

Lab Framework

Text: CORD Applied Math

Unit number and title: Unit 2 "Estimating Answers"

Short Description: Students will use their estimating skills to determine the number of pizzas to order and the cost of said pizzas for a "Passing the WASL" celebration for the entire sophomore class.

Developed by: Barbara Key

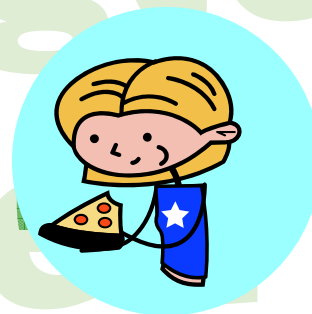
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Lab Title

PIZZA, PIZZA!

LAB PLAN



TEACHER: Teacher Prep/ Lesson Plan

- **Lab Objective:**
To estimate the amount of pizza needed and estimate cost to provide pizza for the sophomore class.
- **Statement of pre-requisite skills needed** (i.e., vocabulary, measurement techniques, formulas, etc.)

Vocabulary: Rough estimate, communication skills

- **Materials List:** Paper, pencil, Lab Data Collection sheet, pizza restaurant order menu, calculator
- **State Standards addressed:**

Math

- 1.1 Understands and uses properties and symbolic representations of real numbers.
- 1.1.6 Apply strategies to compute fluently with rational numbers in...
- 1.1.8 Apply estimation strategies to determine reasonableness...
- 4.1 Gather information.
- 4.2 Organize, represent, and share information.

Reading

- 3.2 Read to perform a task
- 2.2 Apply strategies to comprehend words and ideas.

Writing

- 2.1 Demonstrates understanding of different purposes for writing.

Leadership Skills: Group Skills

- 2.1 The student will communicate, participate, and advocate effectively in pairs, small groups, teams, and large groups in order to reach common goals.

- **SCAN Skills/Workplace Skills**

- Arithmetic

- A. Performs basic computations
 - B. Uses basic numerical concepts such as whole numbers and percentages in practical situations
 - C. Makes reasonable estimates of arithmetic results without a calculator

- Writing

- Records information completely and accurately

- **Set-up information**

- Obtain Pizza business advertising.

- Divide students into groups of 4; group decides the following roles: facilitator, recorder, interviewer, reporter

- Provide total number of sophomore students who passed the WASL

- Brainstorm with students these considerations:

- Portion amount per student (boy vs girl appetites?)

- General student pizza preferences

- Number of slices of pizza per large pizza

- Cost per pizza x number of pizzas

- **Lab organization(-Grouping/leadership opportunities/cooperative learning expectations; -Timeline required)**

- This should require at least one 55 minute class period.

- Groups of 4 students decide the following roles: facilitator, recorder, interviewer, reporter

- **Teacher Assessment of student learning (scoring guide, rubric)**

- Instructor Observation

- Group sharing of their estimations and how they arrived at their decision

- Grading Lab data collection sheets.

- **Summary of learning (to be finished after student completes lab)**

- Discuss real world application of learning

- Group sharing of their estimations and how they arrived at their decision

- **Optional activities**

- (None)

- **Career Applications**

- Food and Beverage Manager.

- Catering business

- Grocery shopper

- Event Planner

LAB TITLE: PIZZA, PIZZA !

STUDENT INSTRUCTIONS:

- **Statement of problem addressed by lab**
Estimate pizza order for the Sophomore student celebration of "Passing the WASL!"
- **Grouping instructions and roles**
Divide into Groups of 4; group decides the following roles: facilitator, recorder, interviewer, reporter
- **Procedures** - steps to follow/instructions
 1. Discuss the following:
 - a) Portion amount per student (boy vs girl appetites?)
 - b) General student pizza preferences
 - c) Number of slices of pizza per large pizza
 - d) Cost per pizza; estimate cost for ____ number of pizzas
 2. Estimate how many pizzas to order, what kind to order, and the total cost.
 3. Complete the Lab Data Collection sheet with all group names affixed.
 4. Be ready to have the reporter present the group's estimations.
- **Outcome instructions**
Create an order list based on your estimations/calculations
- **Assessment instructions** (peer-teacher)
Reporters compare costs with other groups.
Turn in Lab Data Collection sheet with all group names affixed

<https://wa-appliedmath.org/>

Lab Data Collection

Student: _____ Date: _____

Unit: _____

Lab Title: _____

Criteria: Write the problem/objective in statement form

Data Collection: Record the collected/given data

Calculations should be based on 367 students passing the WASL.

The current tax rate is 9.6%

Calculations: Complete the given calculations to solve for an answer(s)

Estimate: how many pieces per large size pizza _____

Estimate: how many pieces each student will eat _____

(Show all work. Attach papers with calculations behind this sheet.)

Kinds of Pizzas and How Many of Each? (Group determination)
(Maximum 3 selections)

_____	_____
_____	_____
_____	_____

Total Number of Pizzas: _____

Estimated Cost of Pizzas: _____

Summary Statement:

Other Assessment(s)

Turn in Lab Data Collection sheets with names of all group members. Attach any additional computation sheets to the back of the Lab Data Collection sheet.

