LESSON MAKER PRO

Check the Chart

Do the numbers support the display?

GRADE 5 · 5.DS.A.1.c

5.DS.A.1.c "Evaluate whether a data visualization accurately represents the data and allows for accurate interpretation given the context."

NAME _____ DATE _____

CHECK THE NUMBERS

Use the graph's labels or key to find what each mark means. Then compare the amounts with the claim. A graph is useful only if it shows the data clearly and supports an accurate reading.

WORKED EXAMPLE

A caption says Art got twice as many votes as Chess. Is the caption right?

CLUB VOTES

Art	21
Chess	7

votes

1. Art has 21 votes, and Chess has 7.
2. 21 / 7 = 3, not 2.

Answer: No. Art got 3 times as many votes as Chess.

PRACTICE 4 problems

1 A pictograph key will say 1 symbol = 5 votes. A student plans to use 2 symbols for 15 votes. Is that accurate? How many symbols are needed?

ANSWER _____

2 Tag got 24 votes, and soccer got 6. A graph caption will say, "Tag got 3 times as many votes." Is that correct? Give the correct multiple.

ANSWER _____

3 Apple slices got 20 votes, and grapes got 30. A planned bar graph's number scale starts at 25. Can it show both bars correctly? Why or why not?

ANSWER _____

_____

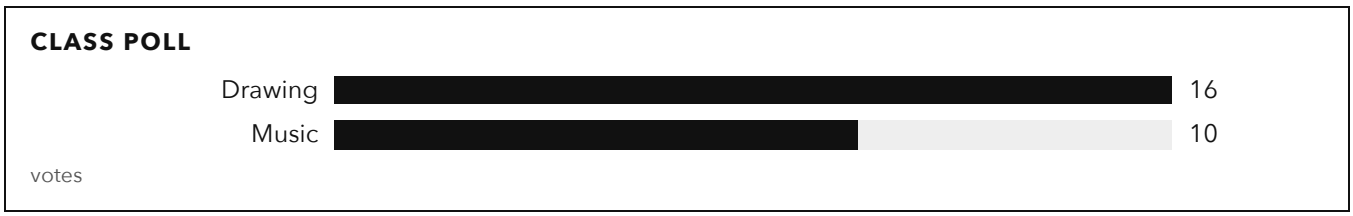
4 A pictograph key will say 1 symbol = 10 books. A student plans to use 3 and a half symbols for 35 books. Is that accurate? Show why.

ANSWER _____

_____

APPLY IT Show your work

1 In a class poll, 16 students chose drawing and 14 chose music. Check the graph. Which bar is wrong, and by how many votes?



ANSWER _____

2 A class voted on a reward. A caption says games got 2 more votes than movies. Is the caption right? Give the actual difference.

Class Reward Votes

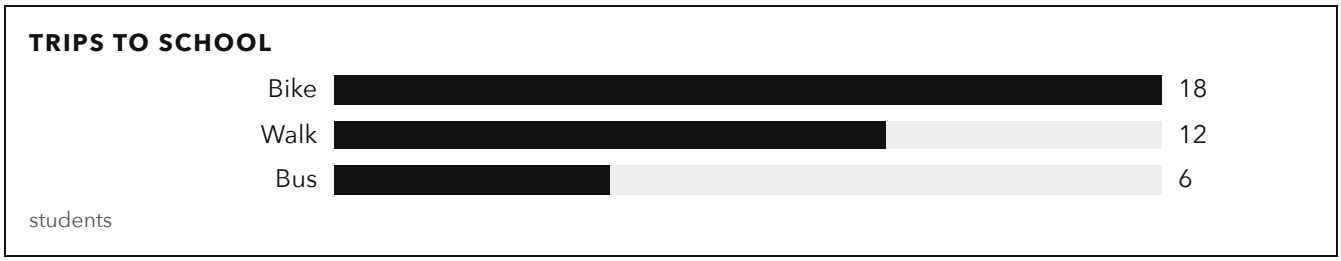
Games	★★★★
Movies	★★

Key: ★ = 3 votes

ANSWER _____

CHALLENGE One step up

A headline says biking has twice as many students as walking and three times as many as riding the bus. Which claim is correct? Use the graph's numbers to explain.



WORK SPACE AND ANSWER

ANSWER KEY

Check the Chart

GRADE 5 · 5.DS.A.1.c

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	A pictograph key will say 1 symbol = 5 votes. A student plans to use 2 symbols for 15 votes. Is that accurate? How many symbols are needed?	**No. 3 symbols are needed.**
2	Tag got 24 votes, and soccer got 6. A graph caption will say, "Tag got 3 times as many votes." Is that correct? Give the correct multiple.	**No. Tag got 4 times as many votes.**
3	Apple slices got 20 votes, and grapes got 30. A planned bar graph's number scale starts at 25. Can it show both bars correctly? Why or why not?	**No. The scale cannot show the 20 votes for apple slices.**
4	A pictograph key will say 1 symbol = 10 books. A student plans to use 3 and a half symbols for 35 books. Is that accurate? Show why.	**Yes. 3 and a half symbols show 35 books because 3.5 × 10 = 35.**

PART 2 · APPLY IT

1. **The Music bar is 4 votes too short.** Music received 14 votes, but its bar shows 10. The difference is 14 - 10 = 4.
2. **No. Games got 6 more votes than movies.** The two extra symbols represent 2 × 3 = 6 votes, not 2 votes.

CHALLENGE

Only the bus claim is correct. Biking has 18 students and riding the bus has 6, so 18 / 6 = 3. Walking has 12 students, and twice 12 is 24, not 18.

Accept equivalent calculations or words that show the same comparisons. For problem 3, accept an explanation that 20 falls below the planned scale.