



Grade 2 Quick Start Guide

This guide will help you unpack and organize your materials, access additional resources, and prepare to teach Bridges.

What's in the boxes

The Bridges classroom kit comes packed in four boxes — Box 1 and 2 for Bridges, and Box 1 and 2 for Number Corner. Each box includes a package contents sheet you can use to check off items as you unpack.

What you'll need

There are many ways to organize your materials. Begin with the recommendations here, and refine your system throughout the school year to better meet the unique circumstances of your classroom.

You'll want to have the following materials on hand:

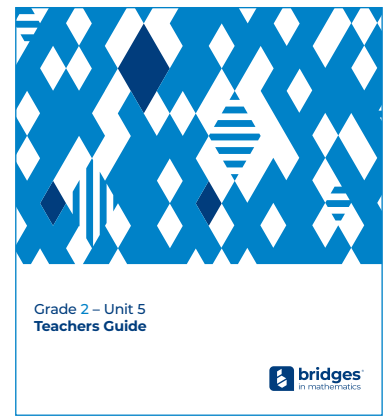
- Container or drawer for Bridges mats, game boards, cards, and spinners
- Container or drawer for Number Corner materials
- Six containers large enough to hold $8\frac{1}{2}'' \times 11''$ game boards (for Work Places)
- Container to hold collections of dice, game markers, and spinner overlays
- Six containers, one each for pattern blocks*, Unifix cubes*, base ten pieces, geoboards, money value pieces, and colored tiles
- Quart-size and smaller ziptop bags for card decks and small manipulatives

** Required but not included in kit (RNI). A complete list of classroom materials is available at the Bridges Educator Site.*

Box 1 Bridges printed materials

Teachers Guides

The Bridges Teachers Guides are divided into eight units of instruction, each of which contains twenty sessions of lesson plans with copies of print originals, student book pages, and Home Connections (homework assignments). Tabbed dividers are included for each unit.



Printed Bridges Components

You'll need access to these materials throughout the year. Store them where you can easily retrieve them when needed.



Kit materials may differ from those shown.

- 1 Card decks
- 2 Last Shape in Wins game boards
- 3 Count & Compare game boards
- 4 Number Path to 20 work mats
- 5 Count & Compare 2s counting mats
- 6 Four in a Row game boards
- 7 Climb the Beanstalk and Race to the Cookie Jar game boards
- 8 Race to the Cookie Jar and Base Ten Triple Spin spinners
- 9 Other spinners

Box 2 Bridges manipulatives

Box 2 of your kit contains the math manipulatives and game items needed only in Bridges activities and lessons.

- Store the large **number rack** in a convenient place. You'll use it for the first time in Unit 1.
- Keep the (unassembled) student number rack kits handy. Students will assemble them in an activity in Unit 1, Module 2.
- Store the **base ten pieces** in a plastic tub, and the **geoboards and geobands** in another.
- Store the **craft sticks**, **adding machine tape**, and **portion cups** with your classroom supplies.
- Set aside the **marbles and balls** for use in Unit 8 later in the year.
- Store the **spinner overlays** and **dice** where you and students can access them. You'll add more dice and spinner overlays to this container when you unpack your Number Corner materials.



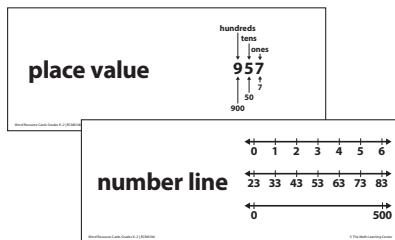
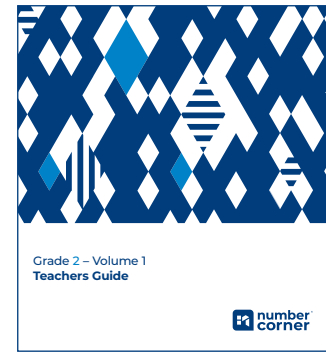
Kit materials may differ from those shown.

- | | | | |
|----------|------------------------------|-----------|---------------------------------------|
| 1 | Demonstration number rack | 6 | Glass marbles, wooden and metal balls |
| 2 | Geoboards and geobands | 7 | Numbered dice collections |
| 3 | Large base ten number pieces | 8 | Adding machine tape |
| 4 | Student number rack kits | 9 | 1-ounce portion cups |
| 5 | Craft sticks | 10 | Spinner overlays |

Box 1 Number Corner printed materials

Teachers Guides

The Number Corner Teachers Guides are divided into three volumes, each of which contains three months of instruction with copies of print originals and student book pages. Tabbed dividers are included for each volume.



Word Resource Cards

You'll use these cards to enhance your students' math vocabulary development in context throughout the year. Use the alphabetical tabs to sort the cards, and store the box of cards in your bookcase or cabinet.

Printed Number Corner Components

You'll need access to these materials throughout the year. Store them where you can easily retrieve them when needed.



Kit materials may differ from those shown.

- | | |
|---|--|
| 1 Calendar markers | 5 Display clocks |
| 2 Greater Than or Less Than, 10-Frame, and 3-D Shape display cards | 6 Calendar titles |
| 3 Card decks (and Kangaroo Number Line Markers) | 7 Number Line segments |
| 4 Addition Table and One Thousand chart displays | 8 Double 10-Frame display cards |
| | 9 Measure & Compare cards |

Box 2 Number Corner manipulatives

Number Corner Box 2 contains math manipulatives and pocket charts.

- Store the **colored tiles** in a tub or bin and the **money value pieces** in another. Store the **measuring tapes, student clocks, and game markers** where you and students can readily access them.
- Store the **geoblocks** and **mystery container** with your instructional supplies.
- Put away the **base 10 pocket chart** for now, and post the **Calendar Grid pocket chart** in your Number Corner display area.
- Post the **Magic Wall** in your Number Corner area and keep the **magnetic tiles** nearby.
- Add the **adding machine tape, base ten pieces, craft sticks, dice, and spinner overlay** to those from your Bridges kit.



Kit materials may differ from those shown.

- | | | |
|-------------------------------------|--|---------------------------------------|
| 1 Calendar Grid pocket chart | 6 Money value pieces | 11 Base 10 pocket chart |
| 2 Mystery container | 7 Magnetic tiles and Magic Wall | 12 Large base 10 number pieces |
| 3 Geoblocks | 8 Measuring tapes | 13 Student clocks |
| 4 Colored tiles | 9 Adding machine tape | 14 Dice |
| 5 Craft sticks | 10 Game markers | 15 Spinner overlay |

Preparing to teach

Take some time to assemble your Teachers Guide. Place each unit in the appropriate three-ring binder, and insert the tabbed dividers in the appropriate locations. Keep **Bridges Unit 1** and **Number Corner Volume 1** handy for the beginning of the school year. Store the other binders in your bookcase or cabinet.

Set aside some time to read the **Program Introductions**. These grade-level overviews, located at the beginning of Bridges Unit 1 and Number Corner Volume 1, introduce the components and structure of each program.

Preview Bridges Unit 1

Unit 1

Figure the Facts

Overview

Unit 1 marks the establishment of classroom norms around mathematical inquiry and discourse. Students that will play an important part in making mathematical experiences are also in place. The mathematical focus remains on the development of number and operations sense, as well as fluency to 20. Foundational math tools, including the number rack, the number path, and 10-frames, are employed throughout the unit. These tools enable students to continue developing proficiency with foundational addition and subtraction facts, as well as derived fact strategies. Students also use these tools to model and solve contextual problems.

Module

Session	WP	PA	BP	A	HC
Session 1 Sorting & Graphing					
Session 2 Creating Beetle Glyphs					
Session 3 Sorting Beetle Glyphs & Introducing Work Places 1A-1D					
Session 4 Beetle Glyph Legend					
Session 5 Beetle & Worm Diagrams					
Session 6 Graphing the Beetles					
Session 7 Link 1 Scenario					
Session 8 Getting to Know the Number Rack					
Session 9 Match the Beetle Introducing Work Place 1E					
Session 10 Count & Compare 2a: Introducing Work Place 1F					
Session 11 Count & Compare 2b: Introducing Work Place 1G					
Session 12 What's the Difference? Introducing Work Place 1H					
Session 13 Ten-Frame Addition Strategy: Introducing Work Place 1I					
Session 14 Making 10 to Add					
Session 15 Ten Over 10					
Session 16 Building Blocks Introducing Work Place 1J					
Session 17 What's the Difference? Introducing Work Place 1K					
Session 18 Ten-Frame Over Introducing Work Place 1L					
Session 19 Modeling & Solving Problems: Situations					
Session 20 Link 1 Assessment					

WP = Work Place; PA = Problems & Investigations; BP = Beetle Glyphs; A = Assessment; HC = Home Connection

Bridges Third Edition Grade 2 Teachers Guide | © The Math Learning Center | mathlearningcenter.org

Unit 1

Module 1 Sorting & Graphing

Overview

The unit opens with a session in which students create beetle glyphs to represent information about themselves that lasts months, their game preferences, and their favorite number, subject, and type of book. In subsequent sessions, the class sorts the glyphs in a variety of ways, learning more about their own classroom community in the process. During the fourth session, students move from sorting the beetles to laying them out in picture graph formation. Then they each construct a bar graph to represent the data and write a series of mathematical observations about their graph. The final session of the module includes a brief overview or diagnostic assessment. This assessment is designed to help teachers identify concepts and skills that students have in place and areas where they might need support to engage effectively with the instruction in Unit 1. Four Work Places are introduced, designed to familiarize the class with some of the math tools and classroom routines that will be in use in year.

Session

Session	WP	PA	BP	A	HC
Session 1 Creating Beetle Glyphs					
Session 2 Sorting Beetle Glyphs & Introducing Work Places 1A-1D					
Session 3 Beetle & Worm Diagrams					
Session 4 Graphing the Beetles					
Session 5 Beetle Glyph Legend					
Session 6 Graphing the Beetles					
Session 7 Link 1 Scenario					
Session 8 Getting to Know the Number Rack					
Session 9 Match the Beetle Introducing Work Place 1E					
Session 10 Count & Compare 2a: Introducing Work Place 1F					
Session 11 Count & Compare 2b: Introducing Work Place 1G					
Session 12 What's the Difference? Introducing Work Place 1H					
Session 13 Ten-Frame Addition Strategy: Introducing Work Place 1I					
Session 14 Making 10 to Add					
Session 15 Ten Over 10					
Session 16 Building Blocks Introducing Work Place 1J					
Session 17 What's the Difference? Introducing Work Place 1K					
Session 18 Ten-Frame Over Introducing Work Place 1L					
Session 19 Modeling & Solving Problems: Situations					
Session 20 Link 1 Assessment					

WP = Work Place; PA = Problems & Investigations; BP = Beetle Glyphs; A = Assessment; HC = Home Connection

Bridges Third Edition Grade 2 Teachers Guide | © The Math Learning Center | mathlearningcenter.org

Unit 1

Session 1 Creating Beetle Glyphs

Summary

This is a community-building session in which the teacher and students establish some norms for math class. Then each member of the classroom community makes a special data display about themselves called a glyph. Students who finish their glyphs before the end of the session explore some of the manipulations they'll be using this year.

Module Learning Goals

- Students learn to represent, organize, and describe data.
- Students represent information about themselves using glyphs.
- Students generate categories based on the characteristics of the glyphs.
- Students sort, classify, and analyze glyph characteristics.
- Students represent and describe data using picture and bar graphs.
- Students compare a bar graph and picture graph that represent the same data.

Materials

Problems & Investigations: Creating Beetle Glyphs

Copy & Display

- PO P1 Beetle Glyph Legend Assembly Diagram
- PO P2 P7 Beetle Glyph Legend
- PO P8 Card & Dice Game Beetle Shapes
- PO P9 Work Place 1a Labels

Kit Materials

- 1 colored blue (about 400), green, and purple dots
- 1 white ruler (about 1000)
- 1 pattern block (1 unit)
- 1 2" x 2" colored dotter paper (see Preparation)
- 1 sheet paper (2 sheets, see Preparation)
- 1 8" x 12" construction paper in black (4 sheets, see Preparation)
- 100 paper in green, yellow, orange, and blue (8 sheets of each color, see Preparation)
- 4" x 12" construction paper in red, brown, white, and light blue (1 sheet of each color, see Preparation)
- 1 crayon (blue and)
- 1 sign on glue sticks (2 each)
- 1 Work Place bin (5, see Preparation)

Classroom Materials

- PO - Print Original; BP - Student Book; MC - Home Connection

Preparation

Beetle Glyph Materials

- Copy and title the Beetle Glyph Legend print original. Assemble the Beetle Glyph Legend as shown on the Beetle Glyph Legend Assembly Diagram print original. This legend will be used in several lessons and Work Places, so plan to keep it on display for the next few weeks.
- On a sheet of chart paper, create a Month's Chart by listing all 12 months of the year along with their number (January-1, February-2, and so on), and post it.

Bridges Third Edition Grade 2 Teachers Guide | © The Math Learning Center | mathlearningcenter.org

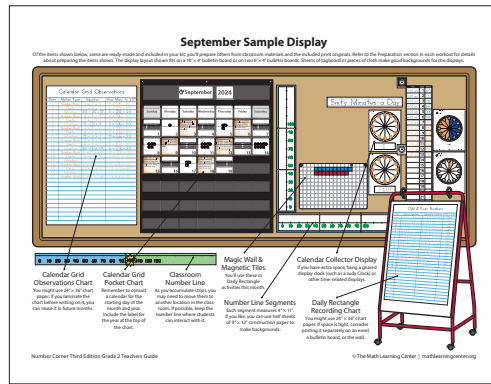
Read the **Bridges Unit 1 Introduction**, which describes the mathematical content of the unit—models, concepts, and strategies students will work with throughout the unit. Each unit's introduction also includes a list of Work Places introduced in the unit, assessment information, and teaching tips.

Next, check out the **Unit 1, Module 1 overview**. Each module's overview includes charts and lists you can use to prepare materials ahead of time.

Look over the **first few lessons of Module 1**. Take note of the four Work Places you'll introduce during Session 2. These provide early opportunities to introduce and establish Work Place routines.

Preview September Number Corner

Day	Page	Activities	Updates
Day 1	27	Calendar Grid Introducing the Calendar Markers	
Day 2	28	Calendar Collector Introducing the Calendar Collector	CC
Day 3	31	Daily Rectangle Introducing Odd & Even Numbers	OE
Day 5	32	Calendar Collector Updating the Calendar	CC, OE, NE
Day 4	39	Computationally Fluency Adding & Subtracting 0 & 1	CC, OE, CE, DR
Day 6	41	Calendar Grid Writing Equations to Match	CC, DR
Day 6	41	Number Line Introducing Three Number Lines	
Day 6	41	Calendar Grid Filling in the Observations Chart and Looking for Patterns	CC, DR, NE
Day 7	49	Calendar Collector Updating the Calendar	CC, DR, NE
Day 8	51	Calendar Grid Filling in the Observations Chart and Looking for Patterns	CC, DR, NE
Day 9	53	Calendar Collector Updating the Calendar	CC, DR, NE
Day 10	55	Daily Rectangle Odd or Even?	CC, OE
Day 10	55	Number Line Introducing the Century	CC, OE
Day 11	59	Calendar Grid Solving Problem Situations	DR, NE
Day 11	59	Calendar Collector Updating the Calendar	CC, DR, NE
Day 12	61	Calendar Grid Filling in the Observations Chart and Looking for Patterns	CC, NE
Day 12	61	Daily Rectangle Completing the Odd & Even Numbers Page	CC, OE, NE
Day 13	63	Calendar Collector Switching to the PM Clock	CC, NE
Day 14	64	Daily Rectangle Counting on the Commutative Property	CC, OE, DR, NE
Day 15	65	Computationally Fluency Counting on the Commutative Property	CC, OE, DR, NE
Day 16	69	Calendar Grid Solving Problem Situations	CC, DR
Day 16	69	Number Line Counting Up to 100 Back by 10s	DR, NE
Day 17	73	Calendar Grid Solving Problem Situations	DR, NE
Day 17	73	Calendar Collector Updating the Calendar	CC, DR, NE
Day 18	75	Daily Rectangle Completing the Odd & Even Numbers Review Pages	CC, OE, NE
Day 19	81	Computationally Fluency Two-Cent Problem	CC, OE, DR, NE
Day 20	85	Calendar Grid Filling in the Observations Chart and Looking for Patterns	CC, DR
Day 20	85	Number Line Substituting the Second Century	CC, DR



September | Workouts

Number Corner September Workouts

Overview

The workouts in the first month of school focus on a variety of basic skills. These include addition and subtraction fact strategies and problem situations to 20, odd and even numbers, time to the hour on analog and digital clocks, and counting by 10s to 200.

Copies & Display

- Print the Bridges Educator Site to review the Interactive Display Materials for this month of Number Corner. Decide whether you will use digital materials for display or copies of print originals and student book pages. Make copies as needed.
- If students do not have Number Corner Student Books, use one set of pages 1–12.
- Additional resources, including printable sets of key questions for each September workout, are available on the Bridges Educator Site.

Teaching Tips

Plan to spend more time on the Number Corner workouts this month. Establish practices that ensure Number Corner runs smoothly all year, such as:

- Allowing quality time to talk and the Number Corner discussion area.
- Picking up and putting away materials.
- Responding to one another's thinking respectfully.
- Think-pair-share effectively.

Number Corner Third Edition Grade 2 Teachers Guide 7 © The Math Learning Center | mathlearningcenter.org

Check out the **September Daily Planner** and **Sample Display**. These introductory materials with each month of Number Corner will help you prepare your schedule and materials ahead of time.

Next, read the **Workouts** section for information about the math content in this month's activities, an overview of each of the five workouts for the month, and more details about materials preparation.

Preview the Assessment Guide

Bridges Unit 1 Assessments

Figure the Facts

Overview

Unit 1 works toward the establishment of classroom norms around mathematical inquiry and discourse. Students that will play an important part in students' mathematical experiences are also put in place. The mathematical focus is on primarily on the development of number and operations sense, as well as on fact fluency to 20. Practice number bonds with the number rack, the number line, and 10 strips are employed throughout the unit, enabling students to continue to develop proficiency with foundational addition and subtraction facts, as well as with derived fact strategies. Students observe these tools to model and solve contextual problems.

There are three written assessments in Unit 1—a summative end-of-Module 1, an addition and subtraction checkpoint at the end of Module 2, and a unit assessment at the end of Module 4. In each two weeks, the third-class activities throughout the unit with teachers inquire opportunities to observe students' skills to achieve, settings.

Skills & Concepts Assessed in Unit 1

Skills & Concepts	Informal Assessments	Formal Assessments
1.OA.A Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, unknowns in all positions.	MS 10 Unit 1 Screener	MS 10 Unit 1 Screener
1.OA.B Understand the meaning of the plus sign (+) and minus sign (-) in word problems involving situations of adding to, taking from, unknowns in all positions.	MS 10 Unit 1 Screener	MS 10 Unit 1 Screener
1.OA.C Represent addition and subtraction word problems using drawings, objects, and equations with a未知 number.	MS 10 Unit 1 Screener	MS 10 Unit 1 Screener
1.OA.D Apply addition and subtraction within 20 to solve problems involving situations of adding to, taking from, unknowns in all positions.	MS 10 Unit 1 Screener	MS 10 Unit 1 Screener
1.OA.E Understand the meaning of the plus sign (+) and minus sign (-) in word problems involving situations of adding to, taking from, unknowns in all positions.	MS 10 Unit 1 Screener	MS 10 Unit 1 Screener
1.OA.F Apply addition and subtraction within 20 to solve problems involving situations of adding to, taking from, unknowns in all positions.	MS 10 Unit 1 Screener	MS 10 Unit 1 Screener
1.OA.G Apply addition and subtraction within 20 to solve problems involving situations of adding to, taking from, unknowns in all positions.	MS 10 Unit 1 Screener	MS 10 Unit 1 Screener
1.OA.H Apply addition and subtraction within 20 to solve problems involving situations of adding to, taking from, unknowns in all positions.	MS 10 Unit 1 Screener	MS 10 Unit 1 Screener
1.OA.I Apply addition and subtraction within 20 to solve problems involving situations of adding to, taking from, unknowns in all positions.	MS 10 Unit 1 Screener	MS 10 Unit 1 Screener
1.OA.J Apply addition and subtraction within 20 to solve problems involving situations of adding to, taking from, unknowns in all positions.	MS 10 Unit 1 Screener	MS 10 Unit 1 Screener
1.OA.K Apply addition and subtraction within 20 to solve problems involving situations of adding to, taking from, unknowns in all positions.	MS 10 Unit 1 Screener	MS 10 Unit 1 Screener
1.OA.L Apply addition and subtraction within 20 to solve problems involving situations of adding to, taking from, unknowns in all positions.	MS 10 Unit 1 Screener	MS 10 Unit 1 Screener
1.OA.M Apply addition and subtraction within 20 to solve problems involving situations of adding to, taking from, unknowns in all positions.	MS 10 Unit 1 Screener	MS 10 Unit 1 Screener
1.OA.N Apply addition and subtraction within 20 to solve problems involving situations of adding to, taking from, unknowns in all positions.	MS 10 Unit 1 Screener	MS 10 Unit 1 Screener
1.OA.O Apply addition and subtraction within 20 to solve problems involving situations of adding to, taking from, unknowns in all positions.	MS 10 Unit 1 Screener	MS 10 Unit 1 Screener
1.OA.P Apply addition and subtraction within 20 to solve problems involving situations of adding to, taking from, unknowns in all positions.	MS 10 Unit 1 Screener	MS 10 Unit 1 Screener
1.OA.Q Apply addition and subtraction within 20 to solve problems involving situations of adding to, taking from, unknowns in all positions.	MS 10 Unit 1 Screener	MS 10 Unit 1 Screener
1.OA.R Apply addition and subtraction within 20 to solve problems involving situations of adding to, taking from, unknowns in all positions.	MS 10 Unit 1 Screener	MS 10 Unit 1 Screener
1.OA.S Apply addition and subtraction within 20 to solve problems involving situations of adding to, taking from, unknowns in all positions.	MS 10 Unit 1 Screener	MS 10 Unit 1 Screener
1.OA.T Apply addition and subtraction within 20 to solve problems involving situations of adding to, taking from, unknowns in all positions.	MS 10 Unit 1 Screener	MS 10 Unit 1 Screener
1.OA.U Apply addition and subtraction within 20 to solve problems involving situations of adding to, taking from, unknowns in all positions.	MS 10 Unit 1 Screener	MS 10 Unit 1 Screener
1.OA.V Apply addition and subtraction within 20 to solve problems involving situations of adding to, taking from, unknowns in all positions.	MS 10 Unit 1 Screener	MS 10 Unit 1 Screener
1.OA.W Apply addition and subtraction within 20 to solve problems involving situations of adding to, taking from, unknowns in all positions.	MS 10 Unit 1 Screener	MS 10 Unit 1 Screener
1.OA.X Apply addition and subtraction within 20 to solve problems involving situations of adding to, taking from, unknowns in all positions.	MS 10 Unit 1 Screener	MS 10 Unit 1 Screener
1.OA.Y Apply addition and subtraction within 20 to solve problems involving situations of adding to, taking from, unknowns in all positions.	MS 10 Unit 1 Screener	MS 10 Unit 1 Screener
1.OA.Z Apply addition and subtraction within 20 to solve problems involving situations of adding to, taking from, unknowns in all positions.	MS 10 Unit 1 Screener	MS 10 Unit 1 Screener

© The Math Learning Center | mathlearningcenter.org

Unit 1 Module 1 | Session 5 class set plus 1 copy for display

Unit 1 Screener page 1 of 2 Sample work shown.

1 Solve each problem. Show your thinking. Write your answer on the line.

a There were 6 penguins in the water. Some more penguins jumped in. Then there were 10 penguins. How many more penguins jumped into the water?

$6 + 4 = 10$

4 more penguins jumped into the water.

b There were 10 butterflies in the garden. Then 8 of them flew away. How many butterflies are in the garden now?

$10 - 8 = 2$

2 butterflies are in the garden now.

(continued on next page)

Bridges Third Edition Grade 2 Print Originals © The Math Learning Center | mathlearningcenter.org

Bridges Unit Assessments | Unit 1

Grade 2 Unit 1 Screener Implementation Guide page 1 of 2

1a. Solve a word problem (join, change unknown) within 10. (CCSS 1.OA.9)

Solve each problem below. Show your thinking. Write your answer on the line. There were 6 penguins in the water. Some more penguins jumped in. Then there were 10 penguins. How many more penguins jumped into the water? **4** work unit 1a

1b. Solve a word problem (subtract, unknown) within 10. (CCSS 1.OA.8)

Solve each problem below. Show your thinking. Write your answer on the line. There were 10 butterflies in the garden. Then 8 of them flew away. How many butterflies are in the garden now? **2** work unit 1a

2 work unit 1a

© The Math Learning Center | mathlearningcenter.org

Visit the Bridges Educator Site at teach.mathlearningcenter.org and navigate to your curriculum materials. Find the **Assessment Guide**, and read the introduction. Here you'll find information about observational, formative, and summative assessment in Bridges.

Next, take a look at the **Bridges Unit 1 Assessments** section of the guide. Here you'll find summary and scoring information for the assessment opportunities included in Unit 1, as well as answer keys and print originals for each assessment.

The Bridges Educator Site

Bridges Educator Site from The Math Learning Center

Recently viewed publications [Go to my curriculum](#)

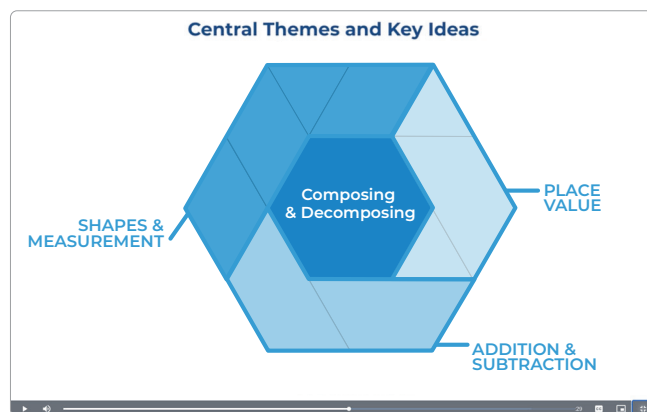
Show starred publications only off

Teachers Guide Grade 2

Assessment Guide Grade 2

Teachers Guide Grade 2

Set 1 Introduction Set 1



teach.mathlearningcenter.org

The Bridges Educator Site is your source for interactive display materials, Work Place games students can play on tablets and computers, printable files, implementation and preparation guidance, the Bridges Assessment Guide, and more.

Access to the Bridges Educator Site is included with the purchase of a Bridges or Number Corner kit. Your school or district account administrator can provide you with registration information.

For more assistance getting started with Bridges or the Bridges Educator Site, contact plsupport@mathlearningcenter.org.