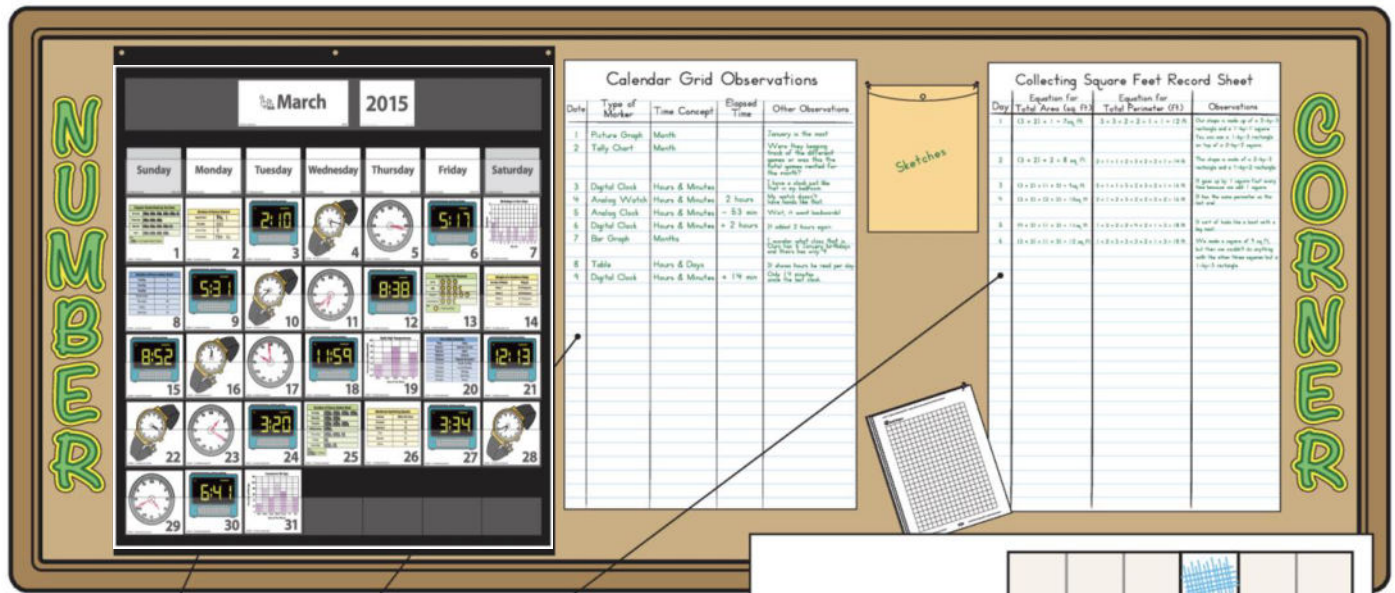


# March Number Corner - Gr. 3



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

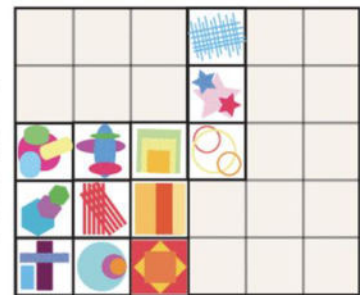
**Calendar Grid Observations Chart**  
You might use 24" x 36" chart paper. If you laminated a sheet in previous months, you can erase and reuse it now.

**Calendar Collector Record Sheet & Grid Sketches**

Keep copies of the Grid Teacher Master and markers or colored pencils nearby, and post a large envelope near the record sheet. Students will sketch their arrangements and store the sketches in the envelope during each update.

**Calendar Collector Square Feet Collection**

This 5' by 6' display may need to be posted on a wall near your Number Corner area. With each Calendar Collector update, another decorated paper square foot will be added to the display.



## March Materials Needed

Copies	Run copies of Teacher Masters T1–T11 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 42–53. Run a single display copy of Number Corner Student Book pages 43, 45–47, and 51–53.
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 Calendar Collector Activity 1, follow Preparation instructions in the workout to cut a class set of 12" x 12" construction paper squares and to create a 5' x 6' butcher paper grid.

### Vocabulary

\* identifies terms for which Word Resource Cards are available.

a.m.	fraction*	picture graph*
analog	greater than	p.m.
area*	hour (hr.)	polygon
bar graph*	improper fraction*	product*
benchmark	less than	rectangle*
chart	minute (min.)	rectilinear
data display	mixed number*	scale*
denominator*	model	second (sec.)
digital	multiple*	skip-count
dimension*	multiply*	strategy
divide*	numerator*	square*
elapsed time*	part	square unit*
equal*	partition*	table*
equation*	pattern*	time
factor*	perimeter*	whole
		whole number*

### Calendar Grid Observations

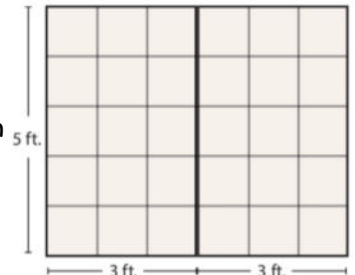
Date	Type of Marker	Time Concept	Elapsed Time	Other Observations

### Collecting Square Feet Record Sheet

Day	Equation for Total Area (sq ft)	Equation for Total Perimeter (ft)	Observations

### Literature Connections:

-*Pigs on the Move* by Amy Axelrod  
 -*It's About Time* by Stuart Murphy  
 -*The Great Graph Contest* by Loreen Leedy  
 -*I Can Count the Petals of a Flower* by John and Stacey Wahl  
 -*Amanda Bean's Amazing Dream* by Marilyn Burns  
 -*Minnie's Diner, A Multiplying Menu* by Dayle Ann Dodds  
 -*The Wishing Club: A Story About Fractions* by Donna Jo Napoli  
 -*Full House: An Invitation to Fractions* by Gayle Add Dodds



# March: Day 1

## Need:

- Tens Minus One Set Facts Teacher Master
- Multiplication Table
- Multiplying by Nine Student Book page 45
- Purple color for each student

### Comp. Fluency: 1-Multiples of Nine & Six (p. 24)

1. Display the Tens Minus One Set Facts Teacher Master and review multiplying by 9.
1. Display the Multiplication Table Student Book page and have students open their books to the same page.
  - a. Ask students to find the Tens Minus One Set facts on the table.
  - b. Mark them lightly in purple.
2. Display Multiplying by Nine page and review the instructions.
  - a. Give students time to complete the page independently.
  - b. At the end of Number Corner, review the products for number 3 so students can check their work.

**Tens Minus One Set Facts**

**Nine Ball**  
Nine is faster to compute, if at first you overshoot. Here's a very clever tack, do 10 times and then subtract!

What is  $9 \times 7$ ?  
It's ten 7s minus 7.  
 $9 \times 7 = (10 \times 7) - 7$   
 $= 70 - 7$   
 $= 63$

**CHALLENGE!**  
What is  $9 \times 12$ ?  
What is  $9 \times 34$ ?

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**Multiplying by Nine**

**"Nine Ball" by Greg Tang**  
Nine is faster to compute, if at first you overshoot. Here's a very clever tack, do 10 times and then subtract!

What is  $9 \times 7$ ?  
It's ten 7s minus 7.  
 $9 \times 7 = (10 \times 7) - 7$   
 $= 70 - 7$   
 $= 63$

- 1 Show your own example of the Tens Minus One Set strategy.  
**Work will vary.**
- 2 Do you have another good strategy for multiplying by 9? If so, show an example.  
**Work will vary.**
- 3 Multiply each number in the grid by 9. Write each answer in the box. The first one is done for you.

45	63	27	9	99	72	108	54	18
90	72	99	0	81	45	0	108	36

- 4 Use the Tens Minus One Set strategy, or your own strategy, to solve these combinations.  
 $9 \times 15 = 135$     $9 \times 25 = 225$     $9 \times 30 = 270$     $9 \times 50 = 450$
- 5 Write and solve your own Tens Minus One Set combination with a larger number.  
**Work will vary.**
- 6 Use what you know about multiplying by 9 to solve these division problems.  
 $18 \div 9 = 2$     $27 \div 9 = 3$     $975 \div 9 = 108$     $9754 \div 9 = 1083$

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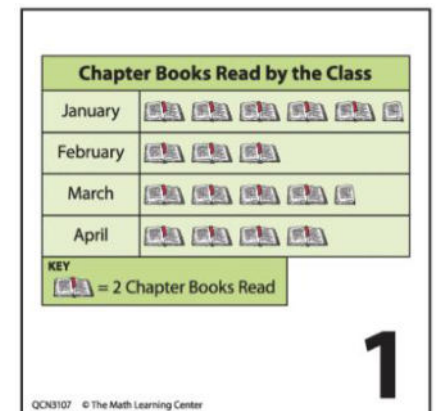
# March: Day 2

## Need:

- Calendar Grid
- Calendar markers
- Word Resource Card: *picture graph*

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

1. Reveal the first marker and have students share what they notice.
  - a. Use the Word Resource card for *picture graph*.
  - b. How many books did the class read in March? What does the half book represent?
  - c. In which month did the class read the most books?
  - d. In which month did the class read the fewest books?
  - e. How many more books did they read in January than in February?
2. Reveal the second marker and repeat the steps.
3. Reveal the third marker and have students share some observations and predictions.
4. Ask students their ideas about the theme for this month's calendar and what the pattern might be.



# March: Day 3

**Need:**

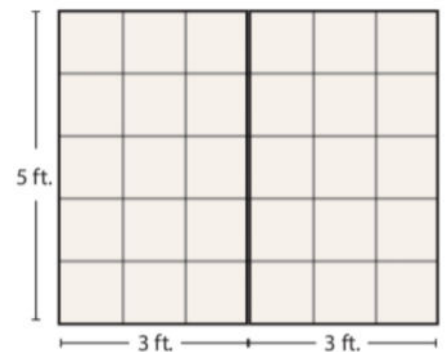
- Ruler
- Class set of 12x12 inch paper squares
- 5x6 ft. butcher paper with square foot grid drawn on it

**C. Grid: Update**

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

**C. Collector: 1-Introducing Square Feet (p. 15)**

1. Introduce the term *square feet*. Hold up a ruler and remind students that this is one foot in length. Hold up one of the construction paper squares and explain that it is a square foot. Each side is one foot.
2. Draw students' attention to the butcher paper grid and explain that each of the squares is 1 square foot.
3. Have students determine what the total area of the grid is.
  - a. Have students share strategies for finding the area.
4. When students have concluded that the total area of the grid is 30 square feet, introduce this month's collection.
  - a. Explain that each student will get their own paper square to decorate. These squares will be added to the grid throughout the month.
  - b. Give students time to decorate their squares. Then collect them.



# March: Day 4

**Need:**

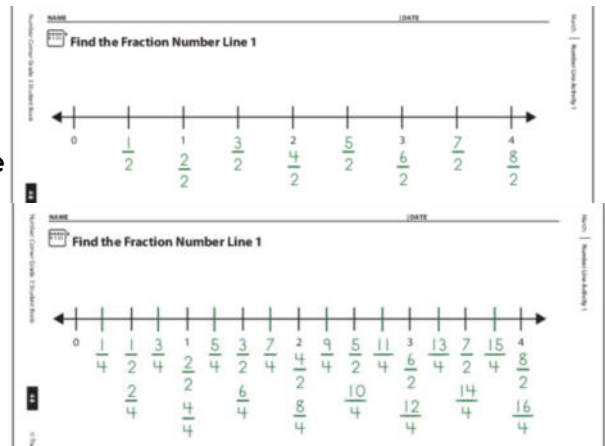
- Find the Fraction Number Line 1 Student Book page 48
- Find the Fraction 1 Teacher Master

**C. Grid: Update**

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

**Number Line: 1-Playing Find the Fraction (p. 28)**

1. Display Find the Fraction Number Line 1 page and have students find it in their books.
1. With student input, label your copy of the number line and have students copy it onto their own page.
1. Write the following fractions on the board and have students label them on their number lines.
  - a.  $2/2$ ,  $4/2$ ,  $6/2$ ,  $8/2$
  - b. Have students share where they put each fraction and why
1. Then have students label the fourths on their number lines.
2. Display Find the Fraction 1 Teacher Master but keep the prompts covered
3. Reveal each prompt one at a time. Have students select the correct fraction and circle it on their number line.
  - a. Have students tell you which fraction to circle on the master
  - b. For each prompt, write an inequality statement to express the relationship between the fractions.
    - a. Repeat the process for the rest of the prompts.



Circle the fraction that is greater:	$\frac{7}{4}$	$\frac{7}{2}$
Circle the fraction that is less:	$\frac{6}{2}$	$\frac{6}{4}$
Circle the fraction that is greater:	$\frac{13}{4}$	$\frac{5}{4}$
Circle the fraction that is less:	$\frac{3}{2}$	$\frac{8}{2}$
Circle the fraction that is equal to 3:	$\frac{3}{2}$	$\frac{6}{2}$
Circle the fraction that is equal to 4:	$\frac{16}{4}$	$\frac{4}{2}$
Circle the fraction that is greater:	$\frac{7}{4}$	$\frac{2}{4}$



# March: Day 5

**Need:**

-Calendar Grid Observations Chart

**C. Grid: 2-Introducing the March Observations Chart (p. 8)**

1. Have students share observations of the calendar
2. Ask students what time is represented on markers 4 and 5
3. Fill in the Observations Chart for all the markers posted so far
  - a. Elapsed time will only be filled in for makers that show clocks

## Calendar Grid Observations

Date	Type of Marker	Time Concept	Elapsed Time	Other Observations
1	Picture Graph	Month		January is the most
2	Tally Chart	Month		Were they keeping track of the different games or was this the total games rented for the month?
3	Digital Clock	Hours & Minutes		I have a clock just like that in my bedroom.
4	Analog Watch	Hours & Minutes	2 hours	My watch doesn't have hands like that

# March: Day 6

**Need:**

-Calendar Collector Record Sheet  
-Grid paper  
-Envelope

**C. Grid: Update**

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

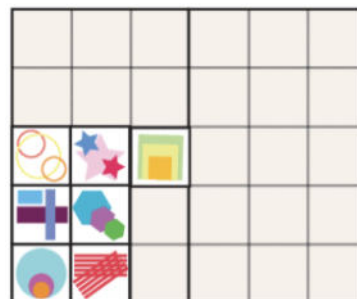
**C. Collector: 2-Starting the Collection (p. 16)**

\*This activity is based on 20 days of school and 26 paper squares. You may need to make adjustments based on how many days you have of school this month and how many students you have. If you have more students or less days in the month, you will need to start with more squares on the chart.

1. Start the collection by posting 6 paper squares on the grid.
2. Ask students what the total area and perimeter are of the beginning of the collection. Have students share their strategies for finding them.
3. Add the first square for the first school day of the month. Add this information to the record sheet. (This is a rectilinear shape, meaning it is made out of rectangles.)
4. Draw this figure on the grid paper posted beside the record sheet. Write the day and date on the back, then put it in the envelope.
5. Repeat this problem to bring the collection up to date.

## Collecting Square Feet Record Sheet

Day	Equation for Total Area (sq ft)	Equation for Total Perimeter (ft)	Observations
1	$(3 \times 2) + 1 = 7 \text{ sq. ft.}$	$3 + 3 + 2 + 2 + 1 + 1 = 12 \text{ ft.}$	Our shape is made up of a 2-by-3 rectangle and a 1-by-1 square. You can see a 1-by-3 rectangle on top of a 2-by-2 square.



# March: Day 7

## Need:

- Find the Fraction Number Line 2 Student Book page 49
- Find the Fraction 2 Teacher Master

### C. Grid: Update

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

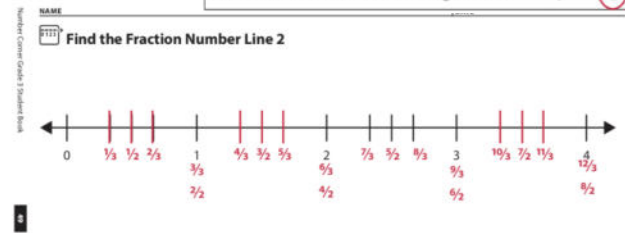
### C. Collector: Update

1. Take a single square out of the bag and add it to the collection of squares.
2. Sketch the figure on grid paper and add it to the envelope. Update the record sheet with the total area and perimeter.

### Number Line: 1-Playing Find the Fraction (p. 28)

1. Display Find the Fraction Number Line 2 page and have students find it in their books.
2. With student input, label your copy of the number line and have students copy it onto their own page.
1. Write the following fractions on the board and have students label them on their number lines.
  - a.  $2/2, 4/2, 6/2, 8/2$
  - b. Have students share where they put each fraction and why
1. Then have students label the thirds on their number lines.
2. Display Find the Fraction 2 Teacher Master but keep the prompts covered.
3. Reveal each prompt one at a time. Have students select the correct fraction and circle it on their number line.
  - a. Have students tell you which fraction to circle on the master.
  - a. For each prompt, write an inequality statement to express the relationship between the fractions.
  - a. Repeat the process for the rest of the prompts.

Circle the fraction that is greater:	$3/5$	$2/5$
Circle the fraction that is less:	$4/2$	$4/2$
Circle the fraction that is greater:	$2/2$	$2/3$
Circle the fraction that is less:	$2/2$	$2/3$
Circle the fraction that is equal to 3:	$6/2$	$6/3$
Circle the fraction that is equal to 4:	$4/2$	$12/3$
Circle the fraction that is greater:	$3/8$	$8/2$



# March: Day 8

## Need:

- Half-Tens Plus One Set Facts Teacher Master
- Multiplication Table
- Multiplying by Six Student Book page 46
- Turquoise color for each student

### 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. Take a single square out of the bag and add it to the collection of squares.
2. Sketch the figure on grid paper and add it to the envelope. Update the record sheet with the total area and perimeter.

### Comp. Fluency: 1-Multiples of Nine & Six (p. 24)

1. Display the Half-Tens Plus One Set Facts Teacher Master and review multiplying by 6.
1. Display the Multiplication Table Student Book page and have students open their books to the same page.
  - a. Ask students to find the Half-Tens Plus One Set facts on the table.
  - a. Mark them lightly in turquoise.
1. Display Multiplying by Six page and review the instructions.
  - a. Give students time to complete the page independently.
  - a. At the end of Number Corner, review the products for number 3 so students can check their work.

### Half-Tens Plus One Set Facts

**Tricks With Six**  
Half-Tens Plus One Set

When multiplying by six, Don't worry. You're not in a fix. Multiply by 10 and take half. Then add in one more. And you're out the door.

What is  $6 \times 6$ ?  $6$ 's half of  $6 \times 10$  with another set added in.

$60 \div 2 = 30$     $30 + 6 = 36$

What is  $6 \times 4$ ?  
 $4 \times 10 = 40$ . Half of 40 is 20. Add one more 4 and you're out the door.  
 $20 + 4 = 24$

**CHALLENGE!**  
What is  $6 \times 15$ ?  
What is  $6 \times 33$ ?

### Multiplying by Six

**"Six Sense" by Greg Tang**

When multiplying by six, Don't worry. You're not in a fix. Multiply by 10 and take half. Then add in one more. And you're out the door.

What is  $6 \times 4$ ? Think Half-Tens and One More Set.  
 $4 \times 10 = 40$ . Half 40 is 20. Add one more 4 and you're out the door.  
 $20 + 4 = 24$

1. Show your own example of the Half-Tens Plus One Set strategy.  
**Work will vary.**
2. Do you have another good strategy for multiplying by 6? If so, show an example.  
**Work will vary.**
3. Multiply each number in the grid by 6. Write each answer in the box. The first one is done for you.

$30 \times 3$	$42 \times 2$	$18 \times 2$	$6 \times 6$	$66 \times 8$	$48 \times 72$	$36 \times 12$
$60 \times 8$	$48 \times 66$	$0 \times 54$	$30 \times 0$	$72 \times 24$		

4. Use the Half-Tens Plus One Set strategy, or your own strategy, to solve these combinations.  
 $6 \times 15 = 90$     $6 \times 20 = 120$     $6 \times 33 = 198$     $6 \times 50 = 300$
5. Write and solve your own Half-Tens Plus One Set combination with a larger number.  
**Work will vary.**
6. Use what you know about multiplying by 9 to solve these division problems.  
 $12 \div 6 = 2$     $24 \div 6 = 8$     $6/30$     $3/678$

## March: Day 9

**Need:**

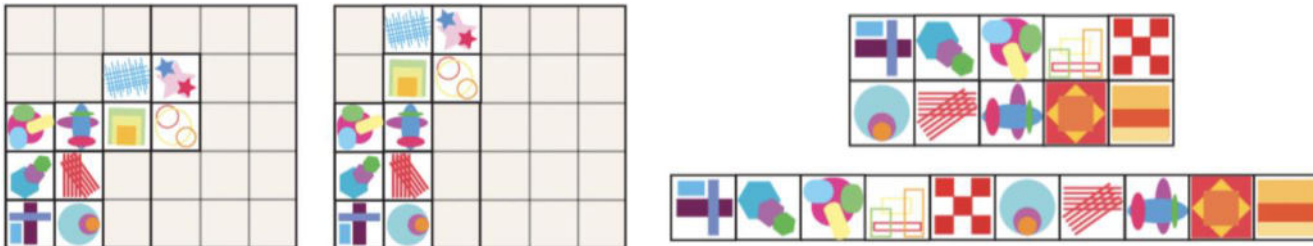
-Square tiles, enough for each student

### 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: 3-Examining the Collection & Individual Figures (p. 19)

1. Ask students to examine the record sheet and share what they notice.
2. Have them look at the area and perimeter columns and share any patterns they notice.
3. Have students turn to the Grid page in their student books. Make sure there are enough tiles for each student.
4. Pull out one of the sketches from the envelope and describe the figure.
  - a. Write on the board: the area of the rectangles the figure is composed of and the total perimeter of the figure.
5. Invite students to share their solutions. Compare the different figures that work. Then compare to the original figure.
6. Ask students to make a rectangle using the same tiles they used to create the figure and find its area and perimeter. If they can make more than one, have them compare the perimeters of the rectangles.
7. Repeat the process with as many sketches you have time for.



## March: Day 10

**Need:**

-Student clocks

### C. Grid: 3-Setting the Time on Analog Clocks (p. 9)

1. Update the Calendar Grid and Observations Chart
2. Pass out student clocks
3. Hold up marker 3 and ask students to set their clocks to this time.
  - a. Come to an agreement where the hour and minute hands should be and what time it is
4. Repeat the process with the other digital clock markers that have been posted so far.
5. Have students leave their clocks set to the last time shown on a digital clock. Then set it to the time it would be 25 minutes later.
  - a. Share the new time
6. Continue with different amount of time (don't reset the clock)
  - a. What time would it be 12 minutes later?
  - b. What time would it be 15 minutes later?
  - c. What time would it be 1 hour and 5 minutes later?
  - d. What time would it be 1 hour and 16 minutes later?
  - e. What time would it be 3 hours later?
  - f. What time would it be 12 hours later?
7. Wrap up by having student report what time it is currently and how long until lunch (or gym, end of day...)

### C. Collector: Update

1. Take a single square out of the bag and add it to the collection of squares.
2. Sketch the figure on grid paper and add it to the envelope. Update the record sheet with the total area and perimeter.

# March: Day 11

**Need:**

-Perimeter Puzzles Student Book page 51

**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. Take a single square out of the bag and add it to the collection of squares.
2. Sketch the figure on grid paper and add it to the envelope. Update the record sheet with the total area and perimeter.

**Solving Problems: 1-Perimeter Puzzles (p. 32)**

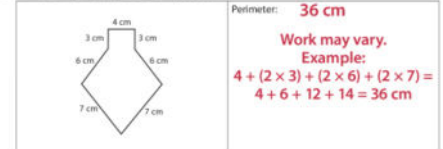
1. Briefly review the meaning of area and perimeter.
2. Display the Perimeter Puzzles page, showing only the first problem. Read the problem aloud. Ask students how they would solve it.
1. Have students find the page in their student books. Give them time to solve problem 1. (If they finish before the class, they can move onto problem 2.)
  - a. Have a couple students share how they solved it.
1. Display the third problem and read it aloud. Give students time to solve it.
  - a. Have a couple students share how they solved it.
2. Give students time to revisit the second problem and share their answers with a partner.
1. Wrap up the activity by summarizing what students did and connecting it to real world problems.
  - a. Explain that students need to be able to solve problems in context.
  - a. Ask students to think of related problems they might encounter in their own lives.

**Perimeter Puzzles**

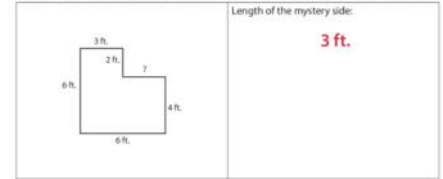
1 Max walked around the edge of his yard. How far did he walk? What is the area of Max's yard? Don't forget to use the correct units.



2 What is the perimeter of the shape below?



3 Claudia has an L-shaped tree fort. She knows the perimeter of the tree fort is 24 feet. She knows the lengths of 5 of the 6 sides. What is the length of the other side? Length of the mystery side:



# March: Day 12

**Need:**

-Comparing Fractions Student Book page 50

**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. Take a single square out of the bag and add it to the collection of squares.
1. Sketch the figure on grid paper and add it to the envelope. Update the record sheet with the total area and perimeter.

**Number Line: 2-Completing the Comparing Fractions Page (p. 30)**

1. Display the Comparing Fractions page and have students find it in their books.
1. Read the problems aloud.
2. Give students time to complete the page.
3. In the last 5 minutes of the lesson, review the answers.

**Comparing Fractions**

1 Draw a colored bar from 0 to the point on the number line that shows the location for the fractions listed to the left of each number line.



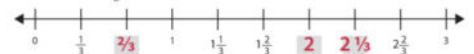
2 Write a >, < or = to make each statement true. Use the number lines above to help.

$\frac{1}{2} > \frac{1}{3}$     $\frac{1}{4} < \frac{1}{3}$     $\frac{1}{4} < \frac{1}{2}$     $\frac{2}{4} = \frac{1}{2}$     $\frac{1}{3} > \frac{1}{4}$     $\frac{1}{2} > \frac{1}{4}$

3 Fill in the missing fractions or whole numbers on the number line.



4 Fill in the missing fractions or whole numbers on the number line.





# March: Day 13

## Need:

- Same Perimeter, Different Area Student Book page 52
- Colored tiles

### 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. Take a single square out of the bag and add it to the collection of squares.
2. Sketch the figure on grid paper and add it to the envelope. Update the record sheet with the total area and perimeter.

### Solving Problems: 2-Same Perimeter, Different Area (p. 34)

1. Display the Same Perimeter, Different Area page, showing only the first problem. Read it aloud.
1. Ask students how this is different from finding rectangles with the same area. Have them share ideas about how to solve the problem.
1. After sharing ideas, have students solve the problem. (Make colored tiles available.)
1. Create a chart of all the possible rectangles.
2. Invite students to share what they notice about the dimensions and areas of the rectangles that have a perimeter of 20.
1. Display the second problem and read it aloud. Have students share how this problem is similar or different from the first one.
1. Give students time to solve the problem. Then create another chart.

### Same Perimeter, Different Area

1. Make two rectangles that have a perimeter of 20 units, but different areas.

Rectangle 1:	Rectangle 2:
--------------	--------------

Dimensions	Area	Perimeter
1 × 9	9 units <sup>2</sup>	20 units
2 × 8	16 units <sup>2</sup>	20 units
3 × 7	21 units <sup>2</sup>	20 units
4 × 6	24 units <sup>2</sup>	20 units
5 × 5	25 units <sup>2</sup>	20 units

2. Sergio is making a quilt. He has 16 meters of edging. What size quilts can Sergio make that have a perimeter of 16 meters? Draw and label two rectangular shapes that Sergio could use for his quilt. Show the area of each quilt.

**Work will vary.**  
Possible rectangles and areas include  
 $4 \times 4 =$  area of 16 square meters  
 $3 \times 5 =$  area of 15 square meters  
 $2 \times 6 =$  area of 12 square meters  
 $1 \times 7 =$  area of 7 square meters

# March: Day 14

### 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. Take a single square out of the bag and add it to the collection of squares.
2. Sketch the figure on grid paper and add it to the envelope. Update the record sheet with the total area and perimeter.

### Comp. Fluency: 3-Scout Them Out (p. 25)

1. Display the Multiplication Table and have students turn to the same page.
  - a. What do they notice about the multiples of 2?
  - b. What facts result in even products? Odd products? Why are there so many more even products than odd?
1. Why does 3 time 7 have the same answer as 7 time 3? What property is this an example of?
  - a. What do they notice about the products in the row and column for multiples of 6?
1. Display the Scout Them Out (6, 9) page and have them turn to that page in their student books.
1. Read the directions and work with students to circle each kind of fact in the specified color.
  - a. Give students time to work on the page independently.
  - b. Once students have finished the page, have them share their work with a partner.

## Need:

- Multiplication Table
- Scout Them Out Student Book page 47
- Blue and red color for each student

### Scout Them Out (6, 9)

#### Multiply by 9 & 6 Practice

1. Circle all the Tens Minus One Set facts ( $\times 9$ ) in red. Then go back and do them.

2. Circle all the Half-Tens Plus One Set ( $\times 6$ ) in blue. Then go back and do them.

#### Divide by 9 & 6 Practice

3. Solve the following division problems if you like. Can you use what you know about multiplication to help?

$10 \overline{)90} \quad 10 \overline{)60} \quad 72 \div 9 = \underline{8} \quad 37 \overline{)333} \quad 30 \div 5 = \underline{6}$   
 $6 \overline{)48} \quad 9 \overline{)54} \quad 30 \div 6 = \underline{5} \quad 9 \overline{)81} \quad 24 \div 6 = \underline{4}$   
 $9 \overline{)72} \quad 9 \overline{)90} \quad 60 \div 10 = \underline{6} \quad 6 \overline{)78} \quad 12 \div 2 = \underline{6}$   
 $6 \overline{)36} \quad 6 \overline{)36} \quad 36 \div 9 = \underline{4} \quad 1 \overline{)9} \quad 63 \div 9 = \underline{7}$



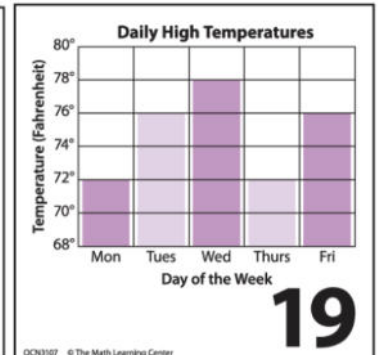
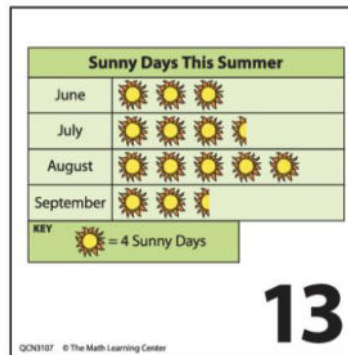
# March: Day 15

## C. Grid: 4-Answering Data Questions (p. 10)

- Update the calendar and observation chart.
- Display marker 13 where everyone can see it.
  - How many sunny days were in June?
  - How many days does the half sun stand for?
  - How many more days were there in August than September?
  - Were there more sunny days in June and July combined, or in August and September combined?
- Display marker 19 and give students time to study it.
  - Which day had the highest high temperature? What was the high temperature that day?
  - Which day had the lowest high temperature? What was the highest temperature that day?
  - What is the difference between the highest and lowest temperature for the week?

## C. Collector: Update

- Take a single square out of the bag and add it to the collection of squares.
- Sketch the figure on grid paper and add it to the envelope. Update the record sheet with the total area and perimeter.



# March: Day 16

## Need:

-Square tiles, enough for each student

## C. Grid: Update

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

## C. Collector: 3-Examining the Collection & Individual Figures (p. 19)

\*This is the same activity as day 9. Be sure to use different sketches.

- Ask students to examine the record sheet and share what they notice.
- Have them look at the area and perimeter columns and share any patterns they notice.
- Have students turn to the Grid page in their student books. Make sure there are enough tiles for each student.
- Pull out one of the sketches from the envelope and describe the figure.
  - Write on the board: the area of the rectangles the figure is composed of and the total perimeter of the figure.
- Invite students to share their solutions. Compare the different figures that work. Then compare to the original figure.
- Ask students to make a rectangle using the same tiles they used to create the figure and find its area and perimeter. If they can make more than one, have them compare the perimeters of the rectangles.
- Repeat the process with as many sketches you have time for.

# March: Day 17

## Need:

- Number Corner Checkup 3 Teacher Master pages 1-3 for each student
- Colored pencil 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. Take a single square out of the bag and add it to the collection of squares.
2. Sketch the figure on grid paper and add it to the envelope. Update the record sheet with the total area and perimeter.

### Assessment: Number Corner Checkup 3, Part 1 (p. 40)

1. Remind students that a checkup is a way of finding out how everyone is doing with some of the skills they've been working on.
2. Explain that students should:
  - a. Listen carefully to the instructions for each problem.
  - b. Stay with the class.
  - c. Work independently.
  - d. Raise your hand if you have a question.
  - e. Try to answer all the problems.
  - f. Explain how you solved the problem when the directions ask you to.
3. Display the Number Corner Checkup 3, pages 1-3.
4. Have students use a colored pencil to complete as many multiplication problems on the first page as they can in one minute.
5. Collect the colored pencils and use the remaining time to complete pages 1-3 of the checkup.

# March: Day 18

## Need:

- Freddy's Community Center Student Book page 53

### 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. Take a single square out of the bag and add it to the collection of squares.
2. Sketch the figure on grid paper and add it to the envelope. Update the record sheet with the total area and perimeter.

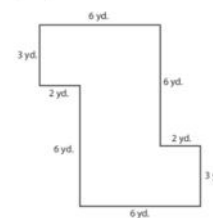
### Solving Problems: 3-Area Story Problems (p. 36)

1. Display the Freddy's Community Center page, showing only the first problem. Read it aloud.
1. Ask students if they know the name of the shape of Freddy's pool.
  - a. If no one remembers the term *rectilinear*, remind them now.
  - b. A rectilinear figure has all right angles, which means it has all straight sides too.
1. Have students share how they could find the area of Freddy's pool.
2. Have students turn to the page in their student books. Give them time to work on the first problem. Invite a few students to share their thinking.
5. Read the second problem aloud and give students time to solve.
6. Have students share their rectangles while creating a chart with their answers.
7. Ask students what they notice about the chart.

Dimensions	Perimeter	Area
1 × 18	38 feet	18 ft <sup>2</sup>
2 × 9	22 feet	18 ft <sup>2</sup>
3 × 6	18 feet	18 ft <sup>2</sup>

### Freddy's Community Center

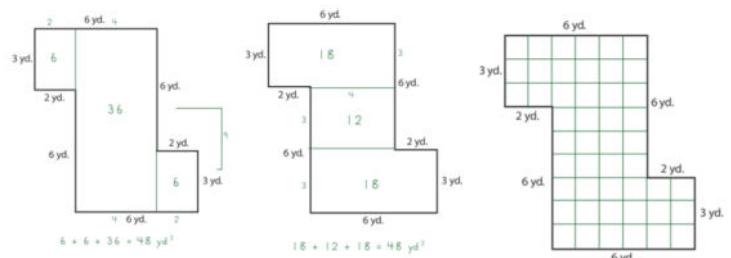
1. Freddy swims at the community center each week. He wonders about the area of the pool. He thinks he cannot figure it out because the pool is not rectangular. Can you figure out the area of the swimming pool at Freddy's community center?



**Area = 48 yds.**  
**Work will vary. Possible solutions include:**  
 $(4 \times 9) + (2 \times 3) + (2 \times 3) = 36 + 6 + 6 = 48$   
**And**  
 $(3 \times 6) + (4 \times 3) + (3 \times 6) = 18 + 12 + 18 = 48$

2. Freddy's community center is building a new sandbox. They know they want the sandbox to be a rectangle with an area of 18 square feet but they are not sure what the perimeter should be. Draw two different rectangles with an area of 18 square feet. Show the perimeter of each one.

**Work will vary. Possible solutions include:**  
 $1 \times 18$  (perimeter 38 ft.)  
 $2 \times 9$  (perimeter 22 ft.)  
 $3 \times 6$  (perimeter 18 ft.)



# March: Day 19

## Need:

-Number Corner Checkup 3 Teacher Master pages 4-6 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. Take a single square out of the bag and add it to the collection of squares.
2. Sketch the figure on grid paper and add it to the envelope. Update the record sheet with the total area and perimeter.

### Assessment: Number Corner Checkup 3, Part 2 (p. 41)

1. Display the Number Corner Checkup 3, pages 4-6 and give students a copy.
2. Let students know they will be finishing the checkup today.
3. Read the directions and answer any questions.
4. Give students the remaining time to complete the pages.

# March: Day 20

## Need:

-Data Story Problems Student Book page 42

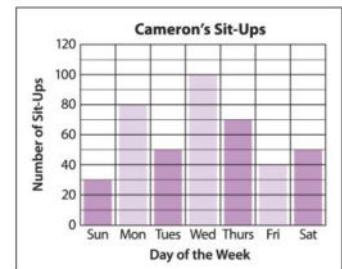
### C. Grid: 5-Data Story Problems (p. 11)

1. Update the calendar and observation chart.
  2. Explain that students will complete a page in the Number Corner Student Book that will give them practice interpreting graphs.
  3. Display Data Story Problems Student Book page and have students turn to the page in their own books.
  4. Read the prompts out loud and answer any questions students have about what to do.
1. Give students time to complete the page. When they are finished have them share their work with a partner.

### C. Collector: Update

1. Take a single square out of the bag and add it to the collection of squares.
1. Sketch the figure on grid paper and add it to the envelope. Update the record sheet with the total area and perimeter.

Data Story Problems



1. On what day did Cameron do the most sit-ups? How many sit-ups did he do that day?  
**Wednesday; 100 sit-ups**
2. On what day did Cameron do the fewest sit-ups? How many did he do that day?  
**Sunday; 30 sit-ups**
3. What is the difference between the number of sit-ups he did on the two days above?  
**70**
4. Did Cameron do more sit-ups on Monday and Friday combined, or on Sunday, Tuesday, and Saturday combined?  
**He did more sit-ups on Sunday, Tuesday, and Saturday combined.**  
 $80 + 40 = 120$  (Monday and Friday)  
 $30 + 50 + 50 = 130$  (Sunday, Tuesday, and Saturday)

# March Daily Planner

Day	Date	Calendar Grid	Calendar Collector	Computational Fluency	Number Line	Solving Problems	Assessment
1				Activity 1 Multiples of Nine & Six (p. 24)			
2		Activity 1 Introducing the March Calendar Grid (p. 7)					
3		Update	Activity 1 Introducing Square Feet (p. 15)				
4		Update	Update		Activity 1 Playing Find the Fraction (p. 28)		
5		Activity 2 Introducing the March Observations Chart (p. 8)	Update				
6		Update	Activity 2 Starting the Collection (p. 16)				
7		Update	Update		Activity 1 Playing Find the Fraction (p. 28)		
8		Update	Update	Activity 1 Multiples of Nine & Six (p. 24)			
9		Update	Activity 3 Examining the Collection & Individual Figures (p. 19)				
10		Activity 3 Setting the Time on Analog Clocks (p. 9)	Update				
11		Update	Update			Activity 1 Perimeter Puzzles (p. 32)	
12		Update	Update		Activity 2 Completing the Comparing Fractions Page (p. 30)		
13		Update	Update			Activity 2 Same Perimeter, Different Area (p. 34)	
14		Update	Update	Activity 3 Scout Them Out (p. 25)			
15		Activity 4 Answering Data Questions (o. 10)	Update				
16		Update	Activity 3 Examining the Collection & Individual Figures (p. 19)				
17		Update	Update				Number Corner Checkup 3, Part 1 (p. 40)
18		Update	Update			Activity 3 Area Story Problems (p. 36)	
19		Update	Update				Number Corner Checkup 3, Part 2 (p. 41)
20		Activity 5 Data Story Problems (p. 11)	Update				

## March Grid Answer Key

### About the Pattern:

- Markers alternate those with pictures of a variety of digital and analog timepieces and those that display data focused around a theme of time. Two markers display data, and then four markers show time on analog and digital time pieces.
- There is also a growing pattern for the times displayed. The first timepiece shows a time, and the next piece shows the time 2 hours later. The first time is shown digitally and the second time is shown on an analog clock. The third piece shows a time that is 53 minutes earlier than the second one, and then the fourth timepiece is, again, 2 hours later than the third.
- While clocks come in groups of 4, students can also notice that the first clock of the next series of clocks is 14 minutes later than the last clock.
- For the data displays, the markers go back and forth between graphs and tables.

Date	Type of Marker	Time Concept	Elapsed Time				
				16	analog watch	hours & minutes	plus 2 hours
				17	analog clock	hours & minutes	minus 53 minutes
1	picture graph	month		18	digital clock	hours & minutes	plus 2 hours
2	table chart	month		19	bar graph	days & week	
3	digital clock	hours & minutes		20	table chart	hours	
4	analog watch	hours & minutes	plus 2 hours	21	digital clock	hours & minutes	plus 14 minutes
5	analog clock	hours & minutes	minus 53 minutes	22	analog watch	hours & minutes	plus 2 hours
6	digital clock	hours & minutes	plus 2 hours	23	analog clock	hours & minutes	minus 53 minutes
7	bar graph	month		24	digital clock	hours & minutes	plus 2 hours
8	table chart	week		25	picture graph	week	
9	digital clock	hours & minutes	plus 14 minutes	26	table chart	hour	
10	analog watch	hours & minutes	plus 2 hours	27	digital clock	hours & minutes	plus 14 minutes
11	analog clock	hours & minutes	minus 53 minutes	28	analog watch	hours & minutes	plus 2 hours
12	digital clock	hours & minutes	plus 2 hours	29	analog clock	hours & minutes	minus 53 minutes
13	picture graph	month		30	digital clock	hours & minutes	plus 2 hours
14	table chart	week		31	bar graph	days	
15	digital clock	hours & minutes	plus 14 minutes				