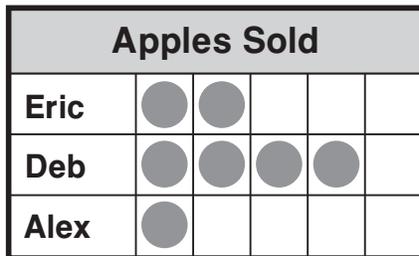# School-Home Letter

Dear Family,

My class started Chapter 10 this week. In this chapter, I will learn about collecting data, making graphs, and interpreting the data.

Love, _____

Vocabulary

picture graph A graph that uses pictures to show data

Apples Sold					
Eric	●	●			
Deb	●	●	●	●	
Alex	●				

Key: Each ● stands for 1 apple.

bar graph A graph that uses bars to show data

Home Activity

Take your child on a walk in your neighborhood. Help your child make a tally chart to record how many people you see driving, walking, and biking. Then talk with your child about the information that is in your tally chart.

How People Are Moving	
How Moving	**Tally**
driving	ⅢⅠⅠ ‖
walking	‖‖Ⅰ
biking	‖

Literature

Reading math stories reinforces learning. Look for these books at the library.

Tables and Graphs of Healthy Things by Joan Freese. Gareth Stevens Publishing, 2008.

Lemonade for Sale by Stuart J. Murphy. Harper Collins, 1998.

Carta
para la casa

Querida familia:

Mi clase comenzó el Capítulo 10 esta semana. En este capítulo, aprenderé a recolectar datos, hacer grácas e interpretar datos.

Con cariño, _____

Vocabulario

pictografía una gráfica que usa ilustraciones para mostrar datos

Manzanas vendidas					
Eric	●	●			
Deb	●	●	●	●	
Alex	●				

Clave: Cada ● representa 2 manzanas.

gráfica de barras una gráfica que usa barras para mostrar datos

Actividad para la casa

Lleve a pasear a su hijo por el vecindario. Ayúdelo a crear una tabla de conteo para anotar cuántas personas ven manejando, caminando y montando en bicicleta. Luego, conversen sobre la información que hay en la tabla de conteo.

Cómo se mueve la gente	
Se mueven	**Conteo**
manejando	||||| ||
caminando	|||||
en bicicleta	||

Literatura

Leer cuentos de matemáticas refuerza los conceptos. Busque estos libros en la biblioteca.

Table and Graphs of Healthy Things por Joan Freese. Gareth Stevens Publishing, 2008.

Lemonade for Sale por Stuart J. Murphy. Harper Collins, 1998.

Collect Data

1. Take a survey. Ask 10 classmates how they got to school. Use tally marks to show their choices.

How We Got to School	
Way	**Tally**
walk	
bus	
car	
bike	

_____

2. How many classmates rode in a bus to school?

_____ classmates

3. How many classmates rode in a car to school?

_____ classmates

4. In which way did the fewest classmates get to school?

_____

5. In which way did the most classmates get to school?

_____

6. Did more classmates get to school by walking or by riding in a car?

_____

How many more?

_____ more classmates

Lesson Check (MACC.2.MD.4.10)

1. Use the tally chart. Which color did the fewest children choose?

   ○ blue
   ○ green
   ○ red
   ○ yellow

Favorite Color	
Color	**Tally**
blue	|||
green	ⅢⅢ ||||
red	ⅢⅢ ||
yellow	ⅢⅢ	

## Spiral Review (MACC.2.MD.2.5, MACC.2.MD.2.6, MACC.2.MD.3.7, MACC.2.MD.3.8)

2. Which group of coins has a value of $1.00? (Lesson 7.5)

   ○ 10 pennies
   ○ 10 nickels
   ○ 10 dimes
   ○ 10 quarters

3. Jared has two ropes. Each rope is 9 inches long. How many inches of rope does he have in all? (Lesson 8.5)

   ○ 10 inches   ○ 18 inches
   ○ 16 inches   ○ 21 inches

4. The clock shows the time Lee got to school. At what time did she get to school? (Lesson 7.11)
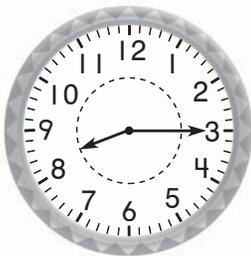
   ○ 3:40 A.M.   ○ 3:40 P.M.
   ○ 8:15 A.M.   ○ 8:15 P.M.

5. Liza finished studying at half past 3. What time did Liza finish studying? (Lesson 7.10)

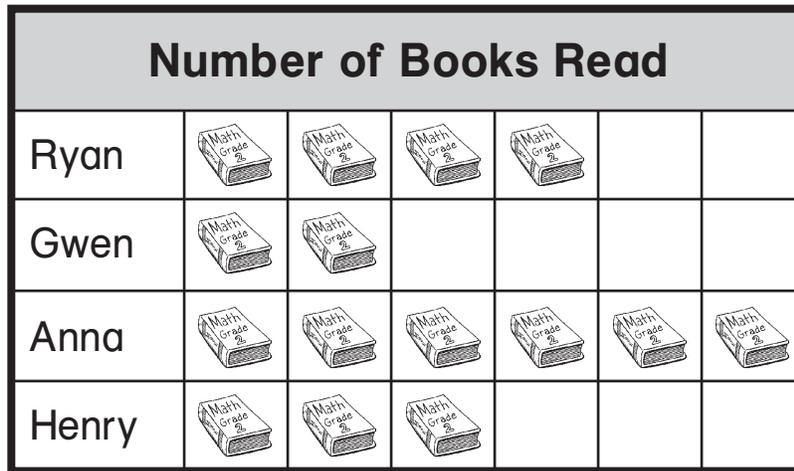   ○ 3:30
   ○ 3:15
   ○ 2:45
   ○ 2:15

Read Picture Graphs

COMMON CORE STANDARD MACC.2.MD.4.10
Represent and interpret data.

Use the picture graph to answer the questions.

Number of Books Read						
Ryan	📖	📖	📖	📖		
Gwen	📖	📖				
Anna	📖	📖	📖	📖	📖	📖
Henry	📖	📖	📖			

Key: Each 📖 stands for 1 book.

1. How many books in all did Henry and Anna read? _____ books

2. How many more books did Ryan read than Gwen? _____ more books

3. How many fewer books did Gwen read than Anna? _____ fewer books

4. How many books did the four children read in all? _____ books

PROBLEM SOLVING REAL WORLD
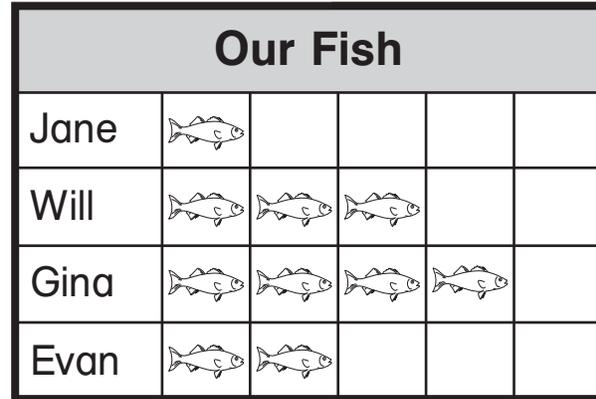
Use the picture graph above. Write or draw to explain.

5. Carlos read 4 books. How many children read fewer books than Carlos?

_____ children

Lesson Check (MACC.2.MD.4.10)

1. Use the picture graph. Who has the most fish?

- ○ Jane
- ○ Will
- ○ Gina
- ○ Evan

Our Fish					
Jane	🐟				
Will	🐟	🐟	🐟		
Gina	🐟	🐟	🐟	🐟	
Evan	🐟	🐟			

Key: Each 🐟 stands for 1 fish.

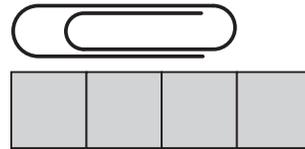## Spiral Review (MACC.2.MD.1.1, MACC.2.MD.3.7, MACC.2.MD.3.8)

2. What is the time on this clock?

(Lesson 7.9)

- ○ 1:55
- ○ 2:55
- ○ 3:05
- ○ 11:15

3. Each unit cube is about 1 centimeter long. Which is the best estimate for the length of the paper clip? (Lesson 9.1)

- ○ 1 centimeter
- ○ 3 centimeters
- ○ 4 centimeters
- ○ 8 centimeters

4. What is the total value of this group of coins? (Lesson 7.2)

- ○ 61¢
- ○ 60¢
- ○ 56¢
- ○ 52¢

Make Picture Graphs

1. Use the tally chart to complete the picture graph.

Draw a ☺ for each child.

Favorite Cookie	
Cookie	**Tally**
chocolate	III
oatmeal	I
peanut butter	IIII
shortbread	IIII

Favorite Cookie					
chocolate					
oatmeal					
peanut butter					
shortbread					

Key: Each ☺ stands for 1 child.

2. How many children chose chocolate?   _____ children

3. How many fewer children chose oatmeal than
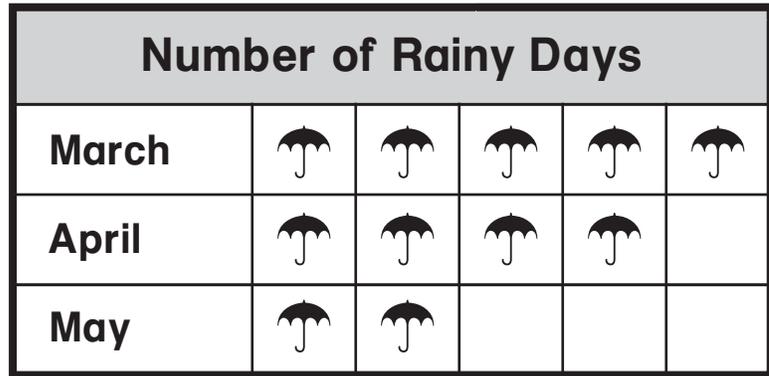peanut butter?   _____ fewer children

4. Which cookie did the most children choose?

_____

5. How many children in all chose a favorite cookie?   _____ children

6. How many children chose oatmeal or shortbread?   _____ children

Lesson Check (MACC.2.MD.4.10)

1. Use the picture graph. How many more rainy days were there in April than in May?

   ○ 2
   ○ 4
   ○ 6
   ○ 12

Number of Rainy Days					
March	☂	☂	☂	☂	☂
April	☂	☂	☂	☂	
May	☂	☂			

Key: Each ☂ stands for 1 day.

Spiral Review (MACC.2.MD.1.1, MACC.2.MD.3.8)

2. Rita has one $1 bill, 2 quarters, and 3 dimes. What is the total value of Rita's money? (Lesson 7.7)

   ○ $1.23   ○ $1.42
   ○ $1.35   ○ $1.80

3. Lucas put 4 quarters and 3 nickels into his coin bank. How much money did Lucas put into his coin bank? (Lesson 7.6)

   ○ $1.15   ○ $1.30
   ○ $1.25   ○ $1.75

4. Use a centimeter ruler. Which is the best choice for the length of this string? (Lesson 9.3)

   ○ 2 centimeters
   ○ 4 centimeters
   ○ 6 centimeters
   ○ 10 centimeters

5. What is the total value of this group of coins? (Lesson 7.1)
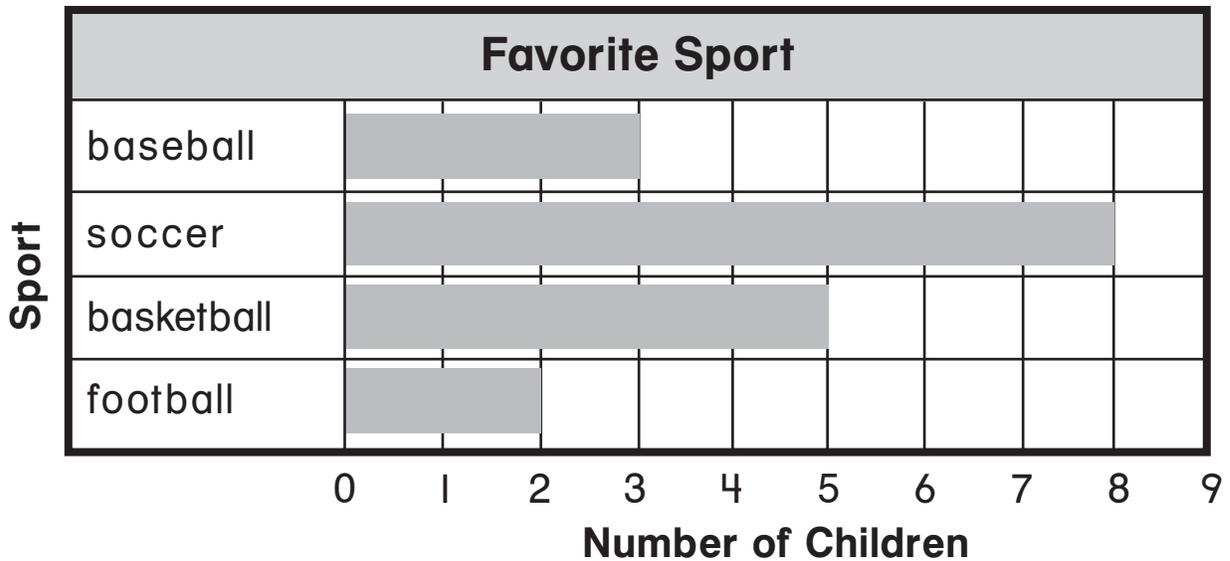
   ○ 8¢
   ○ 17¢
   ○ 21¢
   ○ 26¢

Read Bar Graphs

COMMON CORE STANDARD MACC.2.MD.4.10
Represent and interpret data.

Use the bar graph.

Favorite Sport									

Sport

baseball — bar to 3
soccer — bar to 8
basketball — bar to 5
football — bar to 2

0 1 2 3 4 5 6 7 8 9
Number of Children

1. How many children chose basketball?   _____ children

2. Which sport did the most children choose?   _____

3. How many more children chose basketball
   than baseball?   _____ more children

4. Which sport did the fewest children choose?   _____

5. How many children chose a sport that was not soccer?   _____ children

PROBLEM SOLVING REAL WORLD

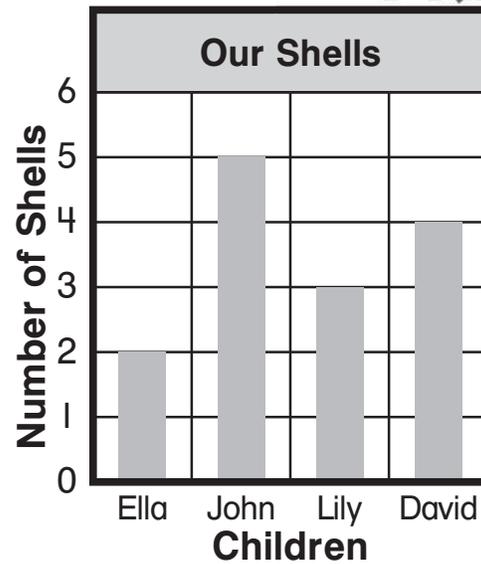6. How many children chose
   baseball or basketball?

   _____ children

Lesson Check

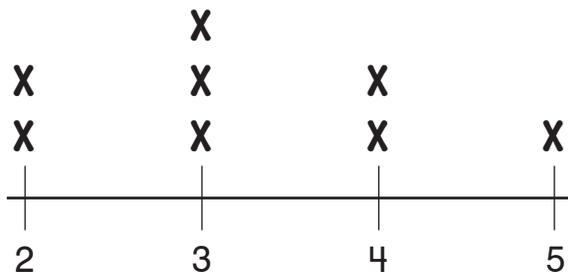**1.** Use the bar graph. How many shells do the children have in all?

- ○ 10
- ○ 12
- ○ 14
- ○ 16

Our Shells

Number of Shells

6	
5	
4	
3	
2	
1	
0	

Ella   John   Lily   David

Children

Spiral Review

2. Use the line plot. How many twigs are 3 inches long? **(Lesson 8.9)**

- ○ 8
- ○ 5
- ○ 4
- ○ 3

```
                X
  X             X             X
  X             X             X             X
  +-------------+-------------+-------------+
  2             3             4             5
```

Lengths of Twigs in Inches

3. Use a centimeter ruler. Which is the best choice for the length of the yarn? **(Lesson 9.3)**

- ○ 7 centimeters
- ○ 4 centimeters
- ○ 2 centimeters
- ○ 1 centimeter

4. Noah buys a pencil. He uses 1 quarter and 2 nickels to pay. How much money does the pencil cost? **(Lesson 7.4)**
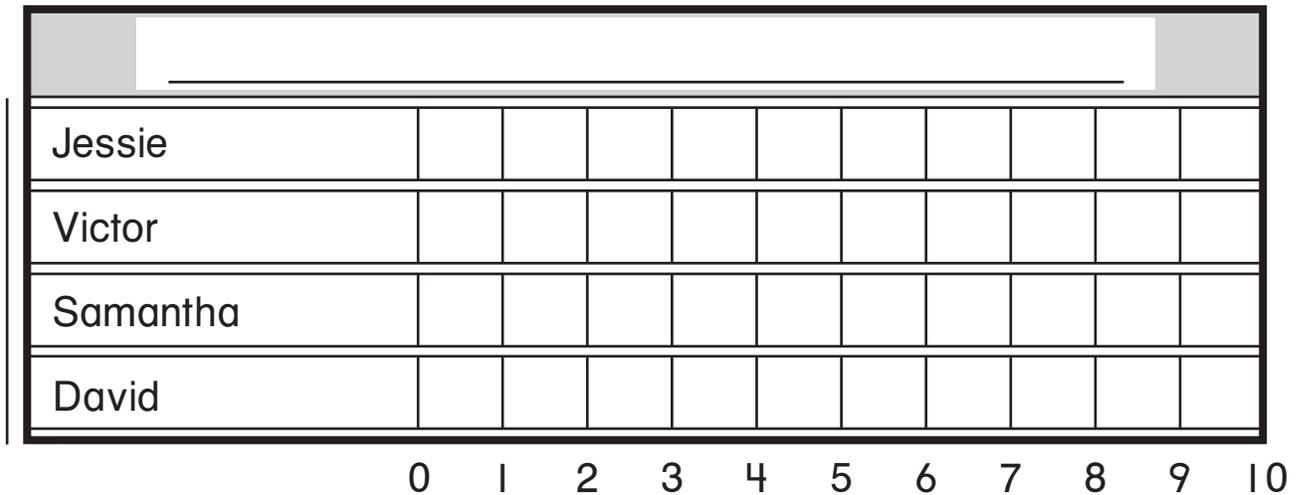
- ○ 45¢
- ○ 35¢
- ○ 30¢
- ○ 27¢

Make Bar Graphs

Maria asked her friends how many hours they practice soccer each week.

- Jessie practices for 3 hours.
- Victor practices for 2 hours.
- Samantha practices for 5 hours.
- David practices for 6 hours.

1. Write a title and labels for the bar graph.

_____

2. Draw bars in the graph to show the data.

	0	1	2	3	4	5	6	7	8	9	10
Jessie											
Victor											
Samantha											
David											

_____

3. Which friend practices soccer for the most hours each week?

_____

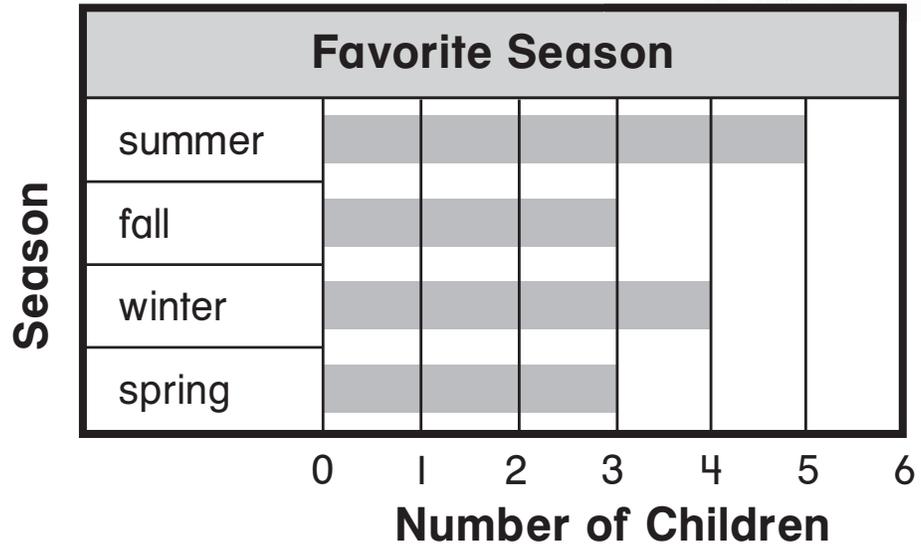## PROBLEM SOLVING REAL WORLD

4. Which friends practice soccer for fewer than 4 hours each week?

_____

Lesson Check (MACC.2.MD.4.10)

1. Use the bar graph. How many more children chose summer than spring?

   ○ 2
   ○ 3
   ○ 5
   ○ 8

Favorite Season

Season	
summer	
fall	
winter	
spring	

0 1 2 3 4 5 6
Number of Children

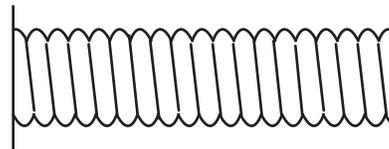## Spiral Review (MACC.2.MD.1.1, MACC.2.MD.2.5, MACC.2.MD.2.6, MACC.2.MD.3.7, MACC.2.MD.3.8)

2. Rachel's chain is 22 centimeters long. She takes 9 centimeters off the chain. How long is Rachel's chain now? **(Lesson 9.4)**

   ○ 31 centimeters
   ○ 29 centimeters
   ○ 17 centimeters
   ○ 13 centimeters

3. Use an inch ruler. What is the length of the string to the nearest inch? **(Lesson 8.4)**

   ○ 1 inch   ○ 4 inches
   ○ 2 inches   ○ 6 inches

4. Gail finished studying at quarter past 1. What time did Gail finish studying? **(Lesson 7.10)**

   ○ 1:15
   ○ 3:50
   ○ 4:30
   ○ 5:45

5. Jill has two $1 bills, 1 quarter, and 1 nickel. How much money does Jill have? **(Lesson 7.7)**

   ○ $2.35
   ○ $2.30
   ○ $2.05
   ○ $1.30

Name _____

Problem Solving • Display Data

COMMON CORE STANDARD MACC.2.MD.4.10
Represent and interpret data.

Make a bar graph to solve the problem.

1. The list shows the number of books that Abby read each month. Describe how the number of books she read changed from February to May.

February	8 books
March	7 books
April	6 books
May	4 books

February

March

April

May

0   1   2   3   4   5   6   7   8   9   10

_____

The number of books _____

_____
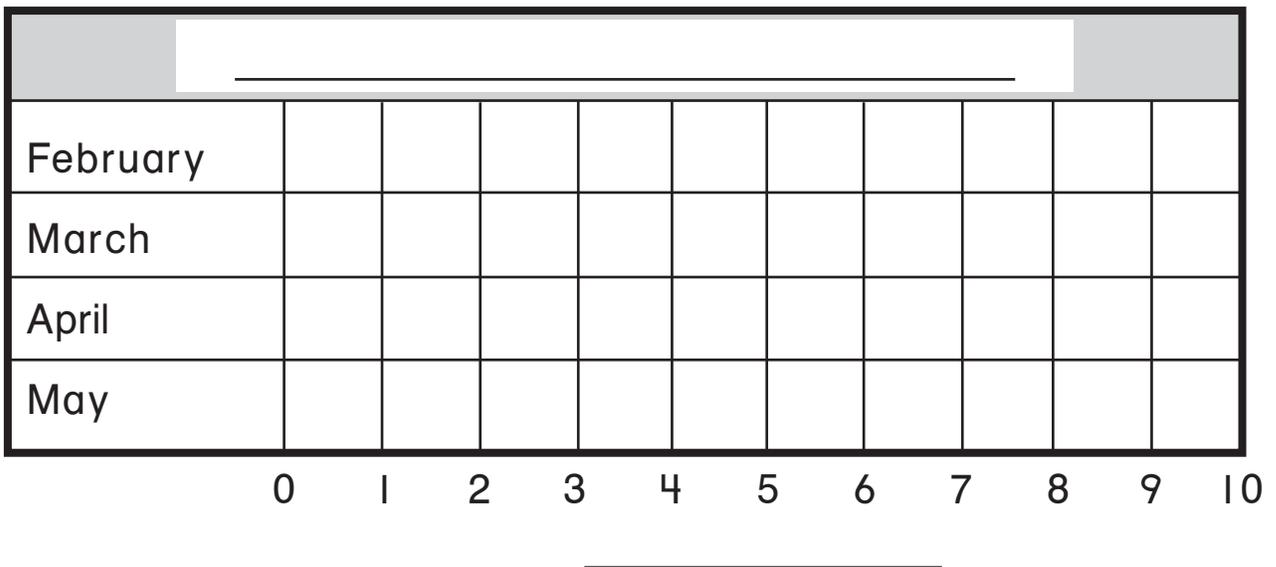
2. How many books in all did Abby read in February and March?   _____ books

3. How many fewer books did Abby read in April than in February?   _____ fewer books

4. In which months did Abby read fewer than 7 books?   _____

Lesson Check (MACC.2.MD.4.10)

1. Use the bar graph. Which of the following describes how the number of hours changed from Week 1 to Week 4?

   ○ The number of hours decreased.
   ○ The number of hours increased and then decreased.
   ○ The number of hours increased.
   ○ The number of hours stayed the same.

Hours at Practice

| | Week 1 | Week 2 | Week 3 | Week 4 |
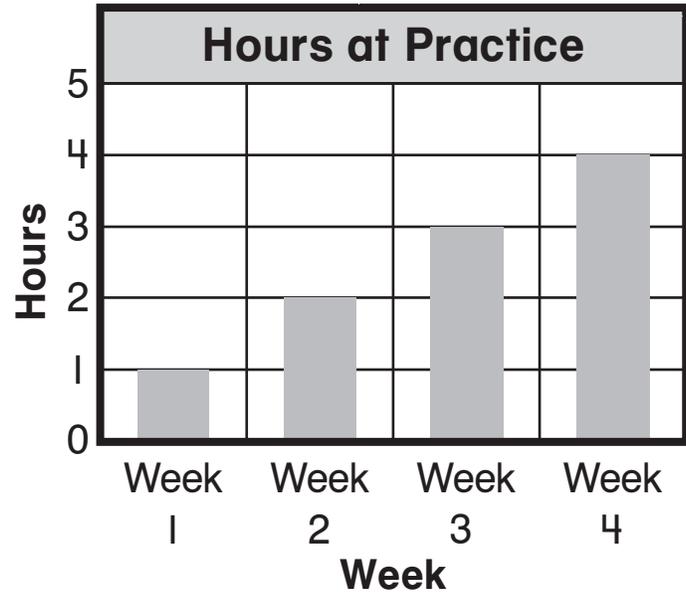
Spiral Review (MACC.2.MD.1.3, MACC.2.MD.3.8)

2. The string is about 10 centimeters long. Which is the best estimate for the length of the feather? (Lesson 9.2)

   ○ 2 centimeters   ○ 10 centimeters
   ○ 5 centimeters   ○ 20 centimeters

3. What is the total value of this group of coins? (Lesson 7.3)

   ○ 55¢   ○ 40¢
   ○ 50¢   ○ 28¢

4. Rick has one $1 bill, 2 dimes, and 3 pennies. How much money does Rick have? (Lesson 7.6)

   ○ $1.72
   ○ $1.53
   ○ $1.40
   ○ $1.23

Chapter 10 Extra Practice

Lesson 10.2 (pp. 473–476)

Use the picture graph.

Favorite Flavor					
vanilla	☺	☺	☺		
chocolate	☺	☺	☺	☺	
strawberry	☺	☺	☺	☺	☺
mint	☺	☺			

Key: Each ☺ stands for 1 child.

1. How many children chose chocolate? _____ children

2. Which flavor did the most children choose? _____

3. How many children in all chose a favorite flavor? _____ children

Lesson 10.3 (pp. 477–479)

1. Use the tally chart to complete the picture graph.
   Draw a ● for each book.

Number of Books Read	
Name	**Tally**
Maya	|||||
Gabe	卌
Tia	|||
Cathy		

Number of Books Read					
Maya					
Gabe					
Tia					
Cathy					

Key: Each ● stands for 1 book.

2. Who read more than 4 books? _____

Lesson 10.4 (pp. 481–484)

Use the bar graph.

Favorite Kind of Book

Number of Children (vertical axis: 0, 1, 2, 3, 4, 5)

animals — 4
sports — 1
people — 4
science — 3
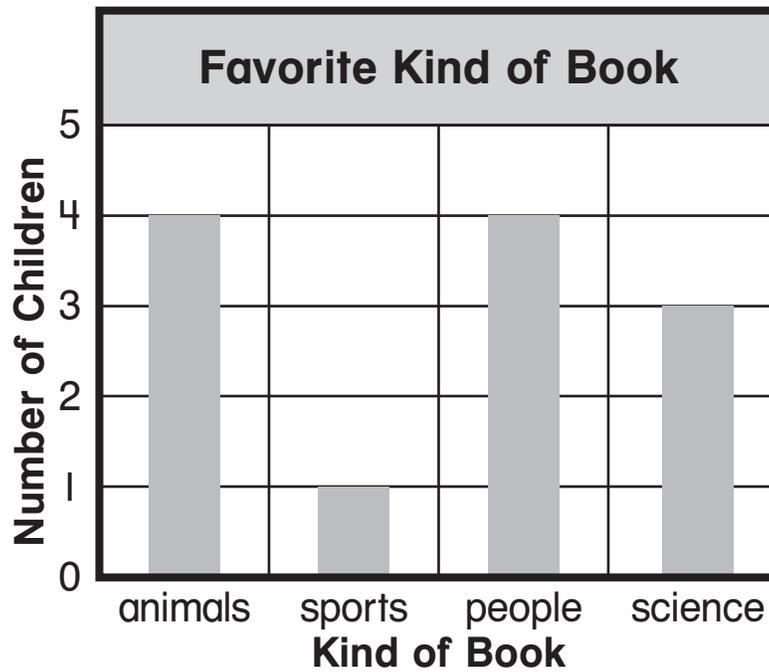
Kind of Book

1. Which kind of book did the
   fewest children choose?   _____

2. How many children in all chose
   a favorite kind of book?   _____ children

Lesson 10.5 (pp. 485–488)

Robin has 5 red beads, 7 blue beads,
8 yellow beads, and 5 green beads.

1. Write a title and labels.
   Draw bars to show the data.

_____

red										
blue										
yellow										
green										

0   1   2   3   4   5   6   7   8   9

_____