

## Unit Seven & April Key Pages

The pages listed below include information and organizational tools that will help you prepare for and teach Unit Seven and April Number Corner. Locate these pages in your Teachers Guides, flag them with sticky notes, read or skim them, and discuss as needed.

APRIL KEY PAGES (MEETING PART II) (Number Corner Teachers Guide, vol. 2)		
Download the April Planner from the Math Learning Center Web site: <a href="http://www.mathlearningcenter.org/resources/materials/grade-five.asp">www.mathlearningcenter.org/resources/materials/grade-five.asp</a>		
329–330	<b>Setup Page</b>	Shows what materials are posted on the overhead or on your Number Corner display for the month. The illustrations often provide a quick overview of the math addressed by each workout.
334	<b>Planning Guide</b>	Shows how often to do each workout and the Student Book pages associated with each workout.
336	<b>Materials You'll Need for April</b>	Details about the materials, copies, and advance preparation this month. Pay close attention to the copies you'll need to make and the advance preparation.
361–364	<b>April Answer Keys</b>	Provide answers for Number Corner Student Book pages.
UNIT SEVEN KEY PAGES (MEETING PART V) (Bridges Teachers Guide, vol. 4)		
919–922	<b>Unit Seven Introduction</b>	Explains what will happen during the unit and addresses the big mathematical ideas developed during the unit.
922–924	<b>What's the Big Idea?</b>	This portion of the Unit Seven Introduction provides a clear explanation of the key mathematical ideas students will explore in this unit.
926	<b>Unit Seven Planner</b>	Highlight these sessions, which require more advance preparation than usual: 2, 4, 7, and 15. See pp. 927–928 for more information about the advance preparation required for these sessions. <b>Note that there are no Work Places in Unit Seven, but you may want to use Work Places from earlier units from time to time. Use the supplement planner if teachers are using a state supplement.</b>
927–928	<b>Materials You'll Need for Unit Seven</b>	Provides a comprehensive list of everything teachers will need to gather and do to prepare for Unit Seven, including manipulatives and materials, overheads, blacklines, assessments, books, and more.
924–925	<b>Skills Across the Grade Levels</b>	Specifies whether key skills are being introduced, developed, or taught for mastery. Also indicates how key skills are addressed in Grades 3 and 4.
925	<b>Assessment</b>	Describes the formal assessments provided in Unit Seven.
1025–1035	<b>Answer Keys</b>	Provides answers and sample student work for assessments, Bridges Student Book pages, and Home Connections in Unit Seven.
GETTING STARTED KEY PAGES (MEETING PART V)		
116–123	<b>Using Assessment Results</b>	At this point in the year, this information may help structure your instruction, talk with parents and administrators, and work with students to set goals and monitor their progress.

## Unit Seven & April Recommended Mathematical Activities

In the previous Number Corner Meetings, you read and summarized workouts. Now, we recommend that you put yourselves in the shoes of students and try some of the workouts. You will gain insight into some of the most important mathematical ideas addressed in April and Unit Seven by doing the activities below. Solve the problems, play the games, and discuss your thinking with one another, just as students will. Keep the big idea and key points in mind as you do these activities. Adjust the activities as needed if you are using a state supplement.

APRIL RECOMMENDED MATHEMATICAL ACTIVITIES (MEETING PART II)	
<b>April Number Corner:</b> Students will review and reinforce important fifth grade skills and concepts: volume and surface area, converting fractions and mixed numbers, adding fractions, and dealing with place value in the billions. In the Problem Solving workout, they will learn a working backwards strategy.	
Activity	Key Points
<b>Calendar Grid</b> (Pages 343–348)	Study the first three calendar markers and share observations. Use cm cubes to build the figures and determine the volume and the surface area. Make predictions about the next two markers. Look at Student Book page 154 and read Weeks 3 & 4 (pp. 346–347) in the Teachers Guides. Complete Student Book page 162, using cm cubes. Share your work with each other and consider how the cm cubes helped you answer the questions.
<b>Computational Fluency</b> (Pages 356–360)	Exploring the game Color Ten will work best if the teacher facilitating the meeting is prepared to teach the game to his or her colleagues. We recommend introducing the game Color Ten using the description for Week 1 on pages 356–359. Then, teachers can play Color Ten, Game 2 (Student Book p. 155) in two teams. Close by discussing the key skills and concepts.
<b>Reading and Summarizing Problem Solving and Calendar Collector</b>	Work in two groups. Each group should read and develop a summary for one the two remaining workouts. Share your summary with the other group, emphasizing big ideas, key skills and concepts, advance preparation, frequency and Number Corner Student Book pages.
UNIT SEVEN RECOMMENDED MATHEMATICAL ACTIVITIES (MEETING PART VII)	
<b>Algebraic Thinking:</b> Students will observe and describe patterns and make generalizations about them. The key work here is seeing relationships between sets of numbers. Students will use letters and symbols to represent variables, examine functions, and construct and interpret various types of graphs.	
<b>Session 1</b> The Operations Game (pp. 929–935)	Read and discuss the directions for the Operations Game (pp. 929–932). Play as a group or in pairs, using Student Book page 174. Discuss the game; consider the key skills and concepts as well as the challenges. Note the Challenge notes on pages 933–934. Read the Home Connections notes (pp. 934–935). You may want to play this game and the Function machine game (Session 9) as Work Places later in the unit.
<b>Sessions 4–5</b> A Tale of Two Patterns, Parts 1 and 2 (pp. 949–964)	Look at Student Book p. 178. Then, work privately to find different ways to loop the tile and write equations to show different ways to count the tile. Then, share your ideas. Next, study and discuss Overhead 7.6. Work in pairs to complete Overheads 7.6 & 7.7—each pair needs a copy of the overhead. Discuss the questions; then graph the sequence on Student Book p. 179 together. Make observations about the graph; then move on to the Second Tile Sequence. Work in pairs on Student Book pp. 180–182: note that this is a Work Sample. If you have time, complete and discuss pp. 180–182, and graph the results on Overhead 7.8. Discuss the lines created on the graph and read the note on p. 962; or, if you are running out of time, read pp. 959–962. Note the challenge on p. 959. Read pp. 962–963 (the Poster Project).

### Instruction & Assessment of Unit Seven Key Learning Objectives

This unit addresses many important skills and concepts. The three skills on the chart below are arguably the most critical. Record when each skill is taught and assessed. Keep in mind that Work Places provide recurring opportunities for instruction, practice, and assessment of many, but not all key skills; and try to identify both formative and summative assessments for each skill.

Learning Objective	Instruction of Learning Objective	Assessment of Learning Objective
<b>1 Representing and analyzing patterns and functions using words, tables, graphs, and algebraic equations</b>	<b>Key Sessions</b>	<b>Key Sessions</b>
Additional instruction and practice in Unit One and most Number Corner months		
<b>2 Beginning to use symbols such as shapes and letters to stand for unknown quantities in equations and representing and solving expressions and equations involving variables.</b>	<b>Key Sessions</b>	<b>Key Sessions</b>
Additional instruction and practice in Unit One		
<b>3 Constructing and interpreting line graphs, line plots, tables and charts and comparing and contrasting data sets</b>	<b>Key Sessions</b>	<b>Key Sessions</b>
Additional instruction and practice in Units One, Two, Five and Eight; September, October, January, February and March Number Corner		

### Skills Assessed in April Number Corner

Number Corner teaches a variety of important skills that your students need to know. Each routine offers opportunities—formal and informal—to assess these skills. The chart below shows the skills that are formally assessed with paper-and-pencil methods during the April Number Corner. (You will have opportunities during class discussions to assess other skills informally—note that the skills and concepts addressed are written at the beginning of each routine.) Do keep in mind that it is best to evaluate students’ understanding using more than one assessment.

SKILLS	WHERE SKILLS ARE ASSESSED
<b>Problem Solving (pp. 337–342)</b>	
<ul style="list-style-type: none"> <li>• Describing, comparing, choosing, and accurately using strategies and operations for a variety of problem situations</li> <li>• Multiplying and dividing with fluency</li> <li>• Demonstrating meanings for fractions in different contexts</li> <li>• Understanding fractions as quotients of whole numbers</li> <li>• Converting back and forth between fractions of an hour and minutes</li> <li>• Telling time and calculating elapsed time</li> </ul>	Number Corner Student Book, pages 144–147, 150–153, and 156–159
<b>Calendar Grid (pp. 343–348)</b>	
<ul style="list-style-type: none"> <li>• Connecting models of surface area and volume with their respective formulas</li> <li>• Selecting and using appropriate units and formulas to measure area and volume</li> </ul>	Number Corner Student Book, pages 154 and 162
<b>Calendar Collector (pp. 349–355)</b>	
<ul style="list-style-type: none"> <li>• Using place value to read, write, order, and compare whole numbers through the billions place</li> <li>• Adding and subtracting multi-digit numbers</li> </ul>	Number Corner Student Book, pages 148 and 163
<b>Computational Fluency (pp. 356–360)</b>	
<ul style="list-style-type: none"> <li>• Generating equivalent improper fractions and mixed numbers</li> <li>• Generating equivalent fractions</li> <li>• Comparing fractions</li> <li>• Estimating the results of adding fractions</li> <li>• Adding fractions with like and unlike denominators using pictures and numbers</li> </ul>	Number Corner Student Book, pages 149, 155, 160, and 161

### Sharing Responsibilities for April Number Corner

Task	Team Member	Date Due to Others
1. Run copies of work products from this meeting: Successes & Challenges and Sharing Responsibilities for April. Bring a copy of Sharing Responsibilities to your administrator, if this is what has been agreed upon.		
2. Prepare for and host Meeting 7. This involves some prep work (e.g., copies).		
3. Run 1 copy of blacklines NC 1.1 and NC 8.3 for each class. Run a class set of blacklines NC 8.8–NC 8.9 for each class.		
4. Run 1 copy of blacklines NC 8.1–NC 8.2 for each class. Trim and attach the sheets for form one long record sheet for each classroom. Run 1 copy of blacklines NC 8.4–8.7, cut them out and attach them to form one large racetrack for each classroom.		
5. Run 1 copy of blacklines NC 8.10–8.13 on heavy cardstock, cut them apart and put them in a lunch sack for each class. You may want to laminate these cards for use in future years.		
6. If you don't have copies of the Number Corner Student Book, run a class set of pages 144–163 for each class.		
7. Find the copies of your own class Problem Solving Score Sheet (see January Advance Preparation Notes, p. 207) and run two and half class sets.	Each teacher will do independently	N/A
8. Other:		
9. Other:		

## Sharing Responsibilities for Unit Seven

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 the completed master copies of the Instruction & Assessment of Key Unit Seven Learning Objectives sheet and this Sharing Responsibilities for Unit Seven sheet. This includes providing your principal with a copy of any sheets she or he has requested.		
2. Prepare for and host Meeting 7. This involves some prep work (e.g., copies).		
3. Run 1 or 2 copies of blacklines 7.1–7.8 for each class. Run a half class set plus a few extra of blacklines 7.9–7.11 for each class.		
4. Run a class set of blacklines A 7.1–7.5, A 7.6–7.10, A 7.13–A 7.14, and A 7.16. Run a few copies of blacklines A 7.11–A 7.12, and A 7.15 for each class.		
5. If you don't have a class set of Student Books, you will need to run copies of pages 174–208 for each class.		
6. If you don't have copies of the Home Connections Book, you will need to run copies of pages 215–246 for each class.		
7. Cut a class set of 2 meter pieces of string for each class.		
8. Prepare a half class set plus a few extra of 18" by 24" chart paper.		
9. For Session 2, cut the bottom inch off of eight 3" by 2" sticky notes to make eight 3" by 1" sticky notes. Cover each puzzle on Overheads 7.3 and 7.4 with the sticky notes—do not cover the row of shapes or letters at the bottom of each puzzle.	Each teacher will do independently	N/A
10. For Session 7, you will need 3" by 3" sticky notes in 2 different colors; you will need about 7–10 sticky notes in each color for each pair of students.	Each teacher will do independently	N/A
11. You will need 15–20 coffee stirrers for each student for several sessions in this unit. You will also need a pound of rice.	Each teacher will do independently	N/A
12. Other:		