

Lab Framework

Text: Cord

Unit number and title: Unit 3 / Measuring in English and Metric Units

Short Description: Uses various measuring techniques for length, area, volume and capacity.

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Lab Title

Measure various products using a variety of measuring

LAB PLAN

TEACHER: Teacher Prep/ Lesson Plan

- **Lab Objective**
Students will learn how to use proper measuring devices for various products
- **Statement of pre-requisite skills needed** (i.e., vocabulary, measurement techniques, formulas, etc.)
Vocabulary -
Equipment used in measuring / How to use the various equipment
Understanding of how items are measured, (volume, mass, ect)
Interrupt formulas
- **Vocabulary**
Mass
Volume
Formulas
Conversion factors
- **Materials List**
Spring Mechanism Scales
Balance Scale
Portion scoops
Ladles
Dry measuring cups
Liquid measuring cups
Measuring spoons
- **GLEs (State Standards) addressed**
Math: 1.2.1.9/10 1.2.3.9/10
Reading: (Reading)
Writing: (Writing)
- **Leadership Skills**
N/A
- **SCAN Skills/Workplace Skills**
Kitchen production
- **Set-up information**
Students will review the various measuring devices and how they are used

They will be given a list of products to measure and they will have to record the device used for measurement, then select another measuring device to compare whether they are the same in weight or volume and record the data.

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

In groups of (4-5); students will measure various product using the appropriate measuring device and record their finding. They will then measure the same product using another measuring device to see if the results are the same.
30 - 45 minutes

- **Teacher Assessment of student learning** (scoring guide, rubric)
 - Instructor observation
 - Rubric
- **Summary of learning** (to be finished after student completes lab)
 - discuss real world application of learning from lab
 - opportunity for students to share/present learning
 - Student will discuss how it is important for measuring products using the correct measuring devices
 - Students will discuss how this can effect the production of formulas.
- **Optional activities**
 - Have a student leader work one on one with struggling students
- **Career Applications**
 - Kitchen production, Sous Chef, Executive Chef

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LAB TITLE: Measure various products using a variety of measuring devices

STUDENT INSTRUCTIONS:

- **Statement of problem addressed by lab**
Discover how using proper measuring device can effect the formula production of various products
- **Grouping instructions and roles**
 1. Supplies Clerk: they will gather equipment and food products and return once information is recorded
 2. Weigh: this person will be responsible to measure using proper measuring device
 3. Weigh: this person will be responsible to measure using another measuring device
 4. Recorder: Keeps track of data
- **Procedures – steps to follow/instructions**
 - Weight (4oz.) AP flour using a measuring cup and an ounce scale
Record information
 - Weight (4oz.) Pastry flour using a measuring cup and an ounce scale
Record information
 - Weight (4oz.) Sugar using a measuring cup and an ounce scale
Record information
 - Weight (4oz.) Powered Sugar using a measuring cup and an ounce scale
Record information
 - Weight (4oz.) Water using a measuring cup and an ounce scale
Record information
 - Weight (4oz.) Milk using a measuring cup and an ounce scale
Record information
 - Weight (4oz.) Buttermilk using a measuring cup and an ounce scale
Record information
- **Outcome instructions**
Complete the given data sheet
- **Assessment instructions (peer-teacher)**
 - Teacher observation-
 - Were the instruction followed
 - Did they work together?
 - Did they complete the task?

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Lab Data Collection

Student: _____ Date: _____

Unit: 3

Lab Title: Measure various products using a variety of measuring devices

Criteria: Write the problem/objective in statement form

Data Collection: Record the collected/given data

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

Summary Findings:

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