

In this project, you will choose a statistical question, collect your own data on two populations (a minimum of 25 data points for each population surveyed), and compare the distributions. Your question can be on any topic, as long as you have teacher permission to move forward.

You can present your statistics project as a written report, slide show, or as a poster.

Your report should include the following:

- A description of your statistical question. (What are you asking?)
- A summary of your data collection process (Who is your population? How did you collect a random sample?)
- A description of your data, including a graph, mean and standard deviation for each group. (Draw a distribution for each group)
- Full sentences comparing and contrasting the two distributions. (Make sure to compare the shape, center, and spread for each distribution)

Scoring Rubric:

4 = Clear description of statistical question and summary of data collection process. Correct mean, standard deviation, and graph with written descriptions relevant to data. Distributions are compared and contrasted thoroughly. Report is well written, organized and draws thoughtful conclusions.

3 = Clear description of statistical question and summary of data collection process. Correct mean, standard deviation, and graph with written descriptions relevant to data. Distributions are compared and contrasted, but the analysis is not thorough and detailed. Report is written in paragraph form, somewhat organized and attempts to draw conclusions.

2.5 = Presentation of statistical question and summary of data collection process. Correct mean, standard deviation, and graph. Some attempt to compare and contrast the distributions. Statistical question is clearly answered.

2 = Presentation of statistical question and summary of data collection process attempted. Mostly correct mean, standard deviation, and graph. Attempt to compare or contrast the distributions. Attempt to answer statistical question.

1 = Incomplete or insufficient description of statistical question and summary of data collection process. Mean, standard deviation, and graph are incorrect. Statistical question is not answered.

Ideas that I would like to explore:

Potential Statistical Questions (highlight the option you decide upon**):

- 1.
- 2.
- 3.

Teacher Initials _____

Collect your data here (you can use another piece of paper and attach if needed):

****Summarize your data collection process** (Who is your population? How did you collect a random sample?) in sentences.

****A description of your data, including a graph, mean, and standard deviation for each group** (you can use another piece of paper and attach if you need more room).

****Full sentences comparing and contrasting** the two distributions. Make sure to compare the shape, center, and spread for each distribution. (You may need to attach an extra paper for room).

Timeline:

<ul style="list-style-type: none"><input type="checkbox"/> You have your topic<input type="checkbox"/> You have your statistical question<input type="checkbox"/> You have two populations to collect your data from<input type="checkbox"/> You collected your data, analyzed data, compared your two populations, and create your project!<input type="checkbox"/> Turn in your completed project!	<p>Date: 9/10-11</p> <p>Date: 9/12-13</p> <p>Date: 9/12-13</p> <p>Date: Week of 9/17</p> <p>Date: 9/24-25</p>
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