May Number Corner – Gr. 3

Calendar Grid Pocket Chart
Remember to consult a calendar for the starting day of this month and year.

Calendar Grid Observations Chart
You might use 24″ × 36″ chart paper.
If you laminated a sheet in previous months, you can erase and reuse it now.

Calendar Collector Record Sheet
Students will roll and collect multiplication products in this month's Calendar Collector. See the Preparation section of the workout for details.

May Materials Needed

Copies	Run copies of Teacher Masters T1–T17 according to the instructions at the top of each master.
	If students do not have their own Number Corner Student Books, run a class set of pages 69–83.
	Run a single display copy of Number Corner Student Book pages 69–76 and 78–83.
Charts	Prepare this month's Observations Chart according to Preparation instructions in the Calendar Grid workout.
	Prepare this month's Record Sheet according to Preparation instructions in the Calendar Collector workout.
Special Items	Before Number Line Activities 1 and 2, prepare the Put It on the Line, Game Teacher Masters by covering each problem with a sticky note. If you are using an overhead projector, you may need to use a stack of sticky notes or card stock to ensure the problems are hidden.
	Before Number Line Activity 3, get enough sticky notes for pairs of students to cover the problems on the Put It on the Line, Game 6 Teacher Master.

Literature Connections:
- *The King's Chessboard* by David Birch
- *Anna's Magic Seeds* by Mitsumasa Anno

Vocabulary:
Area*
Centimeters (cm)*
Data*
Denominator*
Divide*
Dividend*
Divisor*
Equal*
Equation*
Equivalent fraction*
Estimation
Even*
Even Number*
Factor*
Fraction*
Greater than
Grid
Group
Half*
Improper fraction*
Inch (in)*
Less than
Line plot
Mixed number*
Multiple*
Multiply*
Number line*
Numerator*
Odd number*
Product*
Quotient*
Rectangle*
Rounding*
Square centimeters
Unknown*
Variable*
Whole

May: Day 1

Comp. Fluency: 1-Quick Facts & Flashcards (p. 26)

1. Have students record the results from their last Quick Facts.
2. Pass out a new copy of the Quick Facts sheet and have students complete it with their next multiplier.
1. Remind students that they will have 4 minutes to complete as many of the problems as they can.
    a. To keep track of time, you will write 0-1 on the board. After a minute, you'll write 1-2. After 2 minutes, you'll write 2-3. After 3 minutes, you'll write 3-4. After 4 minutes, you'll tell them to stop.
    b. When students have finished, they should write the range of minutes on the board.
2. Start the timer and have students begin. At 4 minutes, have all students stop even if they are not done. If they did not finish, they should write 4+ in the How Many Minutes? box.
3. When students have finished the timed multiplication part of Quick Facts, have them work on the division section at the bottom of the page.
    a. Students write 10 different products of their choice from the grid in the dividend boxes.
    b. They they record their multiplier as the divisor on each line.
    c. Then they find all 10 quotients, based on the multiplication problems they just solved.
1. Collect the Quick Facts worksheets so they can be marked before the next Quick Facts check.
1. Have students look at their Quick Facts Tracking Sheets and think about which facts are most challenging for them so they can make their own flashcards.
1. Explain that students will create their own flashcards for facts they have selected and model how to make a flashcard for 8x7.
1. Make sure students have blank flashcards and colored pencils. Then give them time to create their own flashcards.
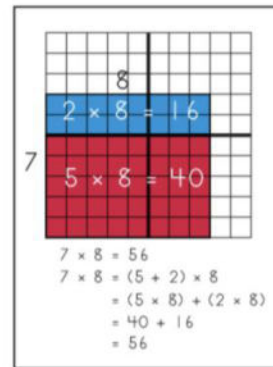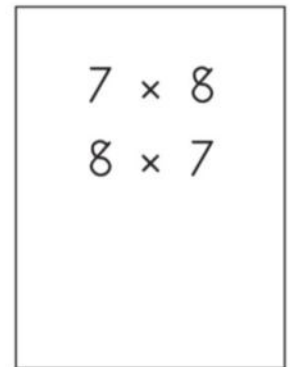
front of card

back of card

May: Day 2

C. Grid: 1-Introducing the Calendar Grid (p. 7)

1. Reveal the first calendar marker and have students make observations.
2. Use the Word Resource card for area to discuss the area of the grid (36 square units) and the area of the outlined figure (24 square units).
1. Reveal the second marker. Give students time to make observations. Have students compare the first two markers.
2. Display the Area & Fraction student book page while students find it in their own books.
    a. Have students shade in part of the rectangle to match the green region on marker 2.
    b. Have students determine what fraction of the whole rectangle is represented by the green region.
    c. Invite students to share the fraction names and the work they did dividing the rectangle into equal parts to justify their thinking.
        i. What is the area that is not shaded in?
3. Fill in the observation chart for the first two calendar markers.
4. If time, review items 3 and 4 on the student book page and give students time to complete them.
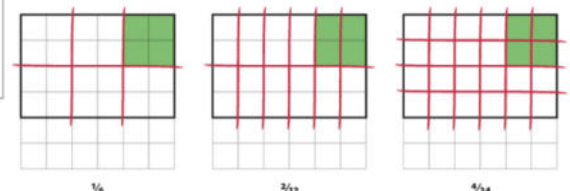
Area & Fractions

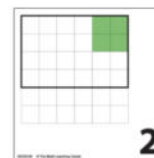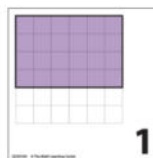1 Shade in part of this rectangle to match the green region on marker 2.
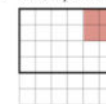
2 Write at least two fractions to show what fraction of the whole rectangle is represented by the shaded region.

1/6, 4/24, 2/12
Work will vary.

1/6   2/12   4/24

Calendar Grid Observations

Date	Area of Outlined Figure	Area of Colored Region	Color	Fractions
1	24	24	purple	24/4 : 1
2	24	4	green	4/24 ; 2/12 ; 1/6

1   2

May: Day 3

Roll & Multiply Record Sheet

Day	Products					Number of Odd Products	Number of Even Products
1	42 (6 × 7)	20 (4 × 5)	20 (5 × 4)	30 (6 × 5)	63 (9 × 7)	1	4

C. Grid: Update
1. Post one or more calendar markers so that the Calendar Grid is current.
1. Update the Calendar Grid Observation Chart.

C. Collector: 1-Introducing Roll & Multiply (p. 17)
1. Explain that every school day this month, students will roll two dice marked 4-9 and multiply the numbers on the dice. They will do this five times each school day to collect five products per day.
   a. They will make observations about the products that will help them learn more about multiplication, patterns, and probability.
2. Before modeling this process, ask students to think about what products you might get: what numbers is it possible to roll, and what are the products of the resulting combinations?
3. Have students talk, first in pairs and then as a whole group, about the following questions. *Take time to build discussion. It is likely that students will disagree with one another, and they might be unsure about how to answer these questions. Over the course of the month, they will use the data they gather to come back to these questions.*
   a. Is there a better chance of getting an odd or even product, or is the chance that you will get an odd product equal to the chance that you will get an even product?
   b. What if you repeated the experiment 100 times? Would you get odd products more than even, even more than odd, or about the same of even or odd?
4. Work with students to generate and record five products for the first day of the month. Then have students consider the following questions.
   a. If we roll the dice 5 times a day for each day of school this month, about how many rolls will that be in all?
   b. Do we really need to collect that much data? How many times do you think we need to roll to determine the chances of rolling an odd or even number?
5. Work with students to fill in the Record Sheet for each day of school that has passed so far.
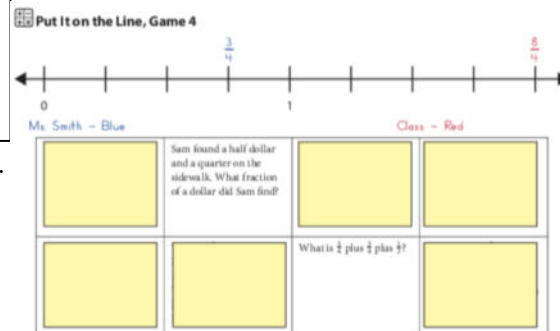

May: Day 4

Put It on the Line, Game 4

C. Grid: Update
1. Post one or more calendar markers so that the Calendar Grid is current.
2. Update the Calendar Grid Observation Chart.

C. Collector: Update
1. Roll two 4-9 dice. Multiply the number shown and record the product on the Roll & Multiply Record Sheet
1. Repeat rolling, multiplying, and recording 4 more times. Record how many products are odd and even.

Number Line: 1-Introducing Put It on the Line with Mixed Numbers (p. 34)
1. Get ready to play Put It on the Line by first displaying the Put It on the Line, Game 4 Teacher Master with sticky notes covering the problems and asking students to get their materials ready.
   a. Each student needs a whiteboard with a marker and eraser or scratch paper and a pencil
2. Remind students how to play.
   a. Players take turns revealing any of the 10 problems on the game board, solving the problem, and recording the answer where it belongs on the number line. Opposing players use a different color to write their numbers on the line. Whatever numbers they write become points for them. After each student or team has solved five problems, they estimate each team's total to predict a winner and then compute the exact totals to determine the winner.
3. Explain that they are going to play as a class against you today. Have a student reveal the first problem. Encourage students to solve each problem on their whiteboards. Then have the student record the answer on the number line.
4. Continue playing by taking turns solving problems and writing the answers on the number line.
5. Once all the questions have been answered, have students estimate their total and your total to predict who will win.
6. Then, have students confirm their predictions by adding each team's numbers.
7. Roll the more/less die to determine if the player with the lower or higher sum wins.

May: Day 5

C. Grid: 2-Focus on Fractions & Division (p. 10)
1. Have students study the Calendar Grid Observations Chart. Have all the rows been filled out correctly? Do they notice any patterns within rows? How about among different rows?
2. Add to or amend the Observation Chart so it is filled out completely and correctly.
1. Invite students to make predictions about today's calendar marker.
   a. What color will it be? What shape will it be? How many square units will be shaded in?
1. Reveal today's calendar marker and fill out the Observations Chart.
2. Have students complete the Fractions of Other Areas page in their number corner student books. Review the directions before giving students time to complete it alone or in pairs.

C. Collector: Update
1. Roll two 4-9 dice. Multiply the number shown and record the product on the Roll & Multiply Record Sheet
1. Repeat rolling, multiplying, and recording 4 more times. Record how many products are odd and even.

May: Day 6

C. Grid: Update
1. Post one or more calendar markers so that the Calendar Grid is current.
2. Update the Calendar Grid Observation Chart.

C. Collector: Update
1. Roll two 4-9 dice. Multiply the number shown and record the product on the Roll & Multiply Record Sheet
2. Repeat rolling, multiplying, and recording 4 more times. Record how many products are odd and even.

Solving Problems: 1-Solving & Discussing Problems (p. 42)
1. Display Number Corner Student Book page 78 & 79. Complete part a of 1 and 2.
1. Return students' most recent Quick Facts papers, and explain how they will use them for today's activity.
   a. Students should identify which multiplication facts were most challenging; these might be problems they got incorrect or those they had to think about longer before solving.
   a. They will select 3 of those challenging facts and focus on them in item 3 by: drawing an array to represent the combination and using the array to illustrate a strategy for calculating the product that works well for them
1. Give students the rest of the time to complete the pages.

May: Day 7

C. Grid: Update
1. Post one or more calendar markers so that the Calendar Grid is current.
2. Update the Calendar Grid Observation Chart.

C. Collector: 2-Showing the Data on a Chart and Graph (p. 19)
1. Roll two 4-9 dice. Multiply the number shown and record the product on the Roll & Multiply Record Sheet.
2. Repeat rolling, multiplying, and recording 4 more times. Record how many products are odd and even.
3. Display the table on the top of the Roll & Multiply Data Chart Student Book page 74. Students will gather data, organize it in a table and a graph, and then make observations about the chart.
4. Determine the total number of odd and even products. Have students fill this out on their page.
   a. Determine the total number of products. Then, share any observations.
1. Look at the bottom portion of the page. Students will transfer the data from the table to the bar graph.
   a. Work together to determine the labels.
   b. Read questions 3 & 4.
   c. Give students time to transfer and complete the information to their own page.

Roll & Multiply Data Chart

Date	Total Odd Products	Total Even Products	Total Products

1. Label the axes on the graph to the right so you can show the data from the chart on it.
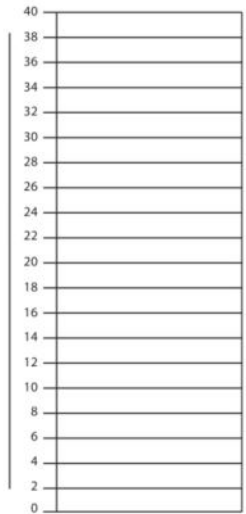
2. Draw a bar graph to represent the data from the chart.

3. Based on the data, how would you describe the chance of getting an odd number when you roll and multiply?
   - impossible
   - unlikely
   - equally likely or unlikely
   - likely
   - certain

4. How would you describe the chance of getting an even number when you roll and multiply?
   - impossible
   - unlikely
   - equally likely or unlikely
   - likely
   - certain

May: Day 8

C. Grid: Update
1. Post one or more calendar markers so that the Calendar Grid is current.
2. Update the Calendar Grid Observation Chart.

C. Collector: Update
1. Roll two 4-9 dice. Multiply the number shown and record the product on the Roll & Multiply Record Sheet
2. Repeat rolling, multiplying, and recording 4 more times. Record how many products are odd and even.

Comp. Fluency: 2-Playing Ten to Win Multiplication as a Class (p. 28)
1. Complete the Quick Facts routine.
2. Display the Ten to Win Game Record Sheet (Class Versus Teacher Version) Teacher Master.
   a. Spin both spinners.
   b. Multiply the two factors spun and find a cell on the grid containing that product.
   a. Color lightly over it in your color to "capture" that cell.
   b. Then have students take their turn.
   c. Continue taking turns until you or the students have "captured" ten cells.
1. End the session with the following reflection questions.
   a. Why are there only certain numbers on the gameboard? Why are there not all the numbers from 16 to 81 or from 0 to 81?
   a. What happens when you multiply an even number by an even number? An odd number with an odd number? An even number by an odd number?

Ten to Win Multiplication Game

Class Versus Teacher Record Sheet
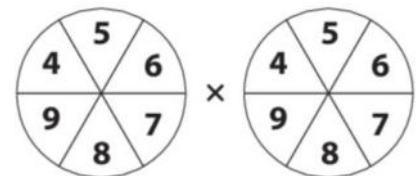
16	20	20	24	24	25	28	28	30
30	32	32	35	35	36	36	36	40
40	42	42	45	45	48	48	49	54
54	56	56	63	63	64	72	72	81

May: Day 9

C. Grid: 3-Finding the Area of Rectilinear Figures (p. 11)

1. Update the Calendar Grid and Observation Chart
2. Have students turn to the Areas of Rectilinear Figures in their student books. Spend time finding two different ways to determine the area of the figure from marker 9.
   a. After students have shared different strategies, give students time to find a third way to determine the area of the figure.
3. Spend some time talking about the calendar markers and the fractions on the observations chart.
   a. What do all the purple markers have in common? (All represent fractions that are greater than ½)
   b. What do all the green markers have in common? (All represent fractions that are less than ½)
   c. What is special about the orange marker? (exactly ½) When do you think we will see another orange marker?
   d. If we made a marker that had this same figure on it and filled in 13 square units, should we use purple, green, or orange? Why? What if we filled in 7 square units? 21 square units?
   e. What is greater: 4/6 or ¾ (⅓ or ⅚, ⅔ or 4/6, ¼ or ⅓, and so on)? Use the markers and observation chart to prove it.
   f. We talk about the fractions on markers 6 and 7 as some number of thirds. Can we do that for marker 5? Why or why not?
   g. What is the same about markers 2 and 10 (or 3 and 11)? What is different about these markers?
   h. Can you say that the two fractions on marker 3 and 11 are equal? Why or why not?
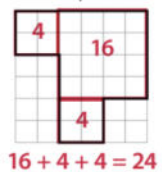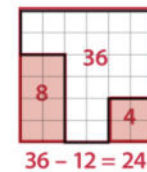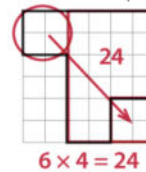4. If time, have students complete the rest of the student book page.

C. Collector: Update

1. Roll two 4-9 dice. Multiply the number shown and record the product on the Roll & Multiply Record Sheet
1. Repeat rolling, multiplying, and recording 4 more times. Record how many products are odd and even.

Work will vary. Examples shown.

🔢 Areas of Rectilinear Figures

1 Show 3 different ways to find the area of the outlined figure. Label all your work.

$6 \times 4 = 24$ $36 - 12 = 24$ $16 + 4 + 4 = 24$

May: Day 10

Need:
-Put It on the Line, Game 5 Teacher Master
-whiteboard and marker for each student

C. Grid: Update

1. Post one or more calendar markers so that the Calendar Grid is current.
2. Update the Calendar Grid Observation Chart.

C. Collector: Update

1. Roll two 4-9 dice. Multiply the number shown and record the product on the Roll & Multiply Record Sheet
2. Repeat rolling, multiplying, and recording 4 more times. Record how many products are odd and even.

Number Line: 2-Playing Put It on the Line as a Class (p. 36)

1. Today the class will play Put It on the Line in two teams. Briefly review the directions (found on Day 4).
2. Split the class in half. Students should each have a whiteboard and whiteboard marker.
3. Display the Put It on the Line, Game 5 Teacher Master (with sticky notes covering the questions).
   a. Ask what numbers would go on the lines.
   b. Have the class play the game. Every student should be working to solve the problems on their whiteboards. Have some students share their strategies for each problem.
   c. Encourage students to state their answers in thirds as a mixed number or improper fraction.

Game 5			
1	2	3	4
$\frac{1}{3}$	$1\frac{1}{3}$ or $\frac{4}{3}$	$2\frac{2}{3}$ or $\frac{8}{3}$	$\frac{2}{3}$
5	6	7	8
$1\frac{2}{3}$ or $\frac{5}{3}$	$2\frac{1}{3}$ or $\frac{7}{3}$	2 or $\frac{6}{3}$	1 or $\frac{3}{3}$

May: Day 11

C. Grid: Update
1. Post one or more calendar markers so that the Calendar Grid is current.
2. Update the Calendar Grid Observation Chart.

C. Collector: Update
1. Roll two 4-9 dice. Multiply the number shown and record the product on the Roll & Multiply Record Sheet
2. Repeat rolling, multiplying, and recording 4 more times. Record how many products are odd and even.

Solving Problems: 1-Solving & Discussing Problems (p. 42)
1. Display Number Corner Student Book page 80 & 81. Complete part A of 1 and 2.
1. Return students' most recent Quick Facts papers, and explain how they will use them for today's activity.
   a. Students should identify which multiplication facts were most challenging; these might be problems they got incorrect or those they had to think about longer before solving.
   a. They will select 3 of those challenging facts and focus on them in item 3 by: drawing an array to represent the combination and using the array to illustrate a strategy for calculating the product that works well for them
1. Give students the rest of the time to complete the pages.

May: Day 12

C. Grid: Update
1. Post one or more calendar markers so that the Calendar Grid is current.
2. Update the Calendar Grid Observation Chart.

C. Collector: 3-Thinking About the Data So Far (p. 21)
1. Roll two 4-9 dice. Multiply the number shown and record the product on the Roll & Multiply Record Sheet.
2. Repeat rolling, multiplying, and recording 4 more times. Record how many products are odd and even.
1. Display the Thinking About Roll & Multiply student book page. Have students work with a partner to determine the total number of odd products and even products shown on the Record Sheet.
   a. Invite student pairs to share their totals.
   b. Enter the date and total number of odd and even products on the student book page.
   a. Have students determine the total number of products.
1. Have students share any observations.
   a. Has your thinking changed? Why or why not?
   b. Do you have a strong opinion about whether you are more likely to get an even product or odd product? Explain.
   a. When do you get even products and when do you get odd products?
   b. Could you predict the likelihood of getting an odd or even product when you multiply any two numbers, not just the ones shown on the dice?
1. Go over the remaining questions with the class. Students will use the information from the display copy for their own page. Give students the remaining time to finish the page.

May: Day 13

C. Grid: Update

1. Post one or more calendar markers so that the Calendar Grid is current.
2. Update the Calendar Grid Observation Chart.

C. Collector: Update

1. Roll two 4-9 dice. Multiply the number shown and record the product on the Roll & Multiply Record Sheet
2. Repeat rolling, multiplying, and recording 4 more times. Record how many products are odd and even.

Number Line: 3-Playing Put It on the Line with a Partner (p. 38)

1. Today the class will play Put It on the Line with a partner. Briefly review the directions (found on Day 4).
2. Distribute copies of the Put It on the Line, Game 6 Teacher Master (with sticky notes covering the questions). Display your copy.
   a. Ask what numbers would go on the lines.
   b. After discussing what numbers will go on the number line, ask students to think of some mixed numbers and improper fractions that will go on the line.
   c. Have students get 2 different colored pencils and play with a partner.
1. At the end of your time, have students stop playing and add up their scores. They can roll the more/less dice to decide who wins.

Game 6				
1	2	3	4	5
$1\frac{4}{10}$ or $\frac{14}{10}$	$1\frac{2}{10}$ or $\frac{12}{10}$	$1\frac{9}{10}$	$\frac{13}{10}$	$1\frac{1}{10}$ or $\frac{11}{10}$
6	7	8	9	10
$1\frac{5}{10}$ or $\frac{15}{10}$	$1\frac{6}{10}$ or $\frac{16}{10}$	$1\frac{7}{10}$ or $\frac{17}{10}$	$1\frac{8}{10}$ or $\frac{18}{10}$	$\frac{20}{10}$

May: Day 14

C. Grid: Update

1. Post one or more calendar markers so that the Calendar Grid is current.
1. Update the Calendar Grid Observation Chart.

C. Collector: Update

1. Roll two 4-9 dice. Multiply the number shown and record the product on the Roll & Multiply Record Sheet
2. Repeat rolling, multiplying, and recording 4 more times. Record how many products are odd and even.

Comp. Fluency: 3-Focusing with Flashcards (p. 30)

1. Complete the Quick Facts routine.
2. Have students look at their Quick Facts Tracking Sheets. Have students determine which facts are challenging for them.
1. Give students blank flashcards and the remaining time to make any new flashcards they need.

$$7 \times 8$$
$$8 \times 7$$

$$2 \times 8 = 16$$
$$5 \times 8 = 40$$

$$7 \times 8 = 56$$
$$7 \times 8 = (5 + 2) \times 8$$
$$= (5 \times 8) + (2 \times 8)$$
$$= 40 + 16$$
$$= 56$$

front of card   back of card

May: Day 15

C. Grid: Update
1. Post one or more calendar markers so that the Calendar Grid is current.
2. Update the Calendar Grid Observation Chart.

C. Collector: Update
1. Roll two 4-9 dice. Multiply the number shown and record the product on the Roll & Multiply Record Sheet
2. Repeat rolling, multiplying, and recording 4 more times. Record how many products are odd and even.

Solving Problems: 1-Solving & Discussing Problems (p. 42)
1. Display Number Corner Student Book page 82 & 83. Complete part A of 1 and 2.
1. Return students' most recent Quick Facts papers, and explain how they will use them for today's activity.
   a. Students should identify which multiplication facts were most challenging; these might be problems they got incorrect or those they had to think about longer before solving.
   a. They will select 3 of those challenging facts and focus on them in item 3 by: drawing an array to represent the combination and using the array to illustrate a strategy for calculating the product that works well for them
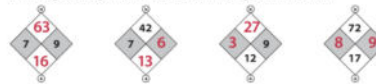1. Give students the rest of the time to complete the pages.

May: Day 16

C. Grid: Update
1. Post one or more calendar markers so that the Calendar Grid is current.
2. Update the Calendar Grid Observation Chart.

C. Collector: 4-Drawing Conclusions About the Data and Experiment (p. 23)
1. Roll two 4-9 dice. Multiply the number shown and record the product on the Roll & Multiply Record Sheet
2. Repeat rolling, multiplying, and recording 4 more times. Record how many products are odd and even.
3. Display the One More Look at Roll & Multiply with the table filled out.
4. Ask students to turn to a partner and share observations about the data in the table.
5. Ask students to think about how the total number of odd products relates to the total number of even products.
   a. It is likely that students will notice that there are about 3 times as many even products as there are odd products and that about one-fourth of the products are odd.
1. Give students a few minutes to find and complete the student book page in their Number Corner books.
1. Invite several students to share their responses to questions 2a and 2b. Encourage students to support and justify their thinking.

May: Day 17

C. Grid: 4-Comparing Fractions (p. 13)
1. Update the Calendar Grid and Observations Chart.
2. Ask students which is greater ⅔ or ⅚. Ask them to study the markers and the Observations Chart to think about this question.
3. Invite students to share their thinking and use the calendar markers to explain why one fraction must be greater than the other. Record students' thinking symbolically.
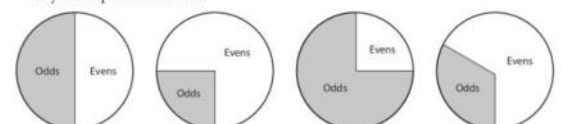4. Repeat with different pairs of fractions. (6/8 and ⅚; 2/8 and ⅓; 4/6 and ⅜; ½ and ⅔; ¼ and ⅔; 6/8 and ⅓)
5. Display the Area & Fractions Story Problems Number Corner Student Book page.
   a. Read each problem aloud or invite a student to read each one aloud.
   b. Answer questions students have about the problems or about what they should do.
6. Give students the rest of the time to complete the page.

C. Collector: Update
1. Roll two 4-9 dice. Multiply the number shown and record the product on the Roll & Multiply Record Sheet
2. Repeat rolling, multiplying, and recording 4 more times. Record how many products are odd and even.

Assessment: Number Corner Checkup 4, Part 1 (p. 44)
1. Display Number Corner Checkup 3, pages 1-3 and give each student a copy.
2. Tell students they will have one minute to complete as many of the multiplication problems on the top half of the first page. They will use a colored pencil for the multiplication problems and a regular pencil for the rest of the problems.
3. Have students pick up a colored pencil. Tell them when to begin and give them one minute to complete as many multiplication facts as possible.
4. When 1 minute has passed, collect the colored pencils. Give students to rest of the time to finish pages 1-3.

May: Day 18

C. Grid: Update
1. Post one or more calendar markers so that the Calendar Grid is current.
2. Update the Calendar Grid Observation Chart.

C. Collector: Update
1. Roll two 4-9 dice. Multiply the number shown and record the product on the Roll & Multiply Record Sheet
2. Repeat rolling, multiplying, and recording 4 more times. Record how many products are odd and even.

May: Day 19

C. Grid: Update
1. Post one or more calendar markers so that the Calendar Grid is current.
1. Update the Calendar Grid Observation Chart.

C. Collector: Update
1. Roll two 4-9 dice. Multiply the number shown and record the product on the Roll & Multiply Record Sheet
2. Repeat rolling, multiplying, and recording 4 more times. Record how many products are odd and even.

Assessment: Number Corner Checkup 4, Part 2 (p. 45)
1. Have students get out their pencils, a colored pencil, and a ruler.
2. Display Number Corner Checkup 4, pages 4-6 and give each student a copy.
3. Give students the rest of the time to finish the assessment.

May: Day 20

C. Grid: Update
1. Post one or more calendar markers so that the Calendar Grid is current.
1. Update the Calendar Grid Observation Chart.

C. Collector: Update
1. Roll two 4-9 dice. Multiply the number shown and record the product on the Roll & Multiply Record Sheet
2. Repeat rolling, multiplying, and recording 4 more times. Record how many products are odd and even.

Comp. Fluency: 4-Playing Ten to Win Multiplication in Pairs (p. 31)

1. Complete the Quick Facts routine.
2. Then, have students get their Number Corner student books out and open to the Ten to Win Spinner and Record Sheet pages.
1. Review how to play Ten to Win in pairs.
    a. Explain that students will play Ten to Win in pairs. Invite a student to summarize the directions. Explain that the rules are the same except that as they spin factors, they need to record each equation spun in the correct column on their side of the record sheet.
    a. They can decide which partner's book to use first and which partner will use which side of the page.
    a. About 5 minutes before time is up, you will signal to the class that they should stop and find out who has captured the most cells on the grid.
1. Pair students up and give each pair a spinner overlay.

May Answer Key

Date	Area of Outlined Figure	Area of Colored Region	Color	Fractions
1	24	24	purple	$^{24}/_{24} = 1$
2	24	4	green	$^{4}/_{24} = ^{2}/_{12} = ^{1}/_{6}$
3	24	20	purple	$^{20}/_{24} = ^{10}/_{12} = ^{5}/_{6}$
4	24	6	green	$^{6}/_{24} = ^{2}/_{8} = ^{1}/_{4}$
5	24	18	purple	$^{18}/_{24} = ^{6}/_{8} = ^{3}/_{4}$
6	24	8	green	$^{8}/_{24} = ^{4}/_{12} = ^{2}/_{6} = ^{1}/_{3}$
7	24	16	purple	$^{16}/_{24} = ^{8}/_{12} = ^{4}/_{6} = ^{2}/_{3}$
8	24	12	orange	$^{12}/_{24} = ^{6}/_{12} = ^{2}/_{4} = ^{3}/_{6} = ^{1}/_{2}$
9	24	24	purple	$^{24}/_{24} = 1$
10	24	4	green	$^{4}/_{24} = ^{2}/_{12} = ^{1}/_{6}$
11	24	20	purple	$^{20}/_{24} = ^{10}/_{12} = ^{5}/_{6}$
12	24	6	green	$^{6}/_{24} = ^{2}/_{8} = ^{1}/_{4}$
13	24	18	purple	$^{18}/_{24} = ^{6}/_{8} = ^{3}/_{4}$
14	24	8	green	$^{8}/_{24} = ^{4}/_{12} = ^{2}/_{6} = ^{1}/_{3}$
15	24	16	purple	$^{16}/_{24} = ^{8}/_{12} = ^{4}/_{6} = ^{2}/_{3}$
16	24	12	orange	$^{12}/_{24} = ^{6}/_{12} = ^{2}/_{4} = ^{3}/_{6} = ^{1}/_{2}$
17	24	24	purple	$^{24}/_{24} = 1$
18	24	4	green	$^{4}/_{24} = ^{2}/_{12} = ^{1}/_{6}$
19	24	20	purple	$^{20}/_{24} = ^{10}/_{12} = ^{5}/_{6}$
20	24	6	green	$^{6}/_{24} = ^{2}/_{8} = ^{1}/_{4}$
21	24	18	purple	$^{18}/_{24} = ^{6}/_{8} = ^{3}/_{4}$
22	24	8	green	$^{8}/_{24} = ^{4}/_{12} = ^{2}/_{6} = ^{1}/_{3}$
23	24	16	purple	$^{16}/_{24} = ^{8}/_{12} = ^{4}/_{6} = ^{2}/_{3}$
24	24	12	orange	$^{12}/_{24} = ^{6}/_{12} = ^{2}/_{4} = ^{3}/_{6} = ^{1}/_{2}$
25	24	24	purple	$^{24}/_{24} = 1$
26	24	4	green	$^{4}/_{24} = ^{2}/_{12} = ^{1}/_{6}$
27	24	20	purple	$^{20}/_{24} = ^{10}/_{12} = ^{5}/_{6}$
28	24	6	green	$^{6}/_{24} = ^{2}/_{8} = ^{1}/_{4}$
29	24	18	purple	$^{18}/_{24} = ^{6}/_{8} = ^{3}/_{4}$
30	24	8	green	$^{8}/_{24} = ^{4}/_{12} = ^{2}/_{6} = ^{1}/_{3}$
31	24	16	purple	$^{16}/_{24} = ^{8}/_{12} = ^{4}/_{6} = ^{2}/_{3}$

May Daily Planner

Day	Date	Calendar Grid	Calendar Collector	Computational Fluency	Number Line	Solving Problems	Assessment
1		Activity 1 Introducing the Calendar Grid (p. 7)		Activity 1 Quick Facts & Flashcards (p. 26)			
2				Update			
3			Activity 1 Introducing Roll & Multiply (p. 17)	Update			
4				Update	Activity 1 Introducing Put It on the Line with Mixed Numbers (p. 34)		
5		Activity 2 Focus on Fractions & Division (p. 10)	Update			
6		Update				Activity 1 Solving & Discussing Problems (p. 42)	
7		Update		Activity 2 Showing the Data on a Chart and Graph (p. 19)			
8		Update		Activity 2 Playing Ten to Win Multiplication as a Class (p. 28)			
9		Activity 3 Finding the Area of Rectilinear Figures (p. 11)	Update				
10		Update			Activity 2 Playing Put It on the Line as a Class (p. 36)		
11		Update					
12		Update		Activity 2 Playing Put It on the Line as a Class (p. 42)		Activity 1 Solving & Discussing Problems (p. 42)	
13		Update		Activity 3 Thinking About the Data So Far (p. 21)			
14		Update			Activity 3 Playing Put It on the Line with a Partner (p. 38)		
15		Update					
16		Update				Activity 1 Solving & Discussing Problems (p. 42)	
17		Activity 4 Comparing Fractions (p. 13)	Update				
18		Update					
19		Update					
20		Update		Activity 4 Playing Ten to Win Multiplication in Pairs (p. 31)			

Note: Several "Update" entries and activity labels span the planner grid. Reproduced as positioned.