

## Taste Test

Objective – Learn principles of experimental design through practice.

Design and implement a taste test that utilizes principles of sampling and experimentation learned in class. Choose materials and procedures that are practical for implementation in the classroom.

1. Before the test: Submit a proposal (Google form) and get teacher approval.
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  - b. Submit a draft of the detailed description and get feedback.
2. During the test: Collect detailed data and note potential issues.
3. After the test: Write a report summarizing your experiment and its results. The report should include the following (send Ms. Jackson an email if you want her to send what you submitted in the Google form):

### Experiment Description

Question you wish to answer

Factors/treatments

Response variable

Design (describe in words)

How you attempted to address the 3 principles (control, replication, randomization)

### Experiment Execution

High-level description of data; include bar chart (attach raw data)

Description of any issues that occurred during the experiment

### Analysis & Summary

Describe results (justify with data)

Describe any potential confounding

Lessons learned - what would you do differently next time?

## Rubric

	Exceeds Expectations	Meets Expectations	Approaching Expectations
Design	-Design includes consideration of potential confounding and other issues	-Design takes 3 principles into consideration -Question of interest is stated and addressed	-Design is missing key components -Design does not answer question of interest
Implementation	-Extra care was taken to implement the design with fidelity	-Students were prepared with materials -Experiment proceeded as planned. Any issues were documented	-Students did not have all materials needed -Subjects were confused about expectations -Did not note issues
Analysis	- Report provides insight into important lessons learned during the process	- Report addresses all elements and provides sufficient justification	- Report is incomplete -Assertions are not supported with data - Raw data not attached

