## Measuring Techniques - Level I

Summary
Recipe use, components, and measuring techniques.

## Main Core Tie

Food And Nutrition
Strand 2 Standard 2

## Background for Teachers

If students can utilize all the components necessary to carrying out a recipe, they will be successful in preparing food using recipes.

Learning to measure accurately will assure success in the preparation of a recipe. All ingredients are not measured the same, i.e. solids vs. liquids, soft vs. granules.
There are different types of measuring utensils and measuring techniques to meet these differences - liquid vs. dry measuring cups.

Flour
level off with straight not the curved edge; there is difference between a spatula and knife sifted - a difference between sifted and non-sifted exists (1/4 cup extra/cup)
Sugar
knife
shaking helps to level the sugar
Brown Sugar packed has more sugar than if it is not packed
Shortening/Peanut Butter
pack, no air
water displacement method
Salt
level with a flat edge
Oil or Shortening
liquid vs. dry measuring cup use
Solid vs. liquid with measuring spoons
Basic abbreviations to include:
$T$ and $1 \mathrm{bsp} .={ }_{\min }=$ minute $\mathrm{doz}=$ dozen
tablespoon
$\mathrm{qt}=$ quart
oz = ounce
gal = gallon
pt $=$ pint
$l b=$ pound $\quad c=$ cup
Two important equivalents to know:
$3 \mathrm{tsp}=1 \mathrm{tbsp}$
4 tbsp = 1/4 cup
A knowledge of cooking terms helps people prepare satisfactory products. When all the necessary parts to reading a recipe are applied in a practical experience, that learning becomes automatic.

## Instructional Procedures

## ACTIVITIES

Distribute recipes which utilize incorrect measurements - CRUNCHY MUNCHY CHOCOLATE-

PEANUT GOOP. Have the kitchen groups follow the directions. After students finish making the product, instruct them to compare each group's product and complete EVALUATION OF CRUNCHY MUNCHY CHOCOLATE-PEANUT GOOP. Finally, carry on a class discussion to summarize findings. Highlight the importance of management and proper measurement. NOTE TO TEACHER: This activity could be done as a demonstration rather than have every unit prepare a recipe. This would save on the budget. Evaluation sheet could be discussed orally. OR
As a pre-test have students do a lab without any instruction or help. Give them any recipe (elephant ears, cinnamon rolls, etc.) and instruct them to prepare it. Do not answer questions - tell students it is a test - and observe how they work. Results should tell you what they know and do not know about using recipes.
The next day demonstrate the same recipe step-by-step. During the demo discuss what they did right and what they did wrong and the need for leaning about recipes.

Students observe a demonstration of chocolate chip cookies for the purpose of learning to measure ingredients accurately. To begin the demonstration, the teacher hands out MEASUREMENTS, EQUIVALENTS AND ADJUSTMENTS and asks:

What is wrong with the recipe in Part A? (no measurements, no temperature, no yield, vague directions)
Explain why measurements are important? (you need to know amounts for proper results) If you had never made chocolate chip cookies could you make them using this recipe?
During the demonstration students take notes in Part B. Teacher continues demonstration while cookies are baking and goes over measurements not used in the preparation of the recipe.
Students could then complete Part C while cookies continue to bake.
SUPPLIES FOR DEMONSTRATION:
2 liquid measuring cups
spatula
set of dry measuring spoons and cups
sifter
knife
bowls
straight spatula
cookie sheet
ingredients for recipe
The teacher could ask for the worksheets to be turned in upon receipt of a cookie.
Students complete MATCH UP THE MEASURING TECHNIQUES!.
Students participate in a lab to practice measuring techniques - GRANDMA J'S OATMEAL
COOKIES. Teacher reminds students of things to be done before starting the lab assignment:
aprons or lab coats, hair tied back
process for getting supplies
time limit
Evaluation of measuring skills and lab performance is done through observation.
The teacher asks what terms are? (words particular to something) An example for students to brainstorm:
Professions:
lawyer = case
doctor =
dentist =
astronaut $=$

$$
\text { chef }=\text { cook }
$$

The teacher places an eclair in front of the class and then passes out the incorrect recipe. The teacher states: Looking at this product I want you to go through the recipe I just gave you and correct the mistakes, if any.
The teacher asks: Could you make this recipe? What is wrong with it? Would your product turn out like this one (refer to the sample)? Is it important to know terms?
Teacher debriefs the ECLAIRS recipe with students.
Pass out COOKING TERMS WORKSHEET or another one that is preferred while stressing the need to know terms. Allow the students time to work on completing the worksheet with the text Food for Today or one that is available.

The teacher states: We are going to put your knowledge of the terms to work. The teacher goes over the terms to be used in preparing an omelet. The teacher asks for 5 students to volunteer to wash hands, put on aprons and put the omelet together. The rest of the students watch and discuss what is happening and apply appropriate terms to the action of the demonstrators.
ITEMS FOR DEMONSTRATION
eggs
cheese
ham
onions
mushrooms
butter
oil
bowls
wire whisk
electric beater
cutting boards (3)
knives
spatula
wooden spoon
grater
salt \& pepper
fry pan (electric)
tooth picks
napkins
recipe
The teacher serves the omelet using toothpicks/napkins.
Students will complete the worksheet using recipe for MEXICAN CORNBREAD and complete MEXICAN CORNBREAD QUIZ. The teacher may opt to use this recipe as a lab experience.

Evaluate students in the following manner:
questions from students
lab sheets
worksheets
quizzes and tests given during the unit

## Authors

## Utah LessonPlans

