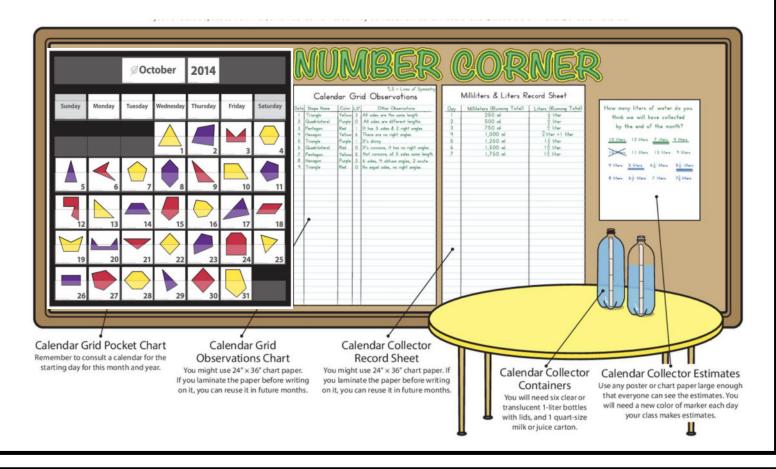
October Number Corner - Gr. 3



October Materials Needed An asterisk [*] identifies fraction* those terms for which Word liquid volume* Resource Cards are available. Task liter (I)* addition acute angle! endpoint measure Run copies of Teacher Masters T1-T12 according to the instructions at the top of angle* Copying equation* metric system* closed expression* milliliter (ml)* concave hundreds If students do not have their own Number Corner Student Books, run a class set running sum or total congruent multiply* sum or total* of pages 4-10. equilateral triangle* number line hexagon* equation* Run a single display copy of Number Corner Student Book pages 4, 5, 8, and 9. ones irregular group subtract Charts Prepare the Calendar Grid Observations Chart according to preparation instrucisosceles triangle* subtraction multiplication tions in the workout. tens multiply* line of symmetry* thousand number line* Prepare the Milliliters & Liters Record Sheet according to preparation instrucproduct* obtuse angle* two-step story problem tions in the Calendar Collector workout. open repeated addition parallel* skip-counting **Special Items** Gather the following items and prepare them according to the preparation parallelogram* instructions in the Calendar Collector workout: sum or total* pentagon* · 1 empty 1-quart carton adding on point backward · 6 clear or translucent 1-liter bottles with tops polygon* difference* · 1 plastic pitcher quadrilateral* digit rectangle* · 1 funnel (optional) forward regular · a small bottle of food coloring hundreds rhombus* jumping strategy · a cafeteria tray right angle* minuend paper or cloth toweling scalene triangle* ones · 4 or 5 plastic drinking cups or containers of various sizes side open number line square* subtract trapezoid* subtrahend Calendar Grid Observations triangle* Milliliters & Liters Record Sheet Other Observations Date Shape Name

Day

Millileters (Running Total)

Vocabulary

Liters (Running Total)

Need:

- -Calendar Grid Observations Chart
- -Quadrilateral Word Resource Card

C. Grid: 1-Introducing the October Calendar Markers (p. 9)

- Introduce the Calendar Grid:
 - a. Post the first two calendar markers
 - b. Have students share observations first in pairs, then whole group
 - c. Have students make predictions about the next calendar marker
 - i. Share and justify predictions
 - d. Post the Word Resource Card for guadrilateral



a. Fill out Calendar Grid Observations Chart for the first two days.

	Calen	dar G	rid Observations
Date	Shape Name	Color	Other Observations
1	Triangle	Yellow	All sides are the same length
2	Quadrilateral	Purple	All sides are different lengths

October: Day 2

C. Grid: Update

- 1. Have your student helper complete this update procedure everyday
 - a. Post one or more calendar markers so that the Calendar Grid is current
 - b. Fill in Observation Chart

C. Collector: 1-Introducing the Calendar Collector (p. 19)

- 1. Review the word *measure*
 - a. Recall with them how they measured length last year using rulers or tape measures
- 2. Explain that this month they will measure liquid volume and post the Word Resource Card
 - a. Ask if they can think of any tools or units that are used to measure liquid volume
- 3. Show the 1-quart carton and explain that the U.S. measures liquid volume in cups, quarts, and gallons but most other places, people use metric units
- 4. Pull out an empty 1-liter bottle and have students compare it to the 1-quart carton (Which will hold more?)
- 5. Pour the tinted water from the quart carton into the 1-liter bottle and have students discuss the results. (A liter is a little bigger than a quart)
- 6. Pour colored water into the pitcher; show students the smaller measuring cup; fill it with 250 milliliters from the pitcher
 - a. Have student estimate how much of the 1-liter bottle this will fill
 - b. Pour tinted water into 1-liter bottle and mark the water level on the tape
 - c. Repeat process until the bottle is full
- 7. Work with students to establish that each measuring cupful of water is ¼ a liter
- 8. Post the Word Resource Cards for *liter* and *milliliter* (1,000 milliliters in a liter)
- 9. Work with the class to determine that 4 sets of 250 added together makes 1,000-confirming that each cupful is ¼ a liter
- 1. Pour all the water back into the pitcher, add 250 milliliters for each day of the

Need:

- -Liquid Volume, Liter, and Milliliter Word Resource Card
- -1 quart milk or juice carton filled with tinted water
- -Empty 1-liter bottle with masking tape
- -Empty pitcher
- -Small measuring cup from Number
- Corner kit

I liter = 1,000 milliliters

Our measuring cup holds 250 ml 250 + 250 + 250 + 250 500 + 500 = 1,000Each measuring cupful is $\frac{1}{4}$ of a liter.

C. Grid: Update

- 1. Have your student helper complete this update procedure everyday.
 - a. Post one or more calendar markers so that the Calendar Grid is current.
 - b. Fill in Observation Chart

C. Collector: Update

1. Add 250 millimeters of tinted water to the 1-liter bottle currently in use and mark the water level on the masking tape.

Comp. Fluency: 1-Introducing Frog Jump Multiplication (p. 28)

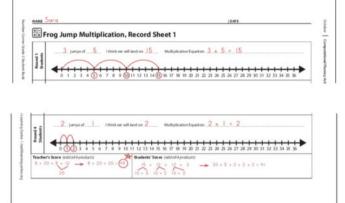
- 1. Display the Whole Class Frog Jump Multiplication Game Sheet
- 2. Briefly explain the game to the class
 - You and the students will take turns rolling a die numbered 1-6 two times. The first jump tells how many jumps you get to take, the second tells how long each jump will be
 - a. Mark your jumps on the number line and write a multiplication equation to show the results
 - Each team takes four turns, then add up their total sum; greater sum wins
- Explain that you'll go first and keep track of both teams; students will do their work in their number corner books



-Whole Class Frog Jump Multiplication

Need:

Game Sheet



October: Day 4

C. Grid: Update

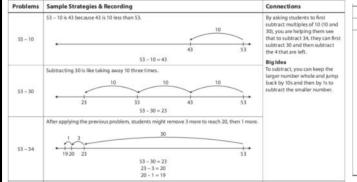
- 1. Have your student helper complete this update procedure everyday.
 - a. Post one or more calendar markers so that the Calendar Grid is current.
 - b. Fill in Observation Chart

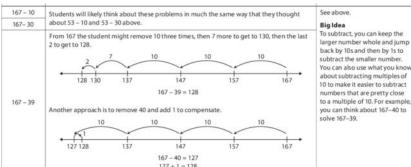
C. Collector: Update

 Add 250 millimeters of tinted water to the 1-liter bottle currently in use and mark the water level on the masking tape.

Solving Problems: 1-Problem Strings: Jumping by 10s (p. 44)

- 1. Have students get their math notebooks and a pencil.
- 2. Display the problem string on the board. Have students give a thumbs up when they have an answer. Write student strategies on the board.





Need:

- -Math notebooks
- -Pencils
- -Problem String 4

Need:

-Changing Endpoints Student Book page

C. Grid: Update

- 1. Have your student helper complete this update procedure everyday.
 - a. Post one or more calendar markers so that the Calendar Grid is current.
 - b. Fill in Observation Chart

C. Collector: Update

1. Add 250 millimeters of tinted water to the 1-liter bottle currently in use and mark the water level on the masking tape.

Number Line: 1-Changing Endpoints (p. 34)

- 1. Display Changing Endpoints Student Book page
 - a. Students will find this in their Number Corner books
- 2. Have students share what numbers belong in the boxes along the first line on the sheet
- 3. As students watch, write the number 1,000 in the last box on the first number line
 - a. Have students do the same on their sheets and discuss what the other numbers should be
 - b. Work together to fill out the rest of the boxes
- Repeat the process with 500 written in the last box of the second number line and again with 250 written in the last box of the third line

1			1000
0			500
0			250

October: Day 6

Need:

-Right Angle Measures transparency

C. Grid: 2-Identifying Right Angles (p.11)

- 1. Have students make and justify predictions about the next calendar marker
- 2. Post the marker and have students share observations
- 4. Update the Observations Chart

smaller than a right angle smaller than a right angle

C. Collector: Update

1. Add 250 millimeters of tinted water to the 1-liter bottle currently in use and mark the water level on the masking tape.

Need:

- -Milliliters & Liters Record Sheet
- -Chart paper

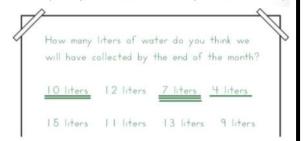
C. Grid: Update

- 1. Have your student helper complete this update procedure everyday.
 - a. Post one or more calendar markers so that the Calendar Grid is current.
 - b. Fill in Observation Chart

C. Collector: 2-Charting Milliliters & Liters (p. 23)

- 1. Have students talk about how much water has been collected so far
- 2. After a general agreement about the amount of water collected, add another cupful to the current bottle; discuss the new total
- 3. Introduce the Milliliters & Liters Record Sheet
 - a. Fill in the data for each day so far this month
 - b. Explain the idea of a running total
- 4. Have students share observations about the numbers on the record sheet
- 1. Ask students to estimate how many liters they will collect by the end of of the month
 - a. Record all estimates on chart paper
 - If more than one student estimates an particular amount, underline it

Milliliters & Liters Record Sheet					
Day	Millileters (Running Total)	Liters (Running Total)			
1	250 ml	i liter			
2	500 ml	2 liter			
3	750 ml	3 liter			
4	1,000 ml	4 liter = liter			
5	1,250 ml	I liter			
6	1,500 ml	l 2 liter			
7	1,750 ml	1 4 liter			



Need:

October: Day 8

C. Grid: Update

- Have your student helper complete this update procedure everyday.
 - a. Post one or more calendar markers so that the Calendar Grid is current.
 - b. Fill in Observation Chart

C. Collector: Update

 Add 250 millimeters of tinted water to the 1-liter bottle currently in use and mark the water level on the masking tape.

Comp. Fluency: 2-Frog Jump Multiplication Rematch (p. 31)

- Display a fresh Whole Group Frog Jump Multiplication Game Sheet Teacher Master
 - Students will find Frog Jump Multiplication, Record Sheet 2 in their Number Corner books
- 1. Review the rules of the game and play again
 - a. Use the Key Questions to keep students engaged



Key Questions

Use questions such as these to keep student engagement high while playing Frog Jump Multiplication.

- I got a 4 on my first roll, and a 5 on my second roll. What number will I land on along the number line? How did you figure it out?
- The class just got a 3 on the first roll. Is there any number you can get on the second roll that will beat my first score of 20? Why not?

 How does your product for the second turn compare with mine? Which of the two is greater? By how much?

-Whole Group Frog Jump Multiplication Game Sheet

- Now that both teams have had 3 turns, let's figure out who's ahead.
 If you add my three products, what's the total? What is the total of your three products?
 Which team is ahead? By how much?
- What two numbers will you need to roll on your last turn to beat me? Is there more than one possibility?

C. Grid: Update

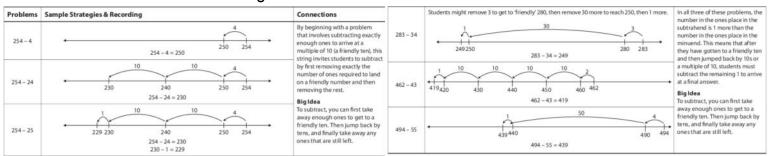
- 1. Have your student helper complete this update procedure everyday.
 - a. Post one or more calendar markers so that the Calendar Grid is current.
 - b. Fill in Observation Chart

C. Collector: Update

1. Add 250 millimeters of tinted water to the 1-liter bottle currently in use and mark the water level on the masking tape.

Solving Problems: 2-Problem Strings: Friendly Tens (p. 45)

- 1. Have students get their math notebooks and a pencil.
- 2. Display the problem string on the board. Have students give a thumbs up when they have an answer. Write student strategies on the board.



October: Day 10

C. Grid: Update

- 1. Have your student helper complete this update procedure everyday.
 - a. Post one or more calendar markers so the Calendar Grid is current.
 - b. Fill in Observation Chart

C. Collector: 2-Charting Milliliters & Liters (p. 23)

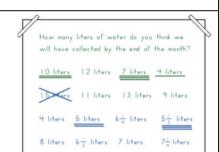
- 1. Have students talk about how much water has been collected so far
- 2. Fill in the data for each day until caught up to the current day
- 3. Have students share observations about the numbers on the record sheet
- 4. Ask students to estimate how many liters they will collect by the end of of the month
 - a. Add estimates to the previous chart using a different color

Number Line: 2-Put It on the Line, Game 1 (p. 37)

- 1. Display the Put It on the Line Game 1 Teacher Master and write 1,000 in the last box
- 2. Describe the game (students will use the top half of the sheet in their number corner books)
 - You will take turns with the class to remove one sticky note at a time front the sheet. There is a problem under 10 of the notes and a picture under the other two. When a team removes one of the notes, they will solve the problem and write the answer in the box where it belongs on the number line. If a team finds a picture, they can write a number in any of the remaining boxes (they must write an equation or story problem with that number as the answer. At the end of the game each team adds up the numbers they placed on the line; highest total wine.

<u>Need:</u>

- -Put It on the Line Game 1
- -Students each need a red and blue colored pencil

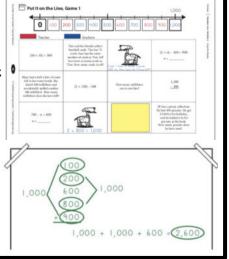


Need:

-Pencils

-Math notebooks

-Problem String 5



Need:

-Jumbo Shapes Teacher Master

Example

C. Grid: 3-Identifying Lines of Symmetry (p. 12)

- 1. Have students make predictions about the next calendar marker
- 2. Post the marker and have students share observations
- 3. Introduce the terms line of symmetry and symmetrical
 - a. Line of symmetry is a line that divides a shape into two identical mirror images; if a shape has at least one line of symmetry, it is symmetrical
- 4. Use the Example square and student input to show where the shape could be folded so one half of the shape matches the other half
- 5. Give pairs of students a cut out jumbo shape and have them determine if their shape is symmetrical
- 1. Update the LS column on the Calendar Grid Observations chart

C. Collector: Update

 Add 250 millimeters of tinted water to the 1-liter bottle currently in use and mark the water level on the masking tape.

Calendar Grid Observations						
Date	Shape Name	Color	LS*	Other Observations		
-	Triangle	Yellow	3	All sides are the same length		
2	Quadrilateral	Purple	0	All sides are different lengths		
3	Pentagon	Red	1.	It has 5 sides & 2 right angles		
4	Hexagon	Yellow	6	There are no right angles		
5	Triangle	Purple	1	It's skinny		
6	Quadrilateral	Red	0	It's concave, it has no right angles		
7	Pentagon	Yellow	5	Not concave, all 5 sides same length		
g	Hexagon	Purple	2	6 sides, 4 obtuse angles, 2 acute		
9	Triangle	Red	0	No equal sides, no right angles		

October: Day 12

Need:

- -Investigating Liters & Milliliters Teacher Master (class set + display)
- -Measuring workstation set up

C. Grid: Update

- 1. Have your student helper complete this update procedure everyday.
 - a. Post one or more calendar markers so that the Calendar Grid is current.
 - b. Fill in Observation Chart

C. Collector: 3-Hands-On Measuring (p. 25)

- Introduce the measuring work station that has been set up
 - a. The best way to learn about measuring it to measure things yourself
 - b. Explain the system for when each pair will take their turn
- 2. Show the Investigating Liters & Milliliters Teacher Master
 - a. Read the instructions and establish rules or procedures
 - b. Students will work in pairs but each student should complete their own paper copy
 - c. It will take 10-15 minutes to complete the worksheet

Need:

- -Frog Jump Multiplication, Record Sheet 3
- -Dice numbered 1-6 (half class set)

C. Grid: Update

- 1. Have your student helper complete this update procedure everyday.
 - a. Post one or more calendar markers so that the Calendar Grid is current.
 - b. Fill in Observation Chart

C. Collector: Update

1. Add 250 millimeters of tinted water to the 1-liter bottle currently in use and mark the water level on the masking tape.

Comp. Fluency: 3-Frog Jump Multiplication with a Partner (p. 31)

- 1. Display the Frog Jump Multiplication, Record Sheet 3
 - a. Have students find this page in their Number Corner Books
- 2. Review how to play the game
- 3. Pair students up and give them one die numbered 1-6 to share
- 4. Give students time to play the game.

October: Day 14

Need:

-Quadrilateral Sorting Tree Poster Teacher Master

C. Grid: 4-Sorting Quadrilaterals (p. 14)

- 1. Have students make predictions about the next calendar marker
- 2. Post the marker and have students share observations
 - a. Update the Observations chart
- 3. Have students help identify which markers show a quadrilateral
 - a. Take these markers out and put them on the whiteboard
 - b. Have students share how these quadrilaterals are the same and different
- Explain that the different quadrilaterals are grouped into three main families base on how many pairs of parallel lines (review Word Resource Card for parallel)
- 5. Display the Quadrilateral Sorting Tree Poster Teacher Master and review the highlights
- 6. Have students help name each of the quadrilaterals

*Leave the Quadrilateral Sorting Tree Poster up for the rest of the month.

C. Collector: Update

 Add 250 millimeters of tinted water to the 1-liter bottle currently in use and mark the water level on the masking tape.

The shapes on markers 10 and 14 are both trapezoids.

The shape on marker 18 is a parallelogram.

The shapes on markers 2 and 6 are called irregular quadrilaterals because they have no equal sides or angles, just as any polygon that has no equal sides or angles is an irregular polygon). A less common definition for irregular quadrilateral requires that the quadrilateral have no sides parallel, and these shapes also meet this condition.

The shape on marker 6 is also a concave quadrilateral, while the shape on marker 2 is a convex quadrilateral. Third graders are not expected to consider this classification, but you may want to discuss it with them, especially if they question the differences in the two shapes' angles.

Need:

- -Put It on the Line Game 2 Teacher Master
- -Students each need a blue and red colored pencil

C. Grid: Update

- 1. Have your student helper complete this update procedure everyday.
 - a. Post one or more calendar markers so that the Calendar Grid is current
 - b. Fill in Observation Chart

C. Collector: 2-Charting Milliliters & Liters (p. 23)

- 1. Have students talk about how much water has been collected so far
- 2. Fill in the data for each day until caught up to the current day
- 3. Have students share observations about the numbers on the record sheet
- 4. Ask students to estimate how many liters they will collect by the end of of the month
 - a. Add estimates to the previous chart using a different color

Number Line: 3-Put It on the Line, Game 2 (p. 40)

- 1. Display Put It on the Line Game 2 Teacher Master while students find it in their number corner books (they will use the bottom half today)
- 2. Write 500 in the last box on the number line while students do the same
- 3. Review the rules and then play the game

October: Day 16

Need:

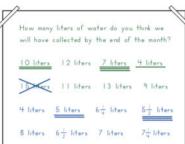
- -Congruent Word Resource Card
- -Polygon Concepts Review page

C. Grid: 5-Congruent Shapes (p. 15)

- 1. Have students make predictions about the next calendar marker
- 2. Post the marker and have students share observations
- 3. Tell students when all the markers are posted, there will be three pairs of congruent shapes
 - a. Post the Word Resource Card for *congruent*
 - b. Ask students if they can figure out what it means by looking at the picture
- 4. Explain that congruent shapes are exactly the same shape and size
 - a. Have students identify one pair of congruent shapes on the Calendar Grid and demonstrate have they know
- 5. Display the Polygon Concepts Review page and read through instructions
 - a. Have students complete this page in their Number Corner Student Books

C. Collector: Update

1. Add 250 millimeters of tinted water to the 1-liter bottle currently in use and mark the water level on the masking tape.



Need:

- -Math notebooks
- -Pencils
- -Problem String 6

C. Grid: Update

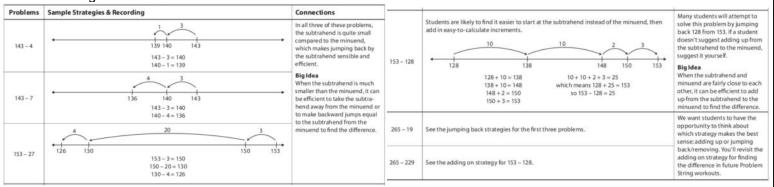
- 1. Have your student helper complete this update procedure everyday.
 - a. Post one or more calendar markers so that the Calendar Grid is current.
 - b. Fill in Observation Chart

C. Collector: Update

1. Add 250 millimeters of tinted water to the 1-liter bottle currently in use and mark the water level on the masking tape.

Solving Problems: 3-Problem Strings: Removing & Adding On (p. 46)

- 1. Have students get their math notebooks and a pencil.
- 2. Display the problem string on the board. Have students give a thumbs up when they have an answer. Write student strategies on the board.



October: Day 18

<u>Need:</u>

- -Number Corner Checkup pages 1&2
- -Red crayons (1 per student)

C. Grid: Update

- 1. Have your student helper complete this update procedure everyday.
 - a. Post one or more calendar markers so that the Calendar Grid is current.
 - b. Fill in Observation Chart

C. Collector: Update

1. Add 250 millimeters of tinted water to the 1-liter bottle currently in use and mark the water level on the masking tape.

Assessment: Number Corner Checkup 1, Part 1 (p. 48)

- 1. Explain that a checkup is a way of finding out how everyone is doing with some of the skills they've been working on over the last couple of months.
- 2. Read the directions at the top of page 1 and explain that the first problem is timed
 - a. Give students 1 minute to complete as many of the multiplication combinations as they can
- 3. Go through the remaining problems and answer questions, then give students time to complete it

Need:

- -Number Corner Checkup pages 3-5
- -Crayons (including yellow)

C. Grid: Update

- 1. Have your student helper complete this update procedure everyday.
 - a. Post one or more calendar markers so that the Calendar Grid is current.
 - b. Fill in Observation Chart

C. Collector: Update

1. Add 250 millimeters of tinted water to the 1-liter bottle currently in use and mark the water level on the masking tape.

Assessment: Number Corner Checkup 1, Part 2 (p. 49)

 Read the directions and problems aloud and answer questions, then give students time to complete the assessment

October: Day 20

<u>Need:</u>

-Solving Liquid Volume Story Problems

C. Grid: Update

- 1. Have your student helper complete this update procedure everyday.
 - a. Post one or more calendar markers so that the Calendar Grid is current.
 - b. Fill in Observation Chart

C. Collector: 4-Total Volume of the Collection (p. 26)

- Work with the class to update the collection and record sheet one last time
 - a. Compare the final volume with the estimates
- 2. Display the Solving Liquid Volume Story Problems
 - a. Review the instructions
 - b. Have students complete this page in their Number Corner Books

☑ October Daily Planner

Day	Date	Calendar Grid	Calendar Collector	Computational Fluency	Number Line	Solving Problems	Assessment
1		Activity 1 Introducing the October Calendar Markers (p. 9)					
2		Update	Activity 1 Introducing the Calendar Collector (p. 19)				
3		Update	Update	Activity 1 Introducing Frog Jump Multiplication (p. 28)			
4		Update	Update			Activity 1 Problem Strings: Jumping by 10s (p. 44)	
5		Update	Update		Activity 1 Changing Endpoints (p. 34)		
6		Activity 2 Identifying Right Angles (p. 11)	Update				
7		Update	Activity 2 Charting Milliliters & Liters (p. 23)				
8		Update	Update	Activity 2 Frog Jump Multiplication Rematch (p. 31)			
9		Update	Update			Activity 1 Problem Strings: Friendly Tens (p. 45)	
10		Update	Activity 2 Charting Milliliters & Liters (p. 23)		Activity 2 Put It on the Line, Game 1 (p. 37)		
11		Activity 3 Identifying Lines of Symmetry (p. 12)	Update				
12		Update	Activity 3 Hands-On Measuring (p. 25)				
13		Update	Update	Activity 3 Frog Jump Multiplication with a Partner (p. 31)			
14		Activity 4 Sorting Quadrilaterals (p. 14)	Update				
15		Update	Activity 2 Charting Milliliters & Liters (p. 23)		Activity 3 Put It on the Line, Game 2 (p. 40)		
16		Activity 5 Congruent Shapes (p. 15)	Update				
17		Update	Update			Activity 1 Problem Strings: Removing vs. Adding On (p. 46)	
18		Update	Update				Number Corner Checkup 1, Part 1 (p. 48)
19		Update	Update				Number Corner Checkup 1, Part 2 (p. 49)
20		Update	Activity 4 Total Volume of the Collection (p. 26)				

Note On days when the Calendar Grid or Calendar Collector are not featured in an activity, a student helper will update one or both either before or after Number Corner. Summaries of the update routines appear below.

Calendar Grid – If the Calendar Grid isn't one of the featured workouts for the day, the student helper posts the marker before or after the class meets for Number Corner and records the day's date on the whiteboard.

Calendar Collector – If the Calendar Collector isn't one of the featured workouts for the day, the student helper measures out 250 millilliters of tinted water from a pitcher you've provided, adds it to the liter bottle that is being filled at the time, and marks the new water level on the bottle.

October Calendar Grid Answer Key

About the Pattern

- Number of sides: 3 sides, 4 sides, 5 sides, 6 sides; 3 sides, 4 sides, 5 sides, 6 sides, and so on
- Type of polygons: Triangle, quadrilateral, pentagon, hexagon; triangle, quadrilateral, pentagon, hexagon, and so on
- Color: Yellow, purple, red; yellow, purple, red, and so on

Date	Shape Name	Color	Other Observations
1	triangle	yellow	Add observations from student
2	quadrilateral	purple	
3	pentagon	red	
4	hexagon	yellow	
5	triangle	purple	
6	quadrilateral	red	
7	pentagon	yellow	
8	hexagon	purple	
9	triangle	red	
10	quadrilateral	yellow	
11	pentagon	purple	
12	hexagon	red	
13	triangle	yellow	
14	quadrilateral	purple	
15	pentagon	red	
16	hexagon	yellow	
17	triangle	purple	
18	quadrilateral	red	
19	pentagon	yellow	
20	hexagon	purple	
21	triangle	red	
22	quadrilateral	yellow	
23	pentagon	purple	
24	hexagon	red	
25	triangle	yellow	
26	quadrilateral	purple	7
27	pentagon	red	
28	hexagon	yellow	
29	triangle	purple	
30	quadrilateral	red	
31	pentagon	yellow	