## . Brainstorm

- Approach Topic Relevant to the CNMI, can be taste test. Choose baking experiment using $100 \%$ Whole wheat flour in cookies.
- WHY? From past responses when baking, put it to the test.
- WHAT? Taste test between two cookies, one made with Whole Wheat Flour, the other made with All Purpose Flour, can tasters tell the difference? HOW will I start? Background information, preparation, methodology
- WHO will I test? Class, Fire Station Personnel, School (if class)? Neighborhood
- How to MEASURE results? surveys, Survey Monkey, Preferences, Questions, Comments
- How to EXPLAIN results? Graphs, summarize
$2^{\text {nd }}$ Research: LITERARY REVIEW, review past taste tests, information on whole grains
- How? Methodology

Taste Test: How many cookies, flavors

- Analysis: Survey, taste, survey, prepare, set date to test, inform participants, explain, Input survey results, analyze results
- Thesis In a taste test using $100 \%$ whole wheat flour and All Purpose Flour, tasters would not be able to detect whole wheat fl.

It is hypothesized that in a taste test incorporating the two flours in a desert such as cookies, participants would have a difficult time determining which flour was used.

## Outline

Taste and Perception of $100 \%$ Whole Wheat Flour vs. All-Purpose Flour *This student researcher hypothesizes that when given two cookies, one prepared with $100 \%$ Whole Wheat Flour and one prepared with AllPurpose Flour, tasters would not be able to identify the cookie Prepared with $100 \%$ Whole Wheat Flour.

## I. Introduction

- Introduce Topic, Why relevant
- Contrast taste and preparation between the two use book and article source
- Introduce Proposal


## II. Background Information

- Discuss how flour is made use sources
- Difference between processing,
- Health benefits from each


## III Research Plan

- What has been done so far,
- What research has been completed,
- What primary research has been started


## IV Literature Review

- Compare and Contrast findings
- Studies and Journal Review
- Review previous taste tests
- Review Whole Grains and Nutrition


## V Research Questions

## VI Methodology

- Preparation
- flavors of cookies, how many to prepare, who to test and why
- Labels, find locations to test
- Surveys: Approved, Distributed,
- Taste Test: 37 local residents. 20 from fire station, 13 from college course, 4 children


## VII Analysis

- Amend survey for children verbally
- Compare answers from survey monkey
- Generate graphs to see differences as a whole
- Look at comments
- Compare survey between largest groups
- Find if hypothesis was proven, was it difficult


## VIII

- Look for patterns in the largest groups
- Look for patterns in comments
- Look at grain preference between the two
- See which group could detect the whole wheat flour more, which group preferred it more
IX Discussion
- Discuss findings,
- How did it compare with literature, perhaps lifestyle is a factor
- Maybe using different recipes
- Problems, questions on survey
- Not enough children in the survey to compare results


## X Conclusion

- Was the hypothesis proven
- What worked
- What didn't work
- What will be done in the future

