Behind the Numbers

Read a news poll with its methods in mind

SS24.CWI.3 "Explain how public opinion polling is implemented, and describe how polling methods can produce intentional and unintentional bias and flawed samplings. 3a Interpret statistics included in current news stores related to political, social..."

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Underline the steps used to conduct each poll, circle the reported percentages, and number two reasons the results might not represent all city adults.

What Does the City Think?

1. A local news site is preparing a story about a proposed 25-cent bus fare increase to pay for later evening service. Its reporters want to know what city adults think. A poll cannot ask everyone, so reporters must choose whom to invite, collect answers, and report both the results and how they were gathered.

2. The reporters try two approaches during the same week. They randomly select 1,000 city addresses, invite one adult at each address, and receive 400 replies. They also post an open poll link on the news site's homepage. Both surveys ask, "Do you favor or oppose raising bus fares by 25 cents to fund later evening service?"

RESULTS FROM THE TWO BUS FARE POLLS

How adults were invited	Completed surveys	Favor increase	Response rate
Selected addresses	400	54%	40%
Open website link	800	78%	Unknown

3. The open link lets people decide for themselves whether to respond; its response rate cannot be calculated because the number who saw it is unknown. The address survey may miss adults without stable housing, and many invited adults did not reply. A loaded question calling the increase "a reckless tax on riders" could intentionally push answers toward opposition.

2 ANSWER WITH EVIDENCE

Use the passage

1. How many percentage points apart are the two results for favoring the increase?

2. Why does the open-link result not show that 78% of all city adults favor the increase?

3. What does the 40% response rate tell you about a limit of the selected-address result?

4. If the reporters replaced their question with the loaded wording in the passage, which way might answers shift? Explain why.

3 YOUR TURN

Your own words

Write a cautious news headline that reports one result from the table. Then write two sentences explaining one sampling limit and one change that could reduce bias in a follow-up poll.

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PART 1 · READ AND MARK

Underline the steps used to conduct each poll, circle the reported percentages, and number two reasons the results might not represent all city adults. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	How many percentage points apart are the two results for favoring the increase?	**78% minus 54% equals 24 percentage points.**
2	Why does the open-link result not show that 78% of all city adults favor the increase?	**People chose whether to take the open poll, so its 800 respondents may not represent all city adults.**
3	What does the 40% response rate tell you about a limit of the selected-address result?	**Only 400 of 1,000 selected addresses produced replies. Adults who did not reply might have different views.**
4	If the reporters replaced their question with the loaded wording in the passage, which way might answers shift? Explain why.	**Answers might shift toward opposition because "a reckless tax on riders" presents the increase negatively.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

Address poll: 54% of respondents favor bus fare increase
Only 400 of 1,000 selected addresses produced replies, so the result may not reflect the views of all city adults. A follow-up poll could contact nonrespondents again and find a way to include adults without stable housing.

Accept a headline using either table result if it identifies the respondents rather than claiming to represent all city adults. The two explanatory sentences should name a plausible sampling limit and a specific way to reduce it.