

Bridges in Mathematics® Remote Getting Started Workshop

Participant Pages (Grades K–2)

Preparing for Your Getting Started Workshop

Your Getting Started Workshop includes about 12 hours of learning: 5 hours with a facilitator and 7 hours of independent study. To get the most out of your workshop, you'll need to complete some of the self-study components before workshop Day 1 or 2, while other portions can be completed after Day 2. Use the chart below to guide your preparation.

To begin your self-study work, you must be registered on the Bridges Educator Site (bridges.mathlearningcenter.org). Bridges Educator Site (BES) registration information will be provided by your district contact. Please direct BES registration questions to your district lead.

Using This Document

Each session (self-study and live session) in the workshop has a section in this document. In some sections, space is provided for you to take notes and answer questions or explore specific ideas. You may need to refer to your notes during live sessions, so save your copy of this document somewhere that you can find again later.

If you have opened this document in a web browser on a desktop computer, note that you may have better results if you download the file and open it using the free [Adobe Reader](#). Due to a known bug in Safari for MacOS and iOS, some links in the PDFs will not work well in either version of Safari, Preview, or Books — using [Adobe Reader](#) solves this problem.

Schedule Overview

Before Day 1 Self-Study	During Day 1 Facilitated Sessions	Between Day 1 & 2 Self-Study	During Day 2 Facilitated Sessions	After Day 2 Self-Study
Self-Study 1 Bridges Overview (45m)	Live Session 1 Welcome & Workshop Goals (15m)	Self-Study 5 Read Unit 1, Module 1, Session 1 (5m)	Live Session 5 Exit Slips: Q&A (20m)	Self-Study 7 Visual Models (60m)
Self-Study 2 Exploring the Bridges Educator Site (30m)	Live Session 2 P&I: Algebraic Thinking (50m)	Self-Study 6 Work Places (15m)	Live Session 6 Work Places (60m)	Self-Study 8 Computational Fluency (40m)
Self-Study 3 Introducing Visual Models (25m)	Break (10m)		Break (10m)	Self-Study 9 Planning Unit 1 & Sept NC (60m)
Self-Study 4 Number Corner (30m)	Live Session 3 Number Corner (60m)		Live Session 7 Bridges Educator Site: Unit 1 (45m)	Self-Study 10 Assessment (60m)
	Live Session 4 Exit Slips & Self-Study (15m)		Live Session 8 Homework & Circle of Knowledge (15m)	Self-Study 11 Families (40m)
Total: 2h, 10m	Total: 2h, 30m	Total: 20m	Total: 2h, 30m	Total: 4h, 20m

Before Day 1

Self-Study 1: Bridges Overview

You'll watch a recorded presentation that overviews the structure of the Bridges curriculum and classroom. You can follow along with the Unit 1 Teachers Guide and a Getting Started Presentation Guide. (45 minutes)

Essential Question: How do all the components of Bridges work together to build community? How do these components support student learning?

1. Visit the [Getting Started with Bridges page](#) of the Bridges Educator Site to view the [Getting Started with Bridges video](#) for your grade level. You can use the corresponding [presentation guide](#) to take notes.

As you watch, you may want to pause the video and locate each section in your Bridges in Mathematics Unit 1 Teachers Guide.

2. Read your Bridges Introduction (located in the front of the Bridges Unit 1 Teachers Guide).
[Grade K](#) | [Grade 1](#) | [Grade 2](#) | [Grade 3](#) | [Grade 4](#) | [Grade 5](#)
3. Answer these reflection questions.

Record questions you still have here.
How do all the components of Bridges work together to build community? How do these components support student learning?
Additional Resources: Blog: Go-To Ideas to Start Your Year by Jennifer Ranum

Self-Study 2: Exploring the Bridges Educator Site

You'll watch a recorded presentation that overviews the Bridges Educator Site. (30 minutes)

Essential Question: How will understanding the layout of the Bridges Educator Site support your teaching?

1. View the [Tour the Bridges Educator Site](#) video. (You may want to pause the video and locate each section.)
 - a. Welcome
 - b. Curriculum
 - c. Curriculum Updates
 - d. Digital Display Materials
 - e. Resources
 - f. Implementation
2. Complete the prompts below.

☐ I found my Teachers Guides, Assessment Guides, Student Books, Home Connections, Component Masters, and Updates in the Curriculum section. Something I figured out was:

☐ I found the Family Overviews in the Resources section. These are my top five favorite resources:

☐ I found the Implementation section and the Quick Start Guide for my grade level. These are a few of my favorite blog entries:

3. Answer these reflection questions.

Record questions you still have about the Bridges Educator Site.

What resources will you use to support your teaching?

Additional Resources:

Recorded Webinar: [Bridges Educator Site Overview](#)

Self-Study 3: Introducing Visual Models

Examine manipulatives and visual models used to advance student thinking. In Bridges, as students move from concrete materials to two-dimensional representations and then abstract notation, they create mental images of quantities. You'll use the Number Rack and Number Pieces apps as part of an interactive learning experience. (25 minutes)

Essential Question: How can teachers use materials and visual models to advance student learning?

1. Watch the [Visual Models video](#) and answer the reflection questions as you move through the video. (You may want to pause the video to open the apps from the links below, work the problems in the video, and answer the questions.)

[Number Rack app](#)

What do you notice about this model?

How do these models support students' math development?

[Number Pieces app](#)

What multiplication problem do you see in this problem? How might you use the model to find the product? Can you find more than one way to get to the total?

How will these models help your students invent, understand, and remember big mathematical ideas?

Self-Study 4: Number Corner

You'll watch a recorded presentation that overviews the structure of Number Corner and the role it plays in the Bridges classroom, then read your Number Corner Introduction. (30 minutes)

Essential Question: Why is Number Corner an important part of the Bridges curriculum?

1. Visit the [Getting Started with Bridges page](#) of the Bridges Educator Site to view the [Getting Started with Number Corner video](#) for your grade level. You can use the corresponding [presentation guide](#) to take notes.
 - The Number Corner videos are located below the Bridges videos on the webpage. (You watched one of the Bridges videos in the first self-study session.)
 - As you watch, you may want to pause the video and locate each section in your Number Corner Volume 1 Teachers Guide.
2. Read your Number Corner grade-level introduction (located in the front of the Volume 1 Teachers Guide).
[Grade K](#) | [Grade 1](#) | [Grade 2](#) | [Grade 3](#) | [Grade 4](#) | [Grade 5](#)
3. Answer these reflection questions.

In a few words, describe Number Corner.

Record questions about Number Corner here.

Day 1

Live Session 1: Welcome & Workshop Goals

In this session, you'll be welcomed to the workshop, read the workshop goals, and review Zoom features. (15 minutes)

Essential Question: Based on what you have learned so far, which goal is a priority for you? Why?

1. Join the Zoom meeting. Before the workshop begins, you may want to use the Chat feature to briefly introduce yourself or say hello to colleagues.
2. When the workshop begins, your facilitator will conduct a brief introduction and review some of the Zoom features you'll use during the workshop.
3. Review the workshop agenda.

Live Session 1

Welcome & Workshop Goals

Live Session 2

P&I: Algebraic Thinking

Ten-Minute Break

Live Session 3

Number Corner

Live Session 4

Exit Slips & Homework

4. Read the workshop goals. Based on what you have learned so far, what is a priority for you?
 1. Experience and understand the components and structure of Bridges in Mathematics.
 2. Investigate daily schedules and yearly pacing.
 3. Explore ways to organize your classroom and materials.
 4. Experience and understand the national standards for content and math practices.
 5. Learn about online resources available from MLC.
 6. Learn ways to use Bridges materials to meet the diverse needs of all your students.
 7. Understand the assessment opportunities provided in Bridges.

Live Session 2: Problems & Investigations: Algebraic Thinking

In this session, you'll engage in Problems & Investigations lessons and examine how embedded Mathematical Practices can deepen student learning. Then you will watch a classroom video that demonstrates a session of teaching and reflect on what you noticed. (50 minutes)

Essential Question: How are the Math Practices nurtured during Problems & Investigations?

1. To prepare for this module, you completed [Self-Study 3: Introducing Visual Models](#). There, you watched a video and reflected on visual models, including the Number Rack.

With your facilitator you will:

2. Review what Problems & Investigations are and the role they play in the Bridges program.
3. Participate in a Problems & Investigations session from Grade 2.
4. Learn how to plan a session and explore the Curriculum Tab on the Bridges Educator Site.
5. Review the Mathematical Practices and their importance in Problems & Investigations.

Habits of Mind of a Productive Mathematical Thinker

- MP.1 Make sense of problems and persevere in solving them.
- MP.6 Attend to precision.

Modeling and Using Tools

- MP.4 Model with mathematics.
- MP.5 Use appropriate tools strategically.

Reasoning and Explaining

- MP.2 Reason abstractly and quantitatively.
- MP.3 Construct viable arguments and critique the reasoning of others.

Seeing Structure and Generalizing

- MP.7 Look for and make use of structure.
- MP.8 Look for and express regularity in repeated reasoning.

6. On your own device, view [this classroom video](#) showing a Kindergarten Problems & Investigations session and answer these reflection questions.

What evidence do you see of the Math Practices in action?

What else did you notice or wonder?

7. Participate in a reflection discussion.

Additional Resources

- Blog: The [Power of Knowing Ten](#) by Shelly Scheafer
- Blog: [Odd Man Out & Other Number Rack Stories](#) by Shelly Scheafer
- Recorded Webinar: [Planning a Bridges Session Recorded Webinar](#)
- Printables: Math Practice Posters K–2 ([English](#)) | ([Spanish](#))

Live Session 3: Number Corner

You'll watch a grade-specific presentation that unpacks the five Number Corner workouts and respond to reflection questions. (60 minutes)

Essential Question: Why is Number Corner an important part of the Bridges curriculum?

1. On your own device, watch the grade-level introduction video for September Number Corner.
 - Video: [Number Corner Kindergarten September Preview](#)
 - Video: [Number Corner Grade 1 September Preview](#)
 - Video: [Number Corner Grade 2 September Preview](#)
2. Use the area below to take notes as you watch your grade level video.

Visual Models	Helpful Tips
Questions	Other Thoughts

3. Participate in a reflection discussion.

Additional Resources

- Blog: [Go-To Ideas to Help Start Your Year](#) by Jennifer Ranum
- Blog: [School Starts in August—What Do We Do with Number Corner?](#) by Jennifer Ranum
- Video: [Number Corner Reduced Instructional Days](#)
- Video: [Number Corner Workout Updates](#)

Additional Classroom Number Corner Videos

- [Number Corner Kindergarten: Updates and Computational Fluency](#)
- [Number Corner Grade 2 Calendar Grid](#)
- [Number Corner Grade 3 Problem String](#)
- [Number Corner Grade 4 Calendar Grid](#)
- [Number Corner Grade 4 Calendar Collector](#)

Number Corner Tips & Suggestions Videos

Tips and ideas for preparation, updates, materials management and more.

- [Kindergarten](#) | [Grade 1](#) | [Grade 2](#)
- [Grade 3](#) | [Grade 4](#) | [Grade 5](#)
- [Additional tips for Kindergarten, Day 12](#)
- [Additional tips for Grade 1, Day 14](#)
- [Additional tips for Grade 2, Day 9](#)

Live Session 4: Exit Slips & Self-Study

With your facilitator, you will reflect on the goals for the day by reviewing the topics completed so far, review self-study work to be completed before Day 2, preview upcoming topics, and use the chat box to answer a reflection question. (15 minutes)

Before Day 2

Self-Study 5: Read Unit 1, Module 1, Session 1

You'll locate and read through the first unit session. (5 minutes)

1. Read Unit 1, Module 1, Session 1 from your grade level as you think about the first day of instruction.
 - [Grade K Unit 1, Module 1, Session 1](#)
 - [Grade 1 Unit 1, Module 1, Session 1](#)
 - [Grade 2 Unit 1, Module 1, Session 1](#)

Self-Study 6: Introducing Work Places

You'll watch an overview video that introduces Work Places. (15 minutes)

Essential Question: How will Work Places support student learning and provide opportunities for differentiation?

1. View the [Work Place Overview](#) video.

Day 2

Live Session 5: Exit Slips Q&A

With your facilitator, you will participate in a Question & Answer session based on the information from participants' Day 1 Exit Slip/Reflection. (20 minutes)

Essential Question: What do I understand and what do I wonder about Bridges?

Today's Agenda

Live Session 5

Exit Slips: Q&A

Live Session 6

Work Places

Ten-Minute Break

Live Session 7

Bridges Educator Site: Unit 1

Live Session 8

Homework & Circle of Knowledge

Live Session 6: Work Places

Having already viewed the Work Place overview video, today you'll participate in a Work Place demonstration that uses the Digital Display Materials, explore Work Places for your grade level, and complete the reflection questions. (60 minutes)

Essential Question: How will Work Places support student learning and provide opportunities for differentiation?

1. Participate in a demonstration of a Work Place activity.
2. In a Breakout Room, on your own device, use the [Digital Display Materials](#) to explore the Work Places for your grade level listed in the chart below.

Note: If you like, view [this 4-minute tutorial](#) on navigating the Digital Display Materials.

Grade	Grade Level Work Place Exploration
Grade K	2A Count & Compare Dots Unit 2 Module 1
Grade 1	2D Double It Unit 2 Module 3
Grade 2	1K Turn Them Over Unit 1 Module 4

3. Return to the whole group to explore the Work Place Guides and Sentence Frames with the entire group before returning to a Breakout Room to explore them in your own grade level.
4. After touring the Work Place materials on the Bridges Educator Site with your facilitator, take a few minutes to explore the materials on your own.

Curriculum Tab	Resource Tab	Implementation Tab
Digital Display Materials	WP Videos for Teachers (Search “WorkPlace Video”)	Bridges Blog (Topics: Work Places)
Student Digital WP		
Work Place Collection* (WP Guides, Instructions, Record Sheets, Sentence Frames) Grade K Grade 1 Grade 2		

5. Reflection. Thinking about Work Places, how would you finish the sentence:

I notice...

I wonder...

Additional Resources

Blogs:

- [Organizing Your Materials](#) by Jennifer Ranum
- [A Great Workout: Work Places](#) by Beth Newman
- [Bridges & A Math Workshop Model](#) by Cynthia Hockman-Chupp

Videos:

- [Grade 1 Introducing the Frog Jump Game \(Unit 4, Module 1, Session 4\)](#)
- [Grade 1 The Frog Jump Game, Part 2 \(Students Playing Work Places\)](#)
- [Grade 3 Frog Jump Multiplication \(Unit 2, Module 2, Session 3\)](#)

Recorded Webinar: [Managing Work Places](#)

Live Session 7: Bridges Educator Site: Unit 1

In this session, you'll watch a video about interacting with your unit binder. Then you'll explore the Bridges Educator Site, focusing on Unit 1 resources. The facilitator will answer questions. (45 minutes)

To prepare for this module, have your reflections from the first two self-study sessions available during this live session.

- [Self-Study 1: Bridges Overview](#)
- [Self-Study 2: Exploring the Bridges Educator Site](#)

With your facilitator you will:

1. On your own device, watch a video about interacting with your unit binders. As you watch, take note of one thing you especially want to remember.
 - Video: [Top 5 Recommendations for Interacting with your Unit Binders](#)
2. Open [Exploring the Bridges Educator Site](#) (PDF).

What do you recognize from our learning together?
What are some topics you are curious about and would like to explore?

3. Individually explore the Bridges Educator Site and be prepared to share one or two discoveries in a Breakout Room.
4. Participate in a reflection discussion.

Live Session 8: Circle of Knowledge & Homework

With your facilitator, you will use the chat box to answer a workshop reflection question and review items to be completed after Day 2. (15 minutes)

After Day 2

Self-Study 7: Visual Models for Counting

In this study, you will examine number paths and number lines. You'll explore the Number Line app and any other of [The Math Learning Center's free math apps](#) that interest you. Then you will identify some visual models used in Unit 1 and September Number Corner and answer reflection questions. (60 minutes)

Essential Question: How do visual models support the development of mathematical ideas?

1. Read the [Spotlight on Number Paths and Number Lines](#) article.
2. View the [Bridges Strategies & Models: The Number Line](#) video. (View all 6 sections.)
3. Explore the [Number Line app](#) and answer the reflection question.



Note: The icon with the “i” inside the white circle in the lower right corner provides tips for using the app.

What are your two biggest takeaways regarding number lines?

4. Explore two or three more of [The Math Learning Center's free math apps](#).
5. Identify three visual models used in Unit 1 and September Number Corner. Then answer the reflection question.

Visual Models used in Unit 1 and September Number Corner:

How will these visual models support the development of mathematical ideas?

Additional Resources

- Video: [Get More from the Number Line App](#)
- Blog: [Progressing Through Visual Models Helps Math Students Grow](#) by Kellie Petrick
- Blog: [Using Visual Models to Spark Discussion](#) by Tod Johnston
- Article: [Models in Bridges](#)

Self-Study 8: Computational Fluency

In this self-study, you'll define computational fluency, watch a webinar, and explore resources. (40 minutes)

Essential Question: How can teachers use visual models to support student strategy development and thus grade-level fluency requirements?

1. View the [Computational Fluency video](#) and answer the questions:

Note: You may want to pause the video to work the problem and answer the questions.

Select one problem to solve several ways: $52 - 28$ or 24×25

Can you see your method or one similar to your method in the anchor charts?

What Is Computational Fluency?

Underline or highlight words or phrases from these definitions that connect with you.

Efficiency

Efficiency implies that the student does not get bogged down in many steps or lose track of the logic in the strategy. An efficient strategy is one that the student can carry out easily, keeping track of sub-problems and making use of intermediate results to solve the problem.

Accuracy

Accuracy depends on several aspects of the problem-solving process, among them careful recording, the knowledge of basic number combinations and other important number relationships, and concern for double-checking results.

Flexibility

Flexibility requires the knowledge of more than one approach to solving a particular kind of problem. Students need to be flexible and choose an appropriate strategy for solving the problem at hand. They can use one method to solve a problem and another method to double-check the results.

Answer these reflection questions:

How does computational fluency relate to your own experience as a student and teacher?

As a student, did you love speed drills or did being timed produce anxiety that was a barrier to learning?

2. Select one webinar to watch and answer the reflection question:

- [Basic Fact Fluency: Addition & Subtraction](#) Watch the first 8 minutes of this recorded webinar (or longer if you like), and then return to the video.
- [Basic Fact Fluency: Multiplication & Division](#) Watch the first 11 minutes of this recorded webinar (or longer if you like), and then return to the video.

What visual models and strategies will promote fact fluency for your students?

3. Watch [There IS a Difference](#), video by Graham Fletcher, and answer the questions below.

What is the difference between knowing facts “from memory” and “memorization”? How do strategies support fact fluency?

How will visual models impact your students’ strategy development? How will the strategy development support your grade level fluency requirements?

Additional Resources

Blogs:

- [Fact Fluency & Families](#) by Jennifer Ranum
- [Drill or Practice: Computational Fluency](#) by Zong Vang
- [Multiplication Fact Fluency Throughout the Year](#) by Erin Billock and Audrey Swift

Math Strategy Posters:

- [Addition \(Spanish\)](#)
- [Subtraction \(Spanish\)](#)
- [Multiplication \(Spanish\)](#)
- [Division \(Spanish\)](#)

Self-Study 9: Planning Unit 1 & September Number Corner

This lesson, which asks you to complete questions about Unit 1 and planning for Unit 1, Module 1, will help you become familiar with the Bridges in Mathematics Teachers Guide. Then you'll plan for September Number Corner to become familiar with the Number Corner Teachers Guide. (60 minutes)

Essential Question: How will unpacking Unit Introductions guide your instruction through the year?

1. Answer these questions about Unit 1 using your Bridges Unit 1 Teachers Guide.

What is the title of the first unit?

Read the Mathematical Background. Think about concepts, models and strategies.

In your own words, list the major skills and concepts addressed in Unit 1.

What are the visual models in this unit? How will the visual models differentiate/support student learning in this module?

Read the Skills Across the Grade Level chart.

Are students expected to master any skills/concepts during this unit? If so, what are they?

Which standards are a review from the major work of the previous grade?

Find the Assessment chart.

Where will the assessment opportunities occur in this unit? (observational, checkpoints, work samples, written, etc.)

Look at the Module 1 Materials Preparation chart.

What will you need to have prepared for Module 1? What materials are in your kit? What materials will you need to copy or put together?

During the first week of school, how will these lessons build community?

2. Choose either option A or B to plan Unit 1, Module 1.

Option A: With a partner (or partners) if possible, jigsaw Unit 1, Module 1. Each person chooses and thoroughly reads one session from Module 1. Be ready to teach your group about the session you chose.

Option B: On your own, read Unit 1, Module 1 and begin thinking about and planning the first week of teaching.

Note: Much of Unit 1 is a review of the major work from the previous grade level. Sometimes, especially during year 1 of implementation, students don't have the background with models, strategies and concepts. After that, Unit 1 will be a review.

Additional Resources

Blogs: [Beginning Your Year: Bridges Lesson Planning](#) by Cynthia Hockman-Chupp

PL Library: [Four Steps to Unit Planning](#)

2. Plan for September Number Corner. Consider these blogs as you begin your planning:

- [Beginning-of-the-Year Planning for Number Corner](#) by Mandie Lorge
- [Color-Coding Your Number Corner Binder](#)

Guide your planning using the questions below.

What materials do you need to prepare for September? What materials are in your kit, and what materials will you need to copy and create?

Additional Resources

- Blog: [Go-To Ideas to Help Start Your Year](#) by Jennifer Ranum
- Blog: [School Starts in August—What Do We Do with Number Corner?](#) by Jennifer Ranum
- Video: [Number Corner Reduced Instructional Days](#)
- Video: [Number Corner Workout Updates](#)

Additional Classroom Number Corner Videos

- [Number Corner Kinder Updates and Computational Fluency](#)
- [Number Corner Grade 2 Calendar Grid](#)
- [Number Corner Grade 3 Problem String](#)
- [Number Corner Grade 4 Calendar Grid](#)
- [Number Corner Grade 4 Calendar Collector](#)

Self-Study 10: Assessment

In this self-study, you will watch a video and use your Bridges Assessment Guide to unpack the formative and summative assessment resources in Bridges and Number Corner. The video will also explore support and intervention resources. You will consider how to elicit the Math Practices, communicate with families, and finally reflect on your own learning. (60 minutes)

Essential Question: How will I use the assessment resources to guide my instruction?

Note: You may want to have your grade-level Assessment Guide open before starting the video.

Bridges Assessment Guides on the Bridges Educator Site

[Grade K](#) | [Grade 1](#) | [Grade 2](#) | [Grade 3](#) | [Grade 4](#) | [Grade 5](#)

1. Watch the [Assessment video](#) and answer the questions.

In the NCTM definition of *assessment*, which words resonate most with you?

What assessment resources do you think will make the most positive impact on your instruction and your assessment practices?

Using your grade level assessment map (Section 2 in the Overview), identify some standards that are assessed for mastery in Number Corner. What do you notice?

Personal Reflection

Three points from today’s professional learning are:

Two things that square with your thinking:

One thing still circling in your head:

2. For updated information regarding Bridges unit screeners, read the blog article “[How to Effectively Use Unit Screeners](#).”

Additional Resources

- Blog: [Grading Smarter. Not Harder](#) by Dalton King
- Blog: [The Power of Knowing Ten](#) by Shelly Scheafer
- Blog: [Bridges Assessment Spreadsheets for Tracking Data](#) by Andy Bishop
- Blog: [Bridges Assessment Tools – Excel to Google Sheets](#) by Daniel Raguse

Self-Study 11: Families

In this session, you'll watch a recorded webinar that offers 10 ways to connect families to the Bridges classroom. (40 minutes)

Essential Question: How can we connect families to our classrooms?

1. View the [Connecting Families to the Bridges Classroom](#) recorded webinar and answer the reflection questions. ([Webinar handout](#))

How can we connect families to our classrooms? List three takeaways.

What other activities does your school already have in place where math could play a larger role?

Additional Resources

- Blog: [Partnering with Families Toward a Growth Mindset](#) by Jennifer Christensen
- Blog: [Fact Fluency & Families](#) by Jennifer Ranum
- Blog: [Family Math Night](#) by Pia Hansen
- Blog: [To Assign or Not to Assign Homework. That Is Not the Question](#) by Bethany Morrissey
- Article: [Building Partnerships with Families](#)
- Family Welcome Letters & Unit Overviews:
 - [Kindergarten](#)
 - [Grade 1](#)
 - [Grade 2](#)
 - [Grade 3](#)
 - [Grade 4](#)
 - [Grade 5](#)