

Worksheet– Backpack Color Study

Name _____



Graphing the Data: Prepare bar graphs to visually display the data charts developed in this study. Please use graph paper. Place the colors on the horizontal axes and the number of responses on the vertical axes. Using your bar graphs and the charts, answer the questions below.

Questions for discussion and response:

1. Are the results from the entire population what you would have expected them to be? Explain.
2. What factors might influence a student's choice of color for a backpack?
3. Why do you think that blue was the most popular color for the entire population?
4. Examine the data from the random sample population. How similar is this data to the entire population? List your observations of similarities and differences.
5. Would the random sample population data in this study be a good predictor for the entire population? Explain.
6. Examine the results from both of the biased sample populations. Why is this data listed as "biased"?
7. What are the similarities and differences between the two sets of biased data?

8. Would the biased sample population data in this study be good predictors for the entire population? Explain for both sets of biased data.

9. Prepare a chart that combines the two biased data charts. Prepare a graph of the new chart.

Backpack color	black	brown	blue	red	yellow	purple	pink	other
Response from boys								
Response from girls								
Totals								

Would this new chart of the combined sample populations be a good predictor for the entire population? Explain.

10. Prepare a chart that combines the three sample population charts (the random and the two biased) to form a larger sample population. Prepare a graph of the new chart.

Backpack color	black	brown	blue	red	yellow	purple	pink	other
Response from boys								
Response from girls								
Totals								

Would this new chart of a larger sample population be a good predictor for the entire population? Explain.