

Measuring Lab

Summary

The students will learn and observe by preparing a recipe using inaccurate and misunderstood measurements for measuring ingredients for a recipe how confused one can be in preparing a recipe and in the overall evaluation of the finished product. By knowing and understanding the importance of using standardized measuring cups and spoons in measuring ingredients correctly and accurately in a recipe will result in a product turning out correctly and consistently every time it is prepared.

Main Core Tie

Food And Nutrition

[Strand 2 Standard 2](#)

Additional Core Ties

Food And Nutrition

[Strand 2 Standard 3](#)

Time Frame

1 class periods of 90 minutes each

Group Size

Small Groups

Materials

Approximate amounts for the ingredients needed to prepare Crunchy Munchy Chocolate-Peanut

Goop per unit:

1 - 2 tbs. corn syrup

2 tbs. brown sugar

1/4 cup peanut butter

1/2 cup rice cereal

1 cup corn flakes

1/4 cup semi-sweet chips

Handouts:

Lab assignment

How to Measure Correctly

Demonstration:

flour

sugar

brown sugar

shortening

vanilla

salt

baking powder

water

sifter

liquid measuring cup

dry measuring cups

measuring spoons

spoon
metal spatula
rubber spatula

Video:

Measure Up in the Kitchen, by Learning Seed #24100, \$89.00, 18 minutes.

Background for Teachers

A fun lab to illustrate to the students the importance of measuring ingredients for a recipe. The idea originated from a curriculum resource and I adapted it to suit my needs. The students have a lot of fun with this lab.

It is very important to go over your instructions and procedures very carefully to eliminate waste of ingredients. I have tried to identify the rules in my instructions. Only one trip to the Supply Table.

Whatever you take-You eat! No ingredient should be measured in excess of 2 cups!

Have the students prepare the recipe within a timed length of time so it doesn't drag on.

The students will question what the words mean-dribble, scoop, dit-dot, blib, blob, handful, smidgens, ittsy-bits. I tell them I don't know and for them to try to figure it out with an amount. Then to proceed with the preparing of the recipe. If they put an amount with the word, it will make it easier for them.

Many of the students want chocolate so they will put a lot in the recipe and a lot of cereal and then they haven't thought to add enough liquid to balance the dry and the liquid ingredients.

From past experience, whatever they put together turns out okay. I do not know what the actual amounts are suppose to be for each of the ingredients.

Upon completion of the recipe and cleaning up the kitchen, I have the students set their goop aside to eat at the end of class. I label a paper plate with the number of units that I have and I ask the students to bring up one piece of goop for comparison during discussion of lab at the end of the hour.

Hand out "How to Measure Correctly". Read it aloud and then demonstrate in front of the class the proper way of measuring sifted flour, sugar, brown sugar, shortening (by packing it into the measuring cup and the water displacement method), water, salt, vanilla, baking powder, etc.

Depending on the time, show the video on Measuring or for review, call some of the students up and measure for the class the following amounts and ingredients which they have to think through. I generally let them try to do it on their own and then I ask from help from the classmates.

$\frac{7}{8}$ cup sifted flour

5 $\frac{1}{3}$ tbs. brown sugar

$\frac{3}{8}$ cup sugar

$\frac{2}{3}$ cup cold water

$\frac{1}{3}$ cup shortening

Student Prior Knowledge

Knowledge of measuring ingredients for a recipe using standard liquid and dry measuring cups and spoons.

Intended Learning Outcomes

The student will demonstrate consistently proper measuring techniques.

Instructional Procedures

The teacher hands out the lab to prepare Crunchy Munchy Chocolate-Peanut Goop for each group. Read and explain the instructions thoroughly with the class.

On the supply table, place the ingredients that are not in their individual units for the students to come up and measure. Allow the students at least 30 minutes to read and follow the directions in preparing this recipe, clean-up and set their goop aside to be eaten at the end of class. The students should

complete the questions from the back of the lab paper as a group.

Each group should bring up a small piece of goop and place according to unit number on a paper plate for comparison purposes.

Once the class has completed the lab, bring them together to talk about Measuring. Read handout on "How to Measure Correctly" and explain it as you go.

Demonstrate for the class the proper procedures and techniques for measuring flour, sugar, brown sugar, water, shortening, salt, baking powder, vanilla, etc. using standardized liquid and dry measuring cups and spoons.

Go over lab experience.

If extra time, show video, "Measure Up in the Kitchen" or review measuring with the students by calling them up in front of the class to measure an amount with an ingredient.

Leave enough time for eating and final clean-up. Turn in completed papers at the end of the hour.

Authors

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