

February 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.

Number Line Fractions
Keep this number line display, which was created in January Number Line activities, posted where students can see it this month.

Calendar Collector Collections
Students will spin for and collect fractions of a dollar in this month's Calendar Collector. You'll assemble the three collection displays shown from poster, chart or butcher paper and copies of included teacher masters. See the Preparation section of the workout for details.

February Materials Needed

Materials	
Copies	Run copies of Teacher Masters T1-T12 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 31-41. Run a single display copy of Number Corner Student Book pages 31-41.
Charts	Prepare the Calendar Grid Observations Chart and the three Calendar Collector collection charts according to preparation instructions in the workout. Make sure the 0 to 1 number lines created in January's Number Line workout remain posted this month.
Special Items	Have 4 pipe cleaners or Wikki Stix on hand for Calendar Grid Activity 2. See the activity for details.

Vocabulary	
<i>An asterisk [*] identifies those terms for which Word Resource Cards are available.</i>	
area*	divide*
dimension*	equal*
formula	equation*
length	factor*
perimeter*	multiple*
product*	multiply*
rectangle*	pattern*
square unit*	product*
sum or total*	skip-count
width	strategy
denominator*	bar graph*
eighth	data*
numerator*	maximum*
sixth	minimum*
third	picture graph*
dime	scale*
dollar	x-axis*
fourth	y-axis*
fraction*	whole number*
half*	
half dollar	
improper fraction*	
nickel	
penny	
quarter	
tenth*	
whole	

Calendar Grid Observations					
Date	Height	Width	Color	Perimeter (cm)	Area (cm ²)

- Literature Connections:**
- All the Colors of the Rainbow by Allan Fowler
 - Spaghetti and Meatballs for All by Marilyn Burns
 - A Rainbow of My Own by Don Freeman
 - What Comes in 2s, 3s, and 4s by Suzanne Aker Dahl
 - One is a Snail, Ten is a Crab by April Pulley Sayre & Jeff Sayre
 - The Wishing Club: A Story About Fractions by Donna Jo Napoli
 - Full House: An Invitation to Fractions by Gayle Ann Dodds

February: Day 1

Need:
-Calendar Grid Markers

C. Grid: 1-Introducing the New Calendar Markers (p. 8)

1. Post all of the calendar markers to the current date.
 - a. Have students share observations.
2. Review what area means (the total number of square units needed to cover a 2-D surface.)
 - a. The smallest square on the grid is 1 square unit.
3. Ask students how many square units are in the rectangles posted so far.
4. Have students make predictions about the patterns.
 - a. What will the shapes look like?
 - b. What colors might they be?
 - c. What might their areas be?

February: Day 2

Need:
-Prepared Calendar Collector Chart
-Dime money pieces
-Glue
-Spinner

C. Grid: Update

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

C. Collector: 1-Collecting Tenths of a Dollar (p. 17)

1. Explain that students will be collecting money. Each week, they will collect a different kind of coin.
2. Show students the different coins one at a time and have them share what they know about each coin.
3. Hold up a dime and explain that this week they will collect dimes.
 - a. Record how to write the value of a dime in different ways (ten cents, 10¢, \$0.10, 1/10 dollar)
4. Work with students to identify how much each number of dimes is worth and express those amounts in cents and fractions of a dollar.
 - a. Record them on the prepared chart paper.
1. Work with student participation to add the first dime or dimes to the collection.
 - a. Have a student spin the spinner. This is how many dimes they will add to the collection.
 - a. Have students glue the pieces to the chart.
 - b. Fill out the first row of the record sheet.
 - c. Update the chart for as many school days that have passed so far this month.

Collection 1: Tenths of a Dollar

$\frac{1}{10}$ dollar = 10 cents
 $\frac{2}{10}$ dollar = 20 cents
 $\frac{3}{10}$ dollar = 30 cents
 $\frac{4}{10}$ dollar = 40 cents

Number of Dimes	Fraction of a Dollar	Cents	Number of Dimes	Cents
2	$\frac{2}{10}$	20¢	$\frac{2}{10}$	20¢
1	$\frac{1}{10}$	10¢	$\frac{3}{10}$	30¢
4	$\frac{4}{10}$	40¢	$\frac{7}{10}$	70¢

February: Day 3

Need:

- Word Resource Card: *perimeter*
- Ruler with centimeters
- Pipe cleaner

C. Grid: 2-Identifying Perimeter (p. 9)

1. Invite students to share observations and make a prediction about today's marker.
2. Reveal today's marker and have students share observations.
3. Introduce or review the term perimeter.
 - a. Point to the 5th marker and ask students if they know the measurements for the unmarked side of the rectangle.
 - b. Opposite sides of a rectangle have the same measurement.
 - c. Have students add up all the side measurements.
 - i. They have found the total distance around the rectangle. This is called the perimeter.
4. Show students the word resource card for *perimeter*.
5. Tell students that the length of each small square is 1 centimeter.
 - a. Review what a centimeter is using a ruler. Measure one side of the rectangle to show that each unit is equal to 1 centimeters.
6. Use a pipe cleaner to outline the rectangle. Trim the excess so only the perimeter of the rectangle remains.
 - a. Have a student measure each side of the rectangle and add them together to find the perimeter.
 - b. Straighten out the pipe cleaner and measure again to find the perimeter again.
7. Ask students how they could use the length and width measurements to figure out the perimeter without actually measuring.
8. If time, repeat with another rectangle.

C. Collector: Update

1. Spin the How Many Pieces? Spinner to determine how many dimes, quarters, or half-dollars to add to the collection.
2. Glue that number of pieces to the Dollar Grid and update the chart.

February: Day 4

Need:

- Doubles Plus One Set Facts Teacher Master
- Multiplication Table
- Multiplying by Three Student Book page 34

C. Grid: Update

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

C. Collector: Update

1. Spin the How Many Pieces? Spinner to determine how many dimes, quarters, or half-dollars to add to the collection.
2. Glue that number of pieces to the Dollar Grid and update the chart.

Comp. Fluency: 1-Multiples of Three (p. 24)

1. Display the Doubles Plus One Set Facts Teacher Master and review multiplying by 3.
1. Display the Multiplication Table and color the Doubles Plus Ones facts if you have not already done so.
1. Display Multiplying by Three Student Book page and read the directions.
1. After students have had time to complete at least numbers 1 & 2, review the products for number 2.

Doubles Plus One Set Facts



What is 3×3 ? It's 3 doubled plus 3.



What is 3×9 ?
It's 9 doubled plus 9.
 $3 \times 9 = (9 + 9) + 9$
 $= 18 + 9$
 $= 27$

CHALLENGE:
What is 3×15 ?
What is 3×33 ?

Multiplying by Three

"Three Sum" by Greg Tang

Three is as easy as can be,
if you triple what you see.
In other words just add it thrice,
this simply is once more than twice!



What is 3×9 ?
It's 9 doubled plus 9.
 $3 \times 9 = (9 + 9) + 9$
 $= 18 + 9$
 $= 27$

- 1 Show your own example of the Doubles Plus One Set strategy.
- 2 For each box below, multiply the number in the corner by 3. Write each answer in the box. The first one is done for you.

5	7	3	1	11	8	12	6	2
15								
- 3 Use the Doubles Plus One Set strategy to help solve these combinations:

$3 \times 13 =$	$3 \times 25 =$	$3 \times 33 =$	$3 \times 40 =$
$\begin{array}{r} 30 \\ \times 3 \\ \hline \end{array}$	$\begin{array}{r} 100 \\ \times 3 \\ \hline \end{array}$	$\begin{array}{r} 125 \\ \times 3 \\ \hline \end{array}$	$\begin{array}{r} 210 \\ \times 3 \\ \hline \end{array}$
- 4 Write and solve your own Doubles Plus One Set combination with a larger number.
- 5 Use what you know about multiplying by 3 to solve these division problems.

$12 \div 3 =$	$21 \div 3 =$	$3 \overline{)18}$	$3 \overline{)24}$
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February: Day 5

Need:

- Number lines from January number corner
- Fraction Number Lines Student Book page 38

C. Grid: Update

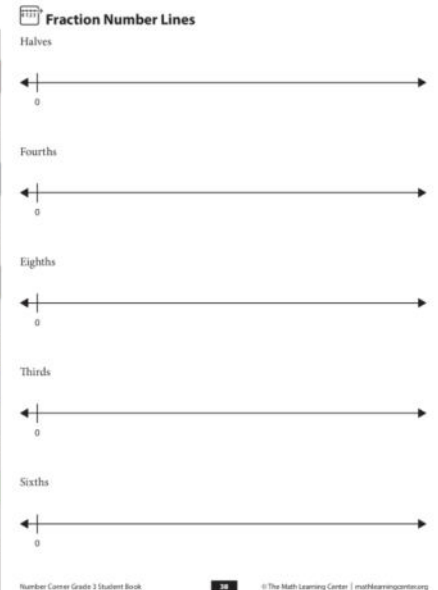
1. Post one or more calendar markers so that the Calendar Grid is current.

C. Collector: Update

1. Spin the How Many Pieces? Spinner to determine how many dimes, quarters, or half-dollars to add to the collection.
2. Glue that number of pieces to the Dollar Grid and update the chart.

Number Line: 1-Labeling Number Lines with Halves, Fourths & Eighths (p. 28)

1. Display the Fraction Number Lines Student Book page. Have students turn to this page in their number corner books.
 - a. Be sure students can see the Number lines chart created last month.
1. Have students mark $\frac{1}{2}$ on the half line. They can use the chart to help.
 - a. Have students share how they found $\frac{1}{2}$ on their number line.
1. Have students mark $\frac{3}{4}$ on the fourths line.
 - a. Have students share how they found $\frac{3}{4}$ on their number line.
1. Challenge students to mark $\frac{5}{8}$ on the eighths line.
 - a. Have students share how they found $\frac{5}{8}$ on their number line.
1. Give students time to completely fill out the halves, fourths, and eighths number lines.



February: Day 6

Need:

- Double-Doubles Facts Teacher Master
- Multiplication Table
- Multiplying by Four Student Book page 35

C. Grid: Update

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

Comp. Fluency: 1-Multiples of Four (p. 24)

1. Display the Double-Doubles Facts Teacher Master and review multiplying by 4.
1. Display the Multiplication Table and color the Double-Doubles facts if you have not already done so.
1. Display Multiplying by Four Student Book page and read the directions.
1. After students have had time to complete at least numbers 1 & 2, review the products for number 2.

Double-Doubles Facts



★ What is 4×4 ? It's 4 doubled twice.

★ Double once.

★ Double twice.

$4 + 4 = 8$

$8 + 8 = 16$

What is 4×7 ?
It's 7 doubled twice.
Double once: $7 + 7 = 14$
Double twice: $14 + 14 = 28$

CHALLENGE:
What is 4×14 ?
What is 4×35 ?

Multiplying by Four

"Four Eyes" by Greg Tang
Four is very fast to do when you multiply by 2.
Here's a little good advice — please just always double twice.



What is 4×7 ?
It's 7 doubled twice.
Double once: $7 + 7 = 14$
Double twice: $14 + 14 = 28$

- 1 Show your own example of the Double-Doubles strategy.
- 2 Multiply each number in the grid by 4. Write each answer in the box. The first one is done for you.

5	7	3	1	11	8	12	6	2
20								
- 3 Use the Double-Doubles strategy to help solve these combinations:

$4 \times 15 = \underline{\quad}$	$4 \times 25 = \underline{\quad}$	$4 \times 35 = \underline{\quad}$	$4 \times 50 = \underline{\quad}$
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$\begin{array}{r} 14 \\ \times 4 \\ \hline \end{array}$	$\begin{array}{r} 100 \\ \times 4 \\ \hline \end{array}$	$\begin{array}{r} 30 \\ \times 4 \\ \hline \end{array}$	$\begin{array}{r} 200 \\ \times 4 \\ \hline \end{array}$
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- 4 Write and solve your own Double-Doubles combination with a larger number.
- 5 Use what you know about multiplying by 4 to solve these division problems.

$12 \div 4 = \underline{\quad}$	$16 \div 4 = \underline{\quad}$	$4 \overline{)24}$	$4 \overline{)40}$
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February: Day 7

Need:

- Calendar Grid Observations chart
- Whiteboards & markers for each student
- Word Resource Card: *area*

C. Grid: 3-Identifying Area (p. 9)

1. Have students make predictions about today's marker.
 - a. What relationships do they see between the rectangles? What do they notice about the growing pattern? How much bigger does each rectangle get each day? Are there any rectangles that are twice as big as others?
2. Post today's marker and have students draw the rectangle on their whiteboards.
3. Ask students how they can determine and confirm the total number of square centimeters in the rectangle.
 - a. Counting each square one-by-one, skip counting by rows or columns, repeated addition equations
4. Explain that this is called area. Show the word resource card for *area*.
5. Have students find the area of another rectangle.
6. Introduce the Calendar Grid Observations chart and work with student input to fill in the information for the first few markers.
7. Have students define perimeter and area before ending.

C. Collector: Update

1. Spin the How Many Pieces? Spinner to determine how many dimes, quarters, or half-dollars to add to the collection.
1. Glue that number of pieces to the Dollar Grid and update the chart.

Date	Height	Width	Color	Perimeter (cm)	Area (cm ²)
1	1	1	red	1 + 1 + 1 + 1 = 4 cm	1 cm ²
2	1	2	orange	1 + 2 + 1 + 2 = 6 cm	2 cm ²
3	1	3	yellow	1 + 3 + 1 + 3 = 8 cm	3 cm ²
4	2	2	green	2 + 2 + 2 + 2 = 8 cm	4 cm ²
5	2	3	blue	2 + 3 + 2 + 3 = 10 cm	6 cm ²
6	2	4	indigo	2 + 4 + 2 + 4 = 12 cm	8 cm ²

February: Day 8

Need:

- Prepared Collector chart
- Quarter money pieces
- Spinner
- Glue

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-Collecting Fourths of a Dollar (p. 19)

1. Have students make observations about the completed dime collection.
 - a. How many tenths did they collect altogether? How can they figure out the total without counting them one by one? How many whole dollars did they collect? How many more tenths do they need to make another whole dollar?
2. Show students the prepared chart and explain that they will collect quarters next. Work with students to identify how much each number of quarters is worth and record it on the chart.
3. Spin the spinner and add that number of quarters to the chart. Fill out the first row of the record sheet.
1. Ask students to make predictions about how much they will collect total. Will it be more or less than the total of the dimes?

Collection 2: Fourths of a Dollar

$\frac{1}{4}$ dollar = 25 cents

$\frac{2}{4}$ dollar = 50 cents

$\frac{3}{4}$ dollar = 75 cents

$\frac{4}{4}$ dollar = 100 cents
(1 whole dollar)

February: Day 9

Need:

-Fraction Number Lines Student Book page 38

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. Spin the How Many Pieces? Spinner to determine how many dimes, quarters, or half-dollars to add to the collection.
2. Glue that number of pieces to the Dollar Grid and update the chart.

Number Line: 2-Labeling Number Lines with Thirds & Sixths & Playing Find the Fraction (p. 29)

1. Display the Fraction Number Lines Student Book page. Have students turn to this page in their number corner books. Be sure students can see the Number lines chart created last month.
2. Give students time to find $\frac{2}{3}$ on the thirds line.
3. Challenge students to mark $\frac{3}{6}$ on the sixths line.
 - a. Have students share how they found $\frac{3}{6}$ on their number line.

Name a fraction that:	Recording	Possible Answers		
Has a 6 in the denominator and is less than $\frac{4}{6}$	$\frac{2}{6} < \frac{4}{6}$	$\frac{3}{6} < \frac{4}{6}$	$\frac{2}{6} < \frac{4}{6}$	$\frac{1}{6} < \frac{4}{6}$
Has a 4 in the denominator and is greater than $\frac{3}{4}$	$\frac{4}{4} > \frac{3}{4}$	$\frac{3}{4} > \frac{3}{4}$	$\frac{4}{4} > \frac{3}{4}$	
Has a 3 in the denominator and is greater than $\frac{1}{3}$	$\frac{2}{3} > \frac{1}{3}$	$\frac{2}{3} > \frac{1}{3}$	$\frac{3}{3} > \frac{1}{3}$	
Has an 8 in the denominator and is less than $\frac{3}{8}$	$\frac{2}{8} < \frac{3}{8}$	$\frac{2}{8} < \frac{3}{8}$	$\frac{1}{8} < \frac{3}{8}$	
Is equal to $\frac{1}{2}$	$\frac{4}{8} = \frac{1}{2}$	$\frac{2}{4} = \frac{1}{2}$	$\frac{3}{6} = \frac{1}{2}$	$\frac{4}{8} = \frac{1}{2}$
Is equal to 1	$\frac{8}{8} = 1$	$\frac{2}{1} = 1$	$\frac{4}{4} = 1$	$\frac{8}{8} = 1$

1. Give students time to completely fill out the thirds and sixths number lines.
1. Explain that students will use their number lines to play Find the Fraction.
 - a. Divide the class into 2 teams.
 - b. You will say a fraction and have the teams find another fraction that meets some requirement.
 - a. Teams will take turns going first. The team that goes first will name a fraction that meets the requirement. The second team will then try to name another fraction that meets the requirement.
 - b. If both teams can name a fraction, they both get 1 point. Otherwise only the team with a correct answer will get a point. The team with the most points at the end wins.
 - c. State each prompt verbally. Then write it as shown in the table.

February: Day 10

Need:

-Double-Double-Doubles Facts Teacher Master
-Multiplication Table
-Multiplying by Eight Student Book page 36

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. Spin the How Many Pieces? Spinner to determine how many dimes, quarters, or half-dollars to add to the collection.
2. Glue that number of pieces to the Dollar Grid and update the chart.

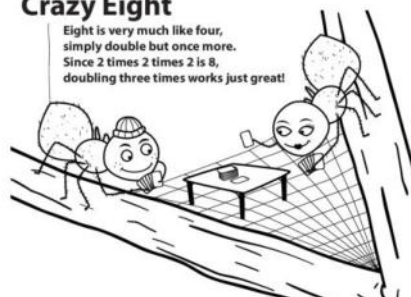
Comp. Fluency: 3-Multiples of Eight (p. 24)

1. Display the Double-Double-Doubles Facts Teacher Master and review multiplying by 8.
1. Display the Multiplication Table and color the Double-Double-Doubles facts if you have not already done so.
1. Display Multiplying by Eight Student Book page and read the directions.
1. After students have had time to complete at least numbers 1 & 2, review the products for number 2.

Double-Double-Doubles Facts

Crazy Eight

Eight is very much like four, simply double but once more. Since 2 times 2 times 2 is 8, doubling three times works just great!



Double once. 8 + 8 = 16	Double twice. 16 + 16 = 32	Double three times. 32 + 32 = 64
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What is 8×6 ?
It's 6 doubled three times.
Double once: $6 + 6 = 12$
Double twice: $12 + 12 = 24$
Double three times: $24 + 24 = 48$

CHALLENGE:
What is 8×25 ?
What is 8×35 ?



Multiplying by Eight

"Crazy Eight" by Greg Tang

Eight is very much like 4; simply double but once more. Since 2 times 2 times 2 is 8, doubling three times works just great!



What is 8×7 ?
It's 7 doubled 3 times.
Double once: $7 + 7 = 14$
Double twice: $14 + 14 = 28$
Double three times: $28 + 28 = 56$

- 1 Show your own example of the Double-Double-Doubles (double 3 times) strategy.
- 2 Do you have another good strategy for multiplying by 8? If so, show an example.
- 3 Multiply each number in the grid by 8. Write each answer in the box. The first one is done for you.

5	7	3	1	11	8	12	6	2
40								
- 4 Use the Double-Double-Doubles strategy to help solve these combinations:

$8 \times 15 =$	$8 \times 25 =$	$8 \times 35 =$	$8 \times 50 =$
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$\begin{array}{r} 14 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 100 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 30 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 150 \\ \times 8 \\ \hline \end{array}$
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- 5 Write and solve your own Double-Double-Doubles combination with a larger number.
- 6 Use what you know about multiplying by 8 to solve these division problems.

$16 \div 8 =$	$24 \div 8 =$	$8 \overline{)32}$	$8 \overline{)40}$
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February: Day 11

Need:

- Food Bank Bar Graph 1 Teacher Master
- Food Bank Bar Graph 2 Teacher Master
- Food Bank Picture Graph 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

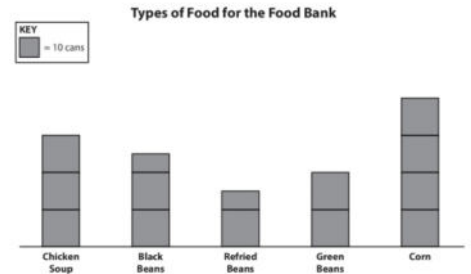
1. Spin the How Many Pieces? Spinner to determine how many dimes, quarters, or half-dollars to add to the collection.
1. Glue that number of pieces to the Dollar Grid and update the chart.

Solving Problems: 1-Looking at Graphs (p. 34)

1. Tell students that they will focus on graphs this month. Have them think about what they already know about graphs.
1. Display the Food Bank Bar Graph 1 Teacher Master. Have students share observations.
1. Emphasize the importance of the title and bar labels.
2. Display the Food Bank Bar Graph 2 Teacher Master. Have students share similarities and differences between the 2 graphs.
1. Display the Food Bank Picture Graph Teacher Master. Tell students that this graph shows the same information as the second Food Bank graph. Ask students what is different about this graph.
1. Use the second bar graph to point out each of the following parts: x-axis, y-axis, title, labels, numbers, bars, and key

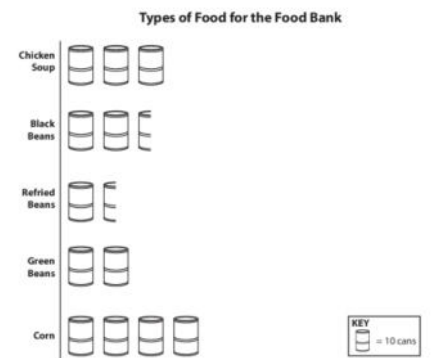
Food Bank Bar Graph 2

Mr. Cardoza's third grade class collected cans of food to donate to the local food bank. The graph below shows how many cans of each kind of food they collected.



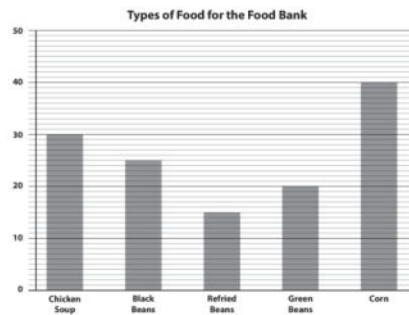
Food Bank Picture Graph

Mr. Cardoza's third grade class collected cans of food to donate to the local food bank. The graph below shows how many cans of each kind of food they collected.



Food Bank Bar Graph 1

Mr. Cardoza's third grade class collected cans of food to donate to the local food bank. The graph below shows how many cans of each kind of food they collected.



February: Day 12

Need:

- Fraction Number Lines Student Book page 38

C. Grid: Update

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

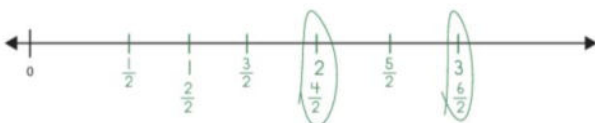
C. Collector: Update

1. Spin the How Many Pieces? Spinner to determine how many dimes, quarters, or half-dollars to add to the collection.
2. Glue that number of pieces to the Dollar Grid and update the chart.

Number Line: 3-Playing Find the Fraction (p. 30)

1. Help students prepare to play Find the Fraction by splitting the class into 2 teams.
2. Invite students to open their number corner student book pages to the Fraction Number Lines page.
3. Review how to play the game.
 - a. You will say a fraction and have the teams find another fraction that meets some requirement.
 - b. Teams will take turns going first. The team that goes first will name a fraction that meets the requirement. The second team will then try to name another fraction that meets the requirement.
 - c. If both teams can name a fraction, they both get 1 point. Otherwise only the team with a correct answer will get a point. The team with the most points at the end wins.
 - a. State each prompt verbally. Then write it as shown in the table.
1. After playing the game, have students share observations about $4/2$ and $6/2$. Draw a number line and mark both.

Name a fraction that:	Recording	Possible Answers		
Has a 2 in the numerator and is less than $2/3$	$2 < \frac{2}{3}$	$2/4 < 2/3$	$2/6 < 2/3$	$2/8 < 2/3$
Has a 3 in the numerator and is greater than $3/6$	$3 > \frac{3}{6}$	$3/2 > 3/6$	$3/3 > 3/6$	$3/4 > 3/6$
Has a 1 in the numerator and is greater than $1/6$	$1 > \frac{1}{6}$	$1/2 > 1/6$	$1/3 > 1/6$	$1/4 > 1/6$
Has a 4 in the numerator and is less than $4/4$	$4 < \frac{4}{4}$	$4/6 < 4/4$	$4/8 < 4/4$	
Has a 1 in the numerator and is less than $1/2$	$1 < \frac{1}{2}$	$1/3 < 1/2$	$1/4 < 1/2$	$1/6 < 1/2$
Has a 2 in the numerator and is greater than $2/6$	$2 > \frac{2}{6}$	$2/4 > 2/6$	$2/3 > 2/6$	$2/2 > 2/6$



February: Day 13

Need:

-12 colored tiles for each student

C. Grid: 4-Area & Perimeter Challenges (p. 12)

1. Post today's marker and fill in the observation chart.
2. Have students look at the chart and find examples of markers that have the same perimeter but different area. (Days 3 & 4, 6 & 7, 9 & 10, 15 & 16, 17 & 18)
3. Then, have students find examples of markers that have the same area by different perimeter. (There are no examples since the area gets bigger with every additional marker)
4. Give each student 12 colored tiles. Have students build as many rectangles they can that have the area of 12 tiles but different perimeters.
5. Record and label the different rectangles. (1-by-12, 2-by-6, and 3-by-4)
6. Have students compare and contrast the rectangles.
 - a. Which one has the biggest perimeter? Which one has the smallest? Is there a connection between the shape of the rectangle and the size of the perimeter?

C. Collector: Update

1. Spin the How Many Pieces? Spinner to determine how many dimes, quarters, or half-dollars to add to the collection.
2. Glue that number of pieces to the Dollar Grid and update the chart.

February: Day 14

Need:

-Kilograms of Food Served Student Book page 40
-Word Resource Cards: *maximum*, *minimum*

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

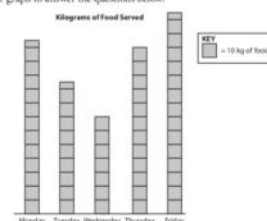
1. Spin the How Many Pieces? Spinner to determine how many dimes, quarters, or half-dollars to add to the collection.
1. Glue that number of pieces to the Dollar Grid and update the chart.

Solving Problems: 2-Interpreting Graphs (p. 35)

1. Display the top of the Kilograms of Food Served Student Book page.
2. Write the word *scale* and show that in this graph 1 square equals 10 kilograms of food.
3. Ask students the following questions: (Encourage students to think about multiplying by 10 in terms of place value: 80 is 8 groups of ten and 80 is 10 times as much as 8. The 8 shifts from the ones place to the tens place.)
 - a. If 1 square equals 10, then how much do 8 squares equal? 13 squares? $3\frac{1}{2}$ squares?
1. Ask students to imagine the scale of the graph has changed so that each square represents 30 kilograms. Then ask the following questions:
 - a. If 1 square equals 30 kilograms, how much do 5 squares equal? 8 squares? $2\frac{1}{2}$ squares?
1. Show students the Word Resource Cards for *maximum* and *minimum*.
 - a. In which month was the most food served? How many kilograms were served?
 - b. In which month was the least food served? How many kilograms were served?
2. Explain that it can be helpful to determine the range of the data. The range is the difference between the maximum and minimum. Ask students how they could find the range of this data.
3. Display the rest of the page and explain that students will use the graph to answer questions about the data. Have students compare their answers with a partner.

Kilograms of Food Served

Use the bar graph to answer the questions below.



- 1 On which day was the most food served? (When was the maximum amount of food served?) What was the amount of food served that day?
- 2 On which day was the least amount of food served? (When was the minimum amount of food served?) What was the amount of food served that day?
- 3 What is the difference between the minimum and maximum amounts? (What is the range?)
- 4 Was there more food served on Monday and Tuesday or on Wednesday and Friday? How do you know?

Number Corner Grade 2 Student Book

40

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February: Day 15

Need:

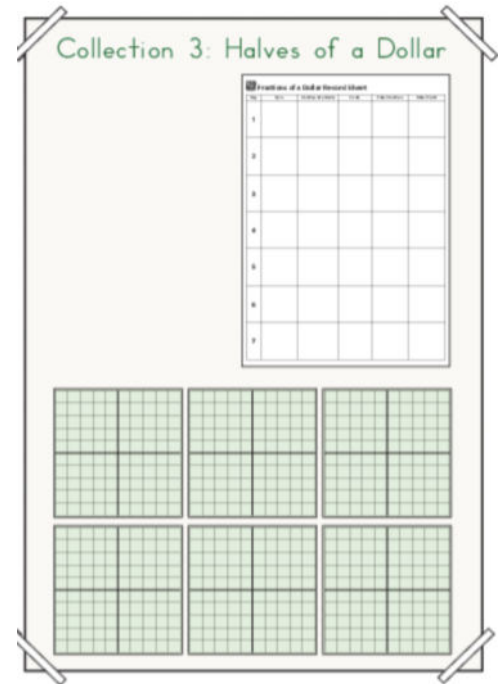
- Prepared Collector chart
- Half dollar money pieces
- Spinner
- Glue

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-Collecting Halves of a Dollar (p. 19)

1. Have students make observations about the completed quarter collection.
 - a. How many fourths did they collect altogether? How can they figure out the total without counting them one by one? How many whole dollars did they collect? How many more fourths do they need to make another whole dollar?
1. Show students the prepared chart and explain that they will collect half dollars next. Work with students to identify how much each number of half dollars is worth and record it on the chart.
1. Spin the spinner and add that number of half dollars to the chart. Fill out the first row of the record sheet.
1. Ask students to make predictions about how much they will collect total. Will it be more or less than the total of the dimes and quarters?



February: Day 16

Need:

- Red, blue, & green colored pencil for each student
- Scout Them Out Multiplication (3, 4, 8) Student Book page 37

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. Spin the How Many Pieces? Spinner to determine how many dimes, quarters, or half-dollars to add to the collection.
2. Glue that number of pieces to the Dollar Grid and update the chart.

Comp. Fluency: 2-Scout Them Out (p. 25)

1. Display the Multiplication Table and have students share observations.
2. Display the Scout Them Out Multiplication (3, 4, 8) Number Student Book page.
 - a. Read the directions out loud and work with students to color each fact with the appropriate color.
 - a. Give students time to complete the rest of the page independently.

Scout Them Out (3, 4, 8)

Multiply by Three, Four and Eight Practice

- 1 Circle all the Doubles Plus One Set facts ($\times 3$) in red. Then go back and solve them.
- 2 Circle all the Double-Doubles facts ($\times 4$) in blue. Then go back and solve them.
- 3 Circle all the Double-Double-Doubles facts ($\times 8$) in green. Then go back and solve them.

$\times 4$	$\times 7$	$\times 10$	$\times 9$	$\times 5$	$\times 6$
9	7	10	9	5	6
$\times 8$	$\times 4$	$\times 3$	$\times 8$	$\times 3$	$\times 4$
8	5	10	10	4	6
$\times 8$	$\times 4$	$\times 3$	$\times 8$	$\times 3$	$\times 4$
3	5	4	2	3	7
$\times 3$	$\times 8$	$\times 4$	$\times 8$	$\times 4$	$\times 3$
1	1	2	3	2	3
$\times 4$	$\times 8$	$\times 4$	$\times 8$	$\times 4$	$\times 4$
1	6	9	3	8	7
$\times 3$	$\times 3$	$\times 4$	$\times 5$	$\times 4$	$\times 4$

Divide by Three, Four and Eight Practice

- 4 Solve the division problems. Can you use what you know about multiplication to help?

$8 \overline{)80}$	$4 \overline{)40}$	$27 \div 3 = \underline{\quad}$	$8 \overline{)48}$	$30 \div 3 = \underline{\quad}$
$8 \overline{)32}$	$4 \overline{)24}$	$56 \div 8 = \underline{\quad}$	$8 \overline{)72}$	$24 \div 3 = \underline{\quad}$
$8 \overline{)64}$	$4 \overline{)12}$	$16 \div 8 = \underline{\quad}$	$4 \overline{)4}$	$21 \div 3 = \underline{\quad}$

February: Day 19

Need:

-Solving Area & Perimeter Problems Student Book page 31

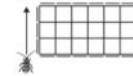
C. Grid: 5-Reviewing Area & Perimeter Concepts (p. 13)

1. Have students share observations and predictions. Then post today's marker and update the observation chart.
2. Ask students if they can make any generalizations about how to find the area and the perimeter of any rectangle.
3. Share the formula for area.
 - a. A formula tells how to solve a certain kind of problem correctly each time.
 - a. Write the area formula $l \times w = A$ (l stands for length and w stands for width)
1. Have students use the formula to find the area of one of the rectangles on the Calendar Grid.
1. Challenge students to think of a formula to find the perimeter of a rectangle.
 - a. Share the formula if students do not: $2l + 2w = P$
1. Display and introduce the Solving Area & Perimeter Problems page
 - a. Give students time to complete the page

Solving Area & Perimeter Problems

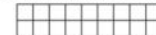
When you answer the questions below, remember that perimeter is the distance around the outside of a figure and area is the total number of square units it takes to cover the figure.

1a The beetle is going to take a walk around the perimeter of this rectangle. How many linear units will she have to travel to get all the way around?



b What is the area of this rectangle?

2a What is the perimeter of this rectangle?



b What is the area of this rectangle?

3a What is the perimeter of this rectangle?



b What is the area of this rectangle?

4a Enter information about the rectangle in questions 1, 2, and 3 on this chart.

Rectangle	Perimeter	Area
1		
2		
3		

b What do you notice about the perimeters and areas?

C. Collector: Update

1. Spin the How Many Pieces? Spinner to determine how many dimes, quarters, or half-dollars to add to the collection.
1. Glue that number of pieces to the Dollar Grid and update the chart.

February: Day 20

Need:

-Fractions of a Dollar Student Book pages 32-33

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-Reviewing Fractions of a Dollar (p. 21)

1. Have students share observations and comparisons of the three collection charts.
 - a. Does anything surprise them? Do they see any patterns?
1. Display Fractions of a Dollar Student Book pages.
1. Read the directions and answer any questions before giving students time to complete it.

Fractions of a Dollar page 1 of 2

1 Complete the table.

	Coin	Fraction of a Dollar	Cents
1 dime		$\frac{1}{10}$	10¢
1 quarter			
1 half dollar			
3 dimes			
5 dimes			
8 dimes			
2 quarters			
3 quarters			
3 half dollars			
6 half dollars			

(continued on next page)

Fractions of a Dollar page 2 of 2

2 Show each fraction on a dollar grid. Then circle the fraction that is greater in each row.

$\frac{1}{2}$ of a dollar	$\frac{3}{4}$ of a dollar

$\frac{3}{10}$ of a dollar	$\frac{1}{4}$ of a dollar

$\frac{2}{10}$ of a dollar	$\frac{2}{4}$ of a dollar

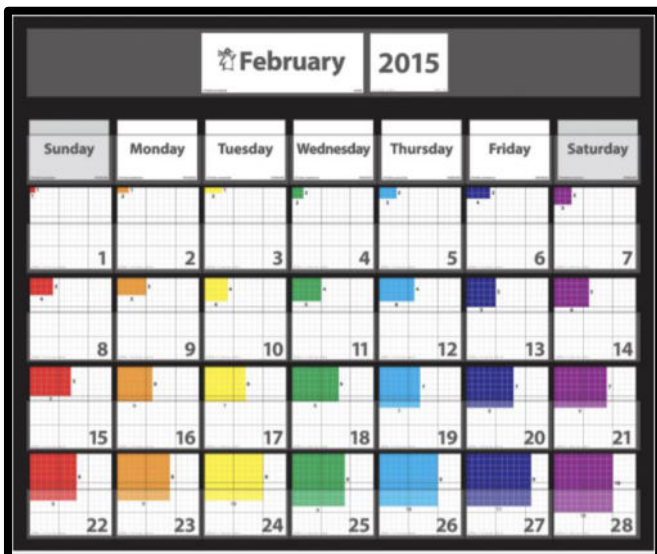
February Daily Planner

Day	Date	Calendar Grid	Calendar Collector	Computational Fluency	Number Line	Solving Problems
1		Activity 1 Introducing the New Calendar Markers (p. 8)				
2		Update	Activity 1 Collecting Tenths of a Dollar (p. 17)			
3		Activity 2 Identifying Perimeter (p. 9)	Update			
4		Update	Update	Activity 1 Multiples of Three (p. 24)		
5		Update	Update		Activity 1 Labeling Number Lines with Halves, Fourths & Eighths (p. 28)	
6		Update	Update	Activity 1 Multiples of Four (p. 24)		
7		Activity 3 Identifying Area (p. 11)	Update			
8		Update	Activity 2 Collecting Fourths of a Dollar (p. 19)			
9		Update	Update		Activity 2 Labeling Number Lines with Thirds & Sixths & Playing Find the Fraction (p. 29)	
10		Update	Update	Activity 1 Multiples of Eight (p. 24)		
11		Update	Update			Activity 1 Looking at Graphs (p. 34)
12		Update	Update		Activity 3 Playing Find the Fraction (p. 30)	
13		Activity 4 Area & Perimeter Challenges (p. 12)	Update			
14		Update	Update			Activity 2 Interpreting Graphs (p. 35)
15		Update	Activity 2 Collecting Halves of a Dollar (p. 19)			
16		Update	Update	Activity 4 Scout Them Out (p. 25)		
17		Update			Activity 4 Thinking About Equivalent Whole Numbers & Fractions (p. 32)	
18		Update	Update			Activity 3 Making Graphs (p. 37)
19		Activity 5 Reviewing Area & Perimeter Concepts (p. 13)	Update			
20		Update	Activity 3 Reviewing Fractions of a Dollar (p. 21)			

February Grid Answer Key

About the Pattern:

- The dimensions (height and width) of the rectangles increase in a predictable pattern
- The areas increase in a predictable manner as a result of the increasing dimensions
- The colors repeat in this sequence: red, orange, yellow, green, blue, indigo, violet



Date	Height	Width	Color	Perimeter (cm)	Area (cm ²)
1	1	1	red	4	1
2	1	2	orange	6	2
3	1	3	yellow	8	3
4	2	2	green	8	4
5	2	3	blue	10	6
6	2	4	indigo	12	8
7	3	3	violet	12	9
8	3	4	red	14	12
9	3	5	orange	16	15
10	4	4	yellow	16	16
11	4	5	green	18	20
12	4	6	blue	20	24
13	5	5	indigo	20	25
14	5	6	violet	22	30
15	5	7	red	24	35
16	6	6	orange	24	36
17	6	7	yellow	26	42
18	6	8	green	28	48
19	7	7	blue	28	49
20	7	8	indigo	30	56
21	7	9	violet	32	63
22	8	8	red	32	64
23	8	9	orange	34	72
24	8	10	yellow	36	80
25	9	9	green	36	81
26	9	10	blue	38	90
27	9	11	indigo	40	99
28	10	10	violet	40	100
29	10	11	red	42	110
30	10	12	orange	44	120
31	11	11	yellow	44	121