

Unit 2 Module 4 Session 2

Problems and Investigations-Library Books Data

Getting Ready-

- SB 68 Library Books Data and Graph
- SB 69 Library Books Problems
- Base ten Pieces

VOCABULARY

Bar graph

Table



- Solve multiplication story problems with products and dividends to 100 involving situations of equal groups, arrays, and measurement quantities
- Fluently multiply and divide within 100 using strategies
- Solve two-step story problems using addition, subtraction, and multiplication
- Fluently add and subtract within 1,000
- Make a scaled bar graph to represent a data set with several categories and solve one- and two-step "how many more" and "how many less"

What is the difference between fiction and nonfiction?

Have you read books from the different genres?

We will be using this data to create a bar graph.



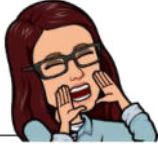
Library Books Data & Graph



Woodlawn Elementary School's librarian Mr. Jackson is keeping track of the kinds of books students check out. This chart shows the number of each kind of book the third graders have checked out so far this year.

Genre	Fiction or Nonfiction	Number of Books Checked Out
Adventure	F	32
Art & Crafts	N	16
Biography	N	12
Fantasy	F	10
Fiction	F	33
Graphic Novels	F	29
Science	N	15
Sports	N	8

WORKBOOK

PAGE 68 PLEASE



Key: Each  = 
books checked out

How can we decide
what our **scale** will be?

What is a good **title**?

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NAME _____

DATE _____



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The third grade teachers want to know more about what their students are reading. Create a bar graph showing the information Mr. Jackson collected. **Each cell in the graph stands for 4 books checked out. Label and title your graph.**

Y axes name

scale

title

genre names (x axes)



WORKBOOK

PAGE 69 PLEASE

When you have completed page 68, you and your partner can answer the questions on this page using the completed graph.



Library Books Problems

Use the Library Books Data & Graph you just completed to solve these problems. Show all of your work for problems 3 and 4.

- 1 Which kind of book was checked out the most? How many of them were checked out?
- 2 Which kind of book was checked out the least? How many of them were checked out?
- 3 How many more of the most popular kind of book (see problem 1) were checked out than the least popular kind of book (see problem 2)?
- 4 Each kind of book is either fiction or nonfiction.
 - a Which kind of book—fiction or nonfiction—was checked out more?
 - b Exactly how many more of the most popular kind of book (fiction or nonfiction) were checked out?
- 5 The librarian noticed that students checked out 21 more of one kind of book than another. Which two kinds of books is the librarian comparing?
- 6 **CHALLENGE** There are some kinds of books that students checked out twice as many of as other books. Name as many pairs of books as you can where students checked out two times more of one than the other.

Work Places

1G Target One Hundred

1H Anything But Five

2A Loops and Groups

2B Frog Jump Multiplication

2C Cover Up

2D Doubles Help

Daily Practice

SB 70 Gift Wrap Fundraiser