

Vote Count Detectives

Build a scaled bar graph and use data to explain your answers.

GRADE 3 • 3.MD.B

CCSS.Math.Content.3.MD.B "Represent and interpret data."

NAME _____

DATE _____

READ AND REPRESENT DATA

A bar graph compares category counts using a number scale. Each equal interval here represents 2 votes or students. Read the bar end against the scale. Add counts to combine groups; subtract to compare them. Give units with your answer.

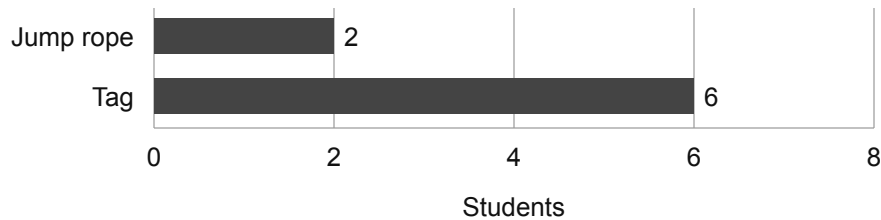
WORKED EXAMPLE

Read this recess graph. How many more students chose tag than jump rope?

1. The bars end at 6 students and 2 students.
2. Compare the counts: $6 - 2 = 4$.

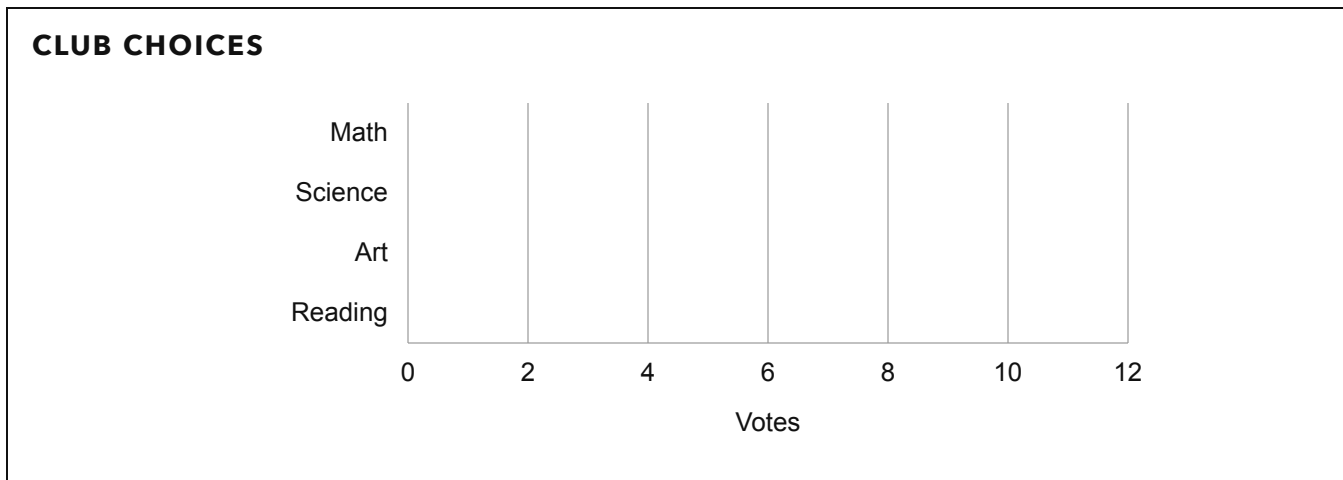
Answer: 4 more students chose tag.

RECESS CHOICES



PRACTICE 4 problems

- 1** Draw bars for this club vote: Math 4, Science 8, Art 10, Reading 12. Use the labeled scale; each interval is 2 votes.



ANSWER _____

- 2** Use YOUR club graph from Practice 1. Which choice has the most votes? How many?

ANSWER _____

- 3** Use your club graph. How many fewer votes did Math get than Art? Show the subtraction.

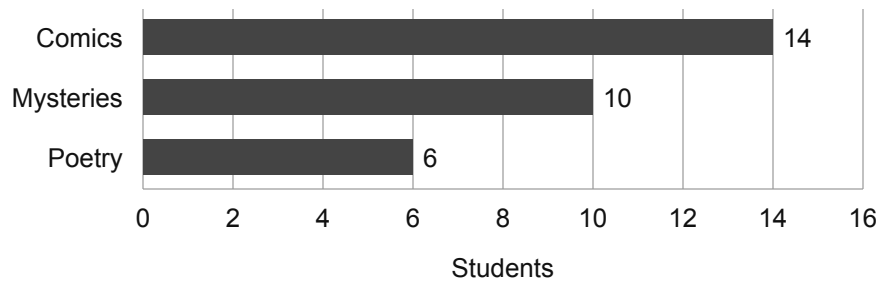
ANSWER _____

- 4** Use your club graph. How many more votes did Math and Science together get than Art? Show both steps.

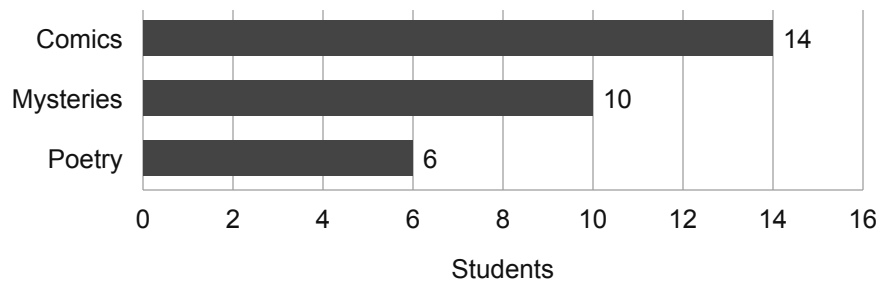
ANSWER _____

APPLY IT Show your work

- 1** Read the library graph. How many more students chose comics than mysteries? Show how the scale gives the counts.

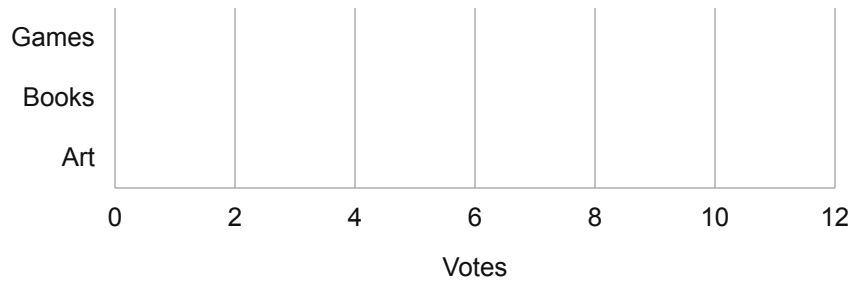
LIBRARY VOTE

- 2** Read the SAME library vote shown here. How many more students chose mysteries and poetry together than comics?

LIBRARY VOTE

CHALLENGE One step up

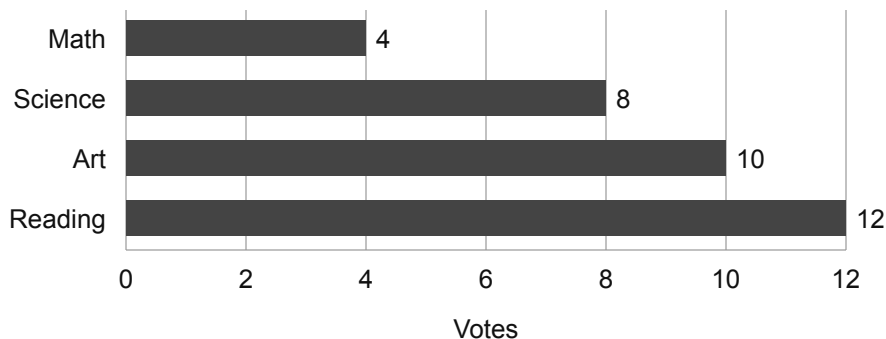
A new club vote has 30 votes: Games 8, Books 10, Art the rest. Find Art's count, then draw ALL THREE bars on this scale.

NEW CLUB VOTE

PRACTICE 1

Draw bars for this club vote: Math 4, Science 8, Art 10, Reading 12. Use the labeled scale; each interval is 2 votes.

Bars end at 4, 8, 10 and 12 votes, respectively.

CLUB CHOICES**PRACTICE 2**

Use YOUR club graph from Practice 1. Which choice has the most votes? How many?

Reading has 12 votes.

PRACTICE 3

Use your club graph. How many fewer votes did Math get than Art? Show the subtraction.

$10 - 4 = 6$ fewer votes.

PRACTICE 4

Use your club graph. How many more votes did Math and Science together get than Art? Show both steps.

$4 + 8 = 12$; $12 - 10 = 2$ more votes.

APPLY IT 1

4 more students.

Each interval is 2 students. Comics ends at 14 and mysteries at 10; $14 - 10 = 4$.

APPLY IT 2

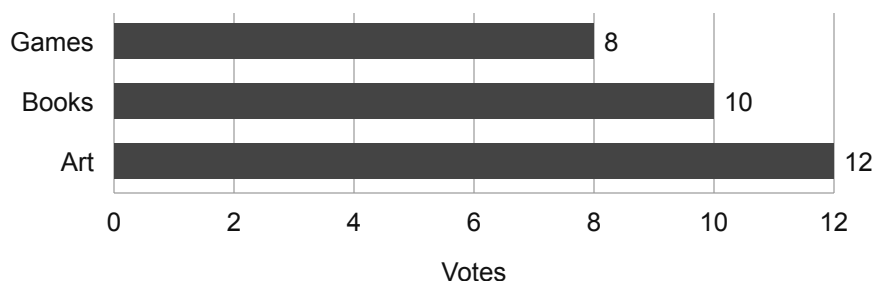
2 more students.

$10 + 6 = 16$ students chose mysteries or poetry. Then $16 - 14 = 2$.

CHALLENGE

Art gets $30 - 8 - 10 = 12$ votes. Bars: Games 8, Books 10, Art 12.

NEW CLUB VOTE



All datasets are invented for practice. Students construct the club graph before reading it; Practice 2-4 explicitly refer to that graph. Check scale use, category counts and units. Both applied tasks include their own copy of the library graph. Accept equivalent correct calculations.