

Capstone: Design & Present a Statistics Survey

Name: _____ Date: _____

LEARNING OBJECTIVE

The student will design an original survey question, collect data from real respondents, analyze it using measures of center and a graph, and present their findings.

MATERIALS NEEDED

- Paper
- pencil
- at least 10 survey respondents (family, friends, neighbors -- in person or by phone/text)
- ruler
- colored pencils
- poster board or plain paper for the final display

HANDS-ON ACTIVITY

1. Write one original survey question with either numeric answers (e.g., 'How many hours of sleep did you get last night?') or a small set of categorical choices (e.g., 'What is your favorite season?').
2. Survey at least 10 people, recording each response in a data table.
3. Calculate the appropriate statistics for your data type: mean, median, mode, and range for numeric data, or a frequency count for categorical data.
4. Create one clear, labeled graph (bar graph or histogram, matching your data type) on poster board or paper displaying your results.
5. Prepare and deliver a 1-2 minute presentation of your findings to a family member, including your question, your graph, your key statistic, and one conclusion you drew from the data.

QUESTIONS

1. What was your survey question, and how many people did you survey?
-

2. What was the key statistic (mean/median/mode or most common category) you found, and what does it tell you about your respondents?
-

3. What is one conclusion or claim your data supports, and what evidence from your graph backs it up?

4. If you repeated this survey with 100 people instead of 10, would you expect your results to change? Why or why not, based on what you learned about probability and sample size this quarter?
