

## Unit Meeting 1

### Preparing to Teach Unit Two: Seeing & Understanding Multi-digit Multiplication & Division

#### Recommended Timing

1 hour in late September (Can be combined with Meeting 1, Preparing to Teach October Number Corner, if you have at least 2 hours to meet.)

#### Materials You'll Need for the Meeting

##### Each teacher will need to bring:

- Teachers Guide Volume One
- Getting Started
- pen
- notebook
- State Supplement (You would have received one in your Bridges kit if this applied to you.)
- Unit Two Post-Assessment Blackline (Backlines A 2.5–A 2.9)
- sticky notes

##### The group will need:

- this guide, 1 copy for each teacher
- Successes & Challenges (Sheet U1.1), 1 copy for each teacher
- Challenges & Solutions (Handout 1), 1 copy for each teacher
- Instruction & Assessment of Key Unit Two Learning Objectives (Sheet U1.2), 1 copy for each teacher
- Sharing Responsibilities chart (Sheet U1.3), 1 copy for each teacher
- Challenges & Solutions (Handout 1), 1 copy for each teacher
- Organizing Your Photocopies (Handout 2), 1 copy for each teacher

**Note** Handouts 1 and 2 can be found on the MLC Web site along with this guide.

#### Part I: Reviewing Roles & Agenda (5 minutes)

As educators, you are responsible for inspiring learning and understanding in a diverse group of students. The purpose of these meetings is to help you meet that responsibility by making it easier to implement the Bridges in Mathematics program through collaboration and shared responsibilities with your colleagues. These meetings should focus on learning—learning for you and for your students.

Begin the meeting by assigning or confirming the roles discussed in the initial meeting. You will need a facilitator, a record keeper, and a timekeeper. If you have

four people, have two people share the role of facilitator. Although there are sheets for everyone to complete, you still need to designate one person as the official record keeper.

Then, start by looking over the agenda below; note the time and purpose of each section. While you could spend more time on each part of the meeting than is indicated below, follow these recommendations as much as possible in order to accomplish the goals of the meeting in about an hour. If you have more than an hour, take a moment now to identify those parts of the meeting where you'd like to spend more time.

Part	Time	Purpose
<b>I</b> Reviewing Roles & Agenda	5 minutes	Clarify group members' roles and review what will happen in today's meeting.
<b>II</b> Recording Your Successes & Challenges	5 minutes	Reflect silently and privately on implementing Bridges so far: use your sheet during this meeting to record potential solutions to your challenges.
<b>III</b> Looking at the Unit Two Planner	5 minutes	Look at the Unit overall from beginning to end, note sequence and components—develop a big picture of the unit.
<b>IV</b> Exploring Unit Two	5 minutes	Locate resources in the Teachers Guide that will be helpful as you plan for and teach the unit.
<b>V</b> Reading the Unit Two Introduction	10 minutes	Deepen your understanding of the big mathematical ideas in the unit, as well as the flow of the instruction and assessment.
<b>VI</b> Completing the Instruction & Assessment of Key Unit Two Learning Objectives Chart	15 minutes	Identify when the most important learning objectives in the unit will be taught and assessed.
<b>VII</b> Sharing Advance Preparation Responsibilities	5 minutes	Share responsibilities for preparing to teach the unit among group members and determine the place, date, and time for your next meeting.
<b>VIII</b> Sharing Successes, Challenges & Solutions	10 minutes	Listen to, support and share ideas with colleagues, with an emphasis on generating solutions to challenges.

### **Part II: Recording Your Successes & Challenges (5 minutes)**

Each group member should take a few moments to reflect on the experience of working with the Bridges curriculum. Then, take about four minutes to fill out a Successes & Challenges sheet (Sheet U1.1). Please note that you will have an opportunity to share from this sheet at the end of the meeting—do not begin to discuss this sheet now. You might record some solutions to your challenges during this meeting based on readings and discussions.

**Part III: Looking at the Unit Two Planner (5 minutes)**

**Note:** If you received a state supplement in your Bridges kit, it is very important to use the planner and activities included with that supplement.

Turn to page 167 in the Volume One Teachers Guide. Spend a minute or two looking over the Unit Two Planner. Then, discuss the planner with your colleagues. The questions below may help structure your discussion.

- Where are the first and last assessments?
- Which sessions have Home Connections?
- When will students build the Great Wall of Base Ten? (Note that this session requires some advance preparation)
- Which sessions produce Work Samples?
- Which sessions have Work Places?

**Part IV: Exploring Unit Two (5 minutes)**

Spend about five minutes using the chart below, which continues to the next page, to help guide you through several important pages and sections that will help support you and your students as you plan for and teach Unit Two. You will not have time to read these pages, but teachers new to Bridges often find it is helpful to know where everything is. *We recommend bookmarking each page with a sticky note so it is easy to find the information again.* You'll be able to find what you are looking for even more quickly if you label each sticky note.

Grade 5 Unit Two Helpful Resources		
Page	Resource	Description
<b>Unit Two Teachers Guide</b>		
168–170	Materials You'll Need for Unit Two	Provides a comprehensive list of everything you will need to gather and or do for Unit Two including manipulatives and materials, overheads, blacklines, assessments, books, and more.
164 & 165	Skills Across the Grade Levels	Shows not only the skills and concepts addressed in Unit Two, but also shows where these skills are addressed in Grade 3 and Grade 4 and other places in Grade 5. Also shows whether skills should be introduced, developed, mastered, or extended to higher levels.
165	Assessment	Describes assessment provided in Unit Two as well as tools you can use to score, track, and better understand student work.
298–306	The Unit Two Post-Assessment	Provides item-by-item answer key and scoring suggestions, also includes sample answers. Also see page 257 to see correlations between points scored and approximate grade levels.
201 and 202-203	Student Multiplication and Division Strategies	Provides charts of multiplication and division strategies students may use. The multiplication chart includes samples of mis-memorized or mis-applied algorithms and the division chart includes a note of what to look for when students use the standard algorithm for division.
221 & 222	Background for the Teacher	Answers the question, “Is the Area Model always best?” and discusses some ideas about what is most efficient when multiplying.
307–317	Unit Two Answer Keys	Provides answers to Student Book pages, Home Connections, and Assessments. Each Unit includes an Answer Key.

Getting Started		
12	Structure of Bridges Grade Five	This chart shows what the Units and Number Corner studies are comprised of and the instructional techniques for each. Look at the following pages for more information about each of the components.
84–93	Organizing and Managing Print and Overhead Materials	Provides suggestions about how to create and use systems for storing overheads, Blacklines, Student Pages, and Assessments. Note the chart on page 90 showing where all of the Bridges blacklines are and the charts on pages 92 and 93 for organizing all other materials.

### Part V: Reading the Unit Two Introduction (10 minutes)

Take about ten minutes to read the Unit Two Introduction quietly (Teachers Guide pages 157–166). You may want to highlight anything you find particularly helpful or important. As you read, please consider these questions:

- What are the mathematical learning targets for your students? What do you want students to be able to know and to do by the end of the unit?
- As you are teaching the unit, what assessment tools and opportunities will you use to determine whether students are meeting the learning objectives?

If you finish before your colleagues, look ahead to the sessions you will teach in this unit.

### Part VI: Completing the Instruction & Assessment of Key Unit Two Learning Objectives Chart (15 minutes)

As a group, read the paragraph at the top of the Instruction & Assessment of Key Unit Two Learning Objectives (sheet U1.2). Work together with your colleagues to identify when each of the three learning objectives is taught. Be sure to include both Problems & Investigations (the whole group lessons) and Work Places (partner games and activities).

Then, work together to identify the assessments that will allow you to determine whether every student in your class has met the three learning objectives. Remember to consider both formative and summative assessments, and don't limit your list to formal paper-and-pencil tasks: also consider opportunities for observation and other informal assessments.

This is a particularly important time for collaborating with colleagues. You can choose to divide the work and share back the results or you can work together and make decisions as you go along. This sheet may be turned in to your administrator following the meeting, if this is what you agreed upon in the initial meeting.

**Part VII: Sharing Advance Preparation Responsibilities (5 minutes)**

Toward the end of your meeting, use the Sharing Responsibilities for Unit Two chart (sheet U1.3) to assign advance preparation tasks to specific group members. For example, one person might take responsibility for making all the photocopies except for what is needed for Work Places, while someone else agrees to do all of the Work Places preparation. You may be able to get parent volunteers or other people to help you with some or all of this advance preparation, which would save time and energy for you. You can develop your own organizational system to store and locate all of the photocopies you will receive or you can use some of the suggestions in Handout 2, Organizing Your Photocopies.

Assign one person to photocopy and distribute finished copies of all the work products from this meeting (including any copies your principal has requested). This will ensure that everyone has a record of the agreements you reached in this meeting. Be sure to keep your Successes & Challenges chart, as well as your work and any other handouts from this meeting. Also confirm the date, time, and location of your next meeting.

**Part VIII: Sharing Successes, Challenges & Solutions (10 minutes)**

Take a few minutes to share what you wrote on your Successes & Challenges Sheet. Sharing your thoughts may help you realize that your implementation is already more successful than you think, that your colleagues have some of the same struggles as you, and that your colleagues may have insightful solutions to share. Be sure to start with the successes and reflect on what is going well so far before moving on to the challenges.

When you share the challenges you've encountered, work together to brainstorm solutions for them. Add the solutions to your chart. In addition to your colleagues' suggestions, you might also find the Challenges and Solutions chart (Handout 1) useful for this purpose. Some solutions may also have arisen during the course of this meeting. After discussing solutions to challenges you have encountered, have each group member identify at least two solutions to try in the classroom. Write each group member's initials next to the solution he or she will try. Be prepared to share your experience trying these solutions in your classroom. Before you end the meeting, give your Successes & Challenges sheets to the group member who has agreed to make and distribute copies of your work products from this meeting.

**Sheet U1.1 Successes & Challenges (Parts II and VIII)****Successes**

I felt like celebrating when ...
I was pleasantly surprised when ...
Other Successes

**Challenges**

<b>Record your challenges in this column.</b>	<b>Record potential solutions (that you thought of, were shared by your colleagues, or were found on the Challenges &amp; Solutions chart) in this column.</b>
I felt concerned when ...	
I'd like to be more effective at ...	
Other Challenges	

**Sheet U1.2 Instruction & Assessment of Key Unit Two Learning Objectives (Part VI)**

This unit addresses many important skills and concepts. The three skills on the chart below are arguably the most critical at this point in time. Record when each skill is taught and assessed; some examples have been filled in for you as a starting point. Keep in mind that Work Places provide recurring opportunities for instruction, practice, and assessment of many, but not all key skills. Try to identify both formative and summative assessments for each skill.\*

Learning Objective	Instruction of Learning Objective	Assessment of Learning Objective
<p><b>1.</b> Multiplying or dividing by 10, 100, and multiples of 10 or 100</p>	<p>Key Sessions and Work Places</p> <p>Work Place 2B Division Showdown</p>	<p>Key Sessions and Work Places</p> <p>Work Place 2B Division Showdown</p>
<p>Additional instruction and practice in November Number Corner; Students should master or approach mastery with this skill in this unit.</p>		
<p><b>2.</b> Using the area and dimensions of a rectangle to represent and solve multi-digit multiplication problems</p>	<p>Key Sessions and Work Places</p> <p>Session 5, Sketching Multiplication Arrays</p>	<p>Key Sessions and Work Places</p> <p>Unit Two post-assessment, problems 1 and 5</p>
<p>Additional instruction and practice in Units Four and Six, and December and January Number Corner; Students should master or approach mastery with this skill in this unit.</p>		
<p><b>3.</b> Dividing 2 and 3-digit numbers by 1-digit numbers with and without remainders and representing a remainder in ways appropriate to the context of the problem.</p>	<p>Key Sessions and Work Places</p>	<p>Key Sessions and Work Places</p>
<p>Additional instruction and practice in Units Four and Six and February Number Corner; these skills are developed in the unit and revisited in Units Four and Six.</p>		

**Formative assessments** provide information about student understanding to both the teacher and the student as the student is learning. Formative assessments happen in the midst of instruction and can be used to guide and change instruction to best meet the needs of the learner.

**Summative assessments** are a means to measure student learning at a particular point in time, usually after they have worked with specific content. A post-assessment is an example of a summative assessment.

## Sheet U1.3 Sharing Responsibilities for Unit Two (Part VII)

**Note** If a State Supplement was included with your Bridges kit, you'll need to adjust this list if some original sessions are being replaced with supplement sessions. You'll also need to add to this list if you are not using the Deluxe Bridges kit.

Task	Team Member	Date Due to Others
1. Run and distribute copies of participants completed Successes & Challenges sheets, as well as the completed master copies of the Instruction & Assessment of Key Unit Two Learning Objectives sheet and this Sharing Responsibilities for Unit Two sheet. This includes providing your principal with a copy of any sheets she or he has requested.		
2. Prepare for and host Meeting 2. This involves some prep work (e.g., copies).		
3. Run off copies of Assessment Blacklines for each class. Run a class set of Blacklines A 2.1–A 2.4, A 2.5–A 2.9, A 2.11, A 2.12, and A 2.14–A 2.16 for each class. Run a few copies of Blacklines A 2.10 and A 2.13 for each class.		
4. Run Blacklines needed for Unit Two for each class. Run three class sets of Blackline 2.1, one copy of Blacklines 2.2–2.13, one class set run single sided and six class sets plus a few extra run double sided of Blackline 2.14, one copy of Blacklines 2.15–2.23, one class set of Blackline 2.24, one class set plus a few extra run double sided of Blackline 2.25, one copy of Blackline 2.26, and one half-class set plus a few extra of Blackline 2.27 for each class.		
5. If you have not purchased Bridges Student Books, run a class set of pages 27–48 for each class.		
6. If you have not purchased the Home Connections, run a class set of pages 29–80 for each class.		
7. If you have not purchased the Work Places Student Book, run a class set of pages 11–28 for each class.		
8. There are several sessions in the unit that require some extra advance preparation for individual classrooms. See page 169 for more information.	Each teacher will do this independently.	N/A
9. Other:		