Perforated pages allow students to remove pages and cut out images for use in a variety of developmentally appropriate activities as they strengthen concepts and skills.



![](_page_4_Figure_9.jpeg)

#### **Grade K Practice Book**

Regular and meaningful practice is a hallmark of ORIGO Stepping Stones 2.0. The Practice Book features activities directly related to earlier modules to help students maintain their previously acquired concepts and skills.

![](_page_4_Picture_12.jpeg)

![](_page_4_Picture_13.jpeg)

![](_page_4_Figure_14.jpeg)

![](_page_4_Picture_17.jpeg)

### Grades 1-6 Student Journals

#### Lessons

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

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

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

#### **Practice**

Opportunities for practice appear after every lesson:

- Computation Practice for fluency
- Words at Work to develop vocabulary
- Think and Solve for problem solving
- Ongoing Practice for maintaining concepts and skills
- Preparing for the next module to review the prerequisite skills.

# STEPPING STONES ED

## **ORIGO Big Books** and **Teaching Tools**

Grades K-2

![](_page_5_Picture_3.jpeg)

ORIGO Big Books are large-format storybooks that develop and reinforce mathematical language and understanding. In ORIGO Big Books Online Tools, characters and concepts from the books are brought to life. Easy-touse tools set the stage for purposeful play and learning. Each book title and its associated math concept for each grade level is listed below.

![](_page_5_Picture_5.jpeg)

Grade 2 Set

Jumping Jacks

Number Lines

**Bears on Buses** 

Active Addition

The Space Party

**Our Sister's Surprise** 

Fractions (Area Model)

Multiplication (Arrays)

The Tiny Town Train

Time Past the Hour

**Clowning Around** 

The Flower Pot Hen

**Representing Data** 

A Bear's Share

Division (Sharing)

**Pieces and Parts** 

The Big Bug Band

Muddy, Muddy Mess

3D Objects and 2D Shapes

Multiplication (Equal Groups)

Missing-Addend Subtraction

Collecting and Representing Data

A Dozen Dizzy Dinosaurs

Division (Equal Groups)

#### Grade K Set

Sweet Dreams Counting Quantities to Ten

Ten Happy Hens **Take-Away Subtraction** 

Scaredy Cats Combinations of Ten

These and Those Subtraction (Taking Apart)

**Hip Hop Hippos** Numbers and Relative Position

The Bug Day Out Numbers Eleven to Sixteen

I Spy Positional Language

The Clown's New Clothes Length

Patterns Here, Patterns There! Patterns

Mice, Mice Everywhere Static Addition

Just a Few More Addition (Adding To)

Perfect Patterns Making and Describing Patterns

#### Grade 1 Set

Cupcake Capers Take-Away Subtraction

Stella's Store Skip Counting by Five

Joe's Carrots Subtraction (Unknown Addend)

The Best Bug Non-Standard Units of Length

Bear and Badger Comparison Subtraction

A Piece of Pie Fractions (Halves and Fourths)

The Cat Nap Time on the Hour

Paint a Rainbow **Ordinal Numbers** 

Addtron Using Doubles to Add

How Many Legs? Number Combinations

Shoes in Twos Counting in Steps of Two

I See, You See Representing Numbers One to Ten

#### Visit origoeducation.com/big-books to see a Big Book in action.

## **The Number Case** Grades K-6

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

![](_page_5_Picture_35.jpeg)

Grade K

Grade 1

Grade 2

The Number Case is packed with over 200 ready-to-use resources. Each case includes multiple representations of number, sharing mats, numeral expanders, mix-andmatch cards, and much, much more.

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 with write on/ wipe off finish.

#### THE NUMBER CASE

provides the ideal resources to develop students' understanding of number.

Visit origoeducation.com/number-case for a list of components in each case.

![](_page_5_Picture_49.jpeg)

![](_page_5_Picture_50.jpeg)

![](_page_5_Picture_51.jpeg)

8

![](_page_5_Picture_56.jpeg)

**AVAILABLE IN** SPANISH

![](_page_5_Picture_58.jpeg)

![](_page_5_Picture_59.jpeg)

![](_page_5_Picture_60.jpeg)

![](_page_5_Picture_61.jpeg)

Grade 3

Grade 4

Grade 5

Grade 6

#### SAMPLE CARDS FROM THE NUMBER CASE

## **Digital Resources**

### **Embedded Professional Learning**

#### **ORIGO** MathEd

ORIGO MathEd is an online library of professional learning videos on current topics in elementary mathematics education. These dynamic sessions offer teachers the practical skills and deeper understanding of mathematics to work more effectively with all students. Teachers can easily tailor their video study for the time and place that suits them.

This invaluable digital video library includes practical demonstrations of materials and tools for the elementary classroom. Most online sessions also provide facilitator notes to support professional learning communities within schools. Access to the complete ORIGO MathEd video library is included with the ORIGO Stepping Stones 2.0 subscription.

![](_page_6_Picture_6.jpeg)

Visit origoeducation.com/origo-mathed for sample clips and a list of all videos available.

### **Interactive Online Tools and Models**

#### Flare Online Tools

High-quality, flexible digital online tools are embedded in the ORIGO Stepping Stones 2.0 program. These resources make direct instruction easier and raise student engagement, and they are available at a click of a button. Teach math with Flare!

#### Visit origoeducation.com/flare

for an explanation of all the interactive teaching tools available.

Number Line

#### **Digital Game Boards** OVER 160 POWERFUL, STRATEGY-BASED INTERACTIVE GAMES

#### Fundamentals Game Boards

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

Visit origoeducation.com/fundamentals-game-boards for a short video on these games.

![](_page_6_Figure_19.jpeg)

![](_page_6_Picture_20.jpeg)

#### **Projectable Resources for Digital Teacher Edition** SIMPLE, TIME-SAVING MATH DIAGRAMS, IMAGES, AND ILLUSTRATIONS

#### **Projectable Resources**

Rather than directing teachers to draw or write images and problems on the board, this program comes with ready-made projectable resources embedded at point of use.

![](_page_6_Figure_24.jpeg)

This ten-frame provides students with a visual model for addition.

![](_page_6_Picture_28.jpeg)

![](_page_6_Figure_30.jpeg)

counting on from 5.

# **Professional Learning** from ORIGO Education

We provide dynamic professional learning to help teachers create meaningful learning experiences for their students. Each engaging session is delivered by curriculum and content specialists.

![](_page_7_Picture_2.jpeg)

James Burnett President and Co-founder, ORIGO Education

#### **3-HOUR SESSIONS**

#### **6-HOUR SESSIONS**

Focus and Coherence of the

Strategies to Support English Language Learners (ELL) in the

**Mathematics Standards** 

Classroom (K-2, 3-6, K-6)

(by grade level)

**Foundational Beginning Processes Fostering the Mathematical** of Mathematics (Pre-K-K) Practices in the Classroom (K-2, 3-6, K-6)

**Early Measurement and Geometry** Concepts (Pre-K-K)

**Developing Number Concepts** and Skills (Pre-K-2)

**Developing a Deep Understanding** of Number and Base Ten (3-5)

Using Powerful Models in the Classroom (Pre-K-2, 3-6, Pre-K-6)

**Developing Thinking Strategies** for Addition and Subtraction (1-2)

**Developing Thinking Strategies** for Multiplication and Division (3-4)

**Developing the Concepts and** Skills of Fractions (3-5)

Additional planning and instructional support services are available for districts seeking multiple-day packages. These services may be customized to suit your district's unique needs, which can include:

demonstration lessons

parent nights

- classroom walkthroughs
- lesson planning and instructional coaching for teachers
- support for district coaches and administrators

![](_page_7_Picture_19.jpeg)

## **Bundled Professional Learning**

Jumpstart learning in the classroom with ORIGO resources and professional learning! Bundle ready-to-use resources with practical and proven strategies that develop thinking and reasoning skills. Leave these sessions equipped with the knowledge and resources needed to inspire student engagement and success.

- Teaching Number Fact Fluency with Understanding, Not Gimmicks The Box and Book of Facts (Grades 1-4)
- Great Games Lead to Great Gains Fundamentals Games (Grades 1-6)
- Let's Talk! Creating and Maintaining a Supportive Environment for Problem Solving The Think Tanks (Grades 1-6)
- STaRT Thinking: Teaching Students How to Think STaRT (Grades 1-5)
- Big Book Fun for Everyone ORIGO Big Books (Grades Pre-K-2)
- Dominoes: A Powerful Tool for Teaching Young Learners of Mathematics Domino Set (Grades Pre-K-2)

![](_page_7_Picture_28.jpeg)

### Welcome to ORIGO Insights-**YOUR SOURCE FOR INSPIRATION!**

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We created this new blog to give dedicated educators like you activities, advice, and support as you learn methods, ideas, and strategies to support the mathematics development of elementary learners.

origoeducation.com/insights

# ORIGO STEPPING STONES 20

Visit origoslate.com to sign up for a free 30-day trial.

### COMPONENTS LIST

Components	Grade K	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6
Print							
Print Teacher Edition (English)	1	1	1	1	1	1	
Student Journals (English)	1	1	1	1	1	1	1
Student Journals (Spanish)	1	1	1	1	1	1	
ORIGO Big Books (English)	1	1	1				
ORIGO Big Books (Spanish)	1	1	1				
The Number Case (English)	1	1	1	1	1	1	1
The Number Case (Spanish)	1	1	1	1	1	1	1
Digital							
Digital Teacher Edition	1	1	1	1	1	1	1
Assessment	1	1	1	1	1	1	1
ORIGO Big Books Tools (English)	1	1	1				
ORIGO Big Books Tools (Spanish)	1	1	1				
Fundamentals Game Boards	1	1	1	1	1	1	1
Flare Teaching Tools	1	1	1	1	1	1	1
Projectable Resources	1	1	1	1	1	1	1
Professional Learning							
MathEd	1	1	1	1	1	1	1

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

facebook.com/OrigoEducation @origomath youtube.com/OrigoEducation

![](_page_8_Picture_7.jpeg)

![](_page_8_Picture_8.jpeg)

pinterest.com/OrigoEducation

vimeo.com/OrigoEducation

@origoed

Visit origoeducation.com/insights for easy-to-use ideas and resources that can be quickly implemented in your classroom.

Visit vimeo.com/channels/origo1 to create light bulb moments for your students.

![](_page_8_Picture_14.jpeg)

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