Market Research FINAL REPORT



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Name _____ Date _____

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| Project Title | Market Research Career: Marketing Occupation: Market Research Analyst | |
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| Career Cluster | | |
| Mission | Businesses use marketing research to understand how customers use their products and to establish trends in sales, products, and services. The daily duties of a market researcher include writing surveys, collecting data, analyzing data, and writing reports to summarize the data. | |
| | The survey is an essential data collection tool for most market researchers. The wording of the questions used in the marketing survey may be the most important aspect of the market researcher's daily duties. If the wording is incorrect, the results of the marketing survey could take a different angle than intended and steer the client in the wrong direction. | |
| | In this project, you will work in a group to create a market survey and a plan to conduct the survey. After your teacher approves the wording of your survey questions, your group will conduct the survey and tally the results. | |
| | Individually, you will analyze the data and prepare a report for the client. | |
| Standards | CC.6.SP.1 Develop understanding of statistical variability. Recognize a statistical question as one that anticipates variability in the data related to the question and accounts for it in the answers. For example, "How | |

| Standards (continued) | old am I?" is not a statistical question, but "How old are the students in my school?" is a statistical question because one anticipates variability in students' ages. | |
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| | CC.6.SP.2 Develop understanding of statistical variability. Understand that a set of data collected to answer a statistical question has a distribution which can be described by its center, spread, and overall shape. | |
| | CC.6.SP.3 Recognize that a measure of center for a numerical data set summarizes all of its values with a single number, while a measure of variation describes how its values vary with a single number. | |
| | CC.6.SP.4 Summarize and describe distributions. Display numerical data in plots on a number line, including dot plots, histograms, and box plots. | |
| | CC.6.SP.5 Summarize and describe distributions. Summarize numerical data sets in relation to their context, such as by: | |
| | a. Reporting the number of observations. | |
| | b. Describing the nature of the attribute under investigation, including how it was measured and its units of measurement. | |
| | c. Giving quantitative measures of center (median and/or mean) and variability (interquartile range and/or mean absolute deviation), as well as describing any overall pattern and any striking deviations from the overall pattern with reference to the context in which the data was gathered. | |
| | d. Relating the choice of measures of center and variability to the shape of the data distribution and the context in which the data was gathered. | |

Numerical Data Set: Computing Statistics

For your final report, choose one numerical data set and one categorical data set from your survey. Write the survey question that generated this data set.



Create a table showing the tallies of your data.

How many observations (number of surveys completed) are included?

What is the range? Explain how you found the range.

What is the median? Explain how you found the median.

What is the mean, rounded to the nearest tenth? Explain how you found the mean.

Numerical Data Set: Computing Statistics (continued) What is the mean absolute deviation (MAD), rounded to the nearest tenth? Explain how you found the MAD?

Numerical Data Set: Graphing

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Create a box plot to summarize the data for the client.

Write a paragraph that explains what the box plot shows.

- Explain what each part of the box plot means or tells about the data.
- Is the distribution skewed?

Numerical Data Set: Graphing (continued)

Create a histogram to summarize the data for the client.

Write a paragraph that explains how to read the histogram.

- Explain what each part of the box plot means or tells about the data.
- Explain how you chose the bin size.
- What would happen if you chose a different bin size?
- Explain what the graph tells about the data and what the shape of the graph tells about the data.

Numerical Data Set: Measures of Variability and Center Write a paragraph for the client that explains what measures of variability tell about the data.

- What is variability? What do higher or lower numbers for variability mean?
- Describe two measures of variability.
- Explain the advantages or disadvantages of each measure.
- Tell the client why the measure of variability used for this data set does or does not matter.

Numerical Data Set: Measures of Variability and Center (continued) Write a paragraph for the client that explains what measures of center tell about the data. • Explain why the client might choose one measure over the other for a particular data set.

• Tell the client why the measure of center used for this data set does or does not matter.

Categorical Data Set

Write the survey question that generated this data set.



Create a table showing the tallies of your data.

How many observations (number of surveys completed) are included?



Make a graph to summarize the categorical data.

Write a paragraph for the client explaining the mode and summarizing the information displayed in the graph.