

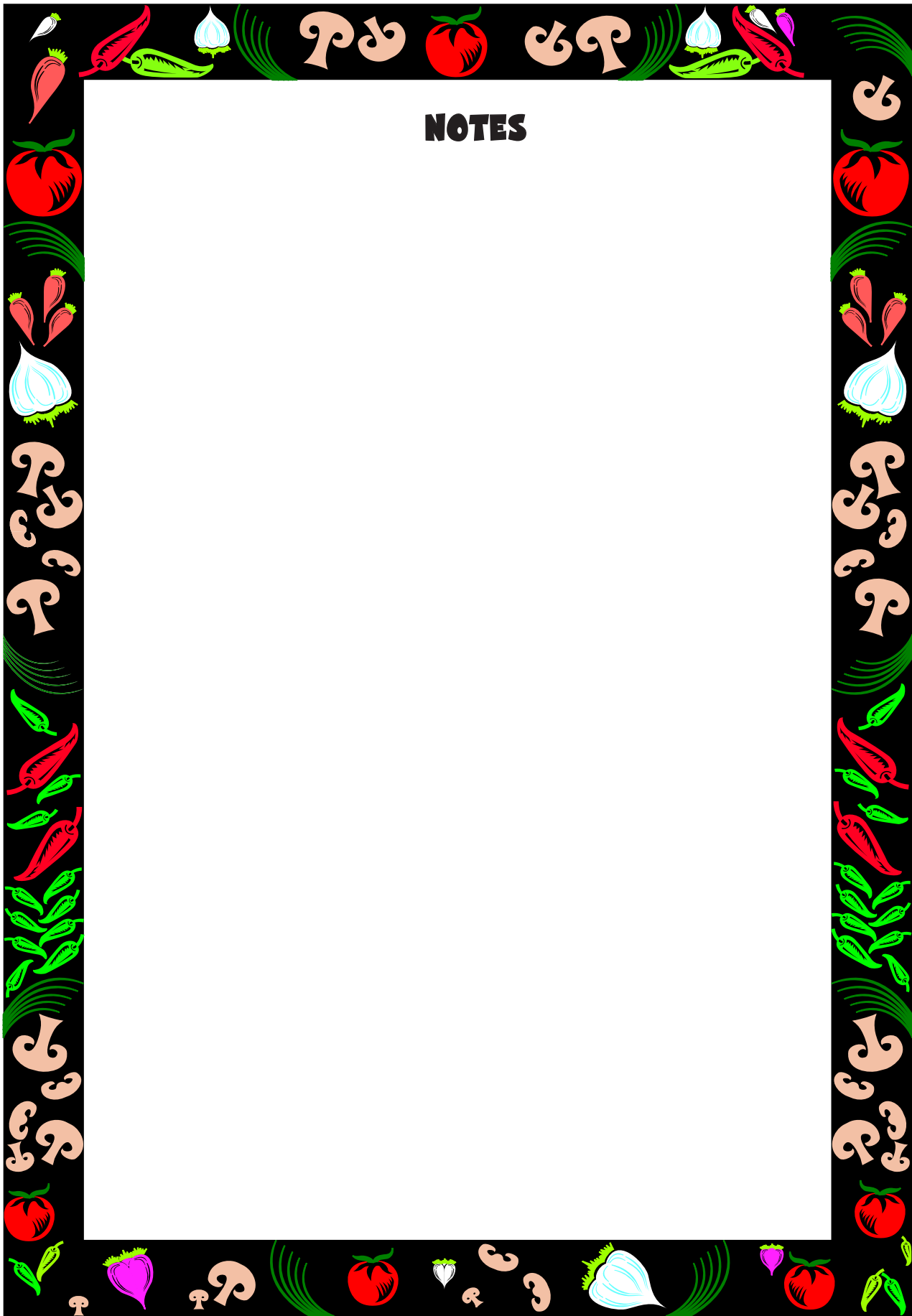


# Section 3

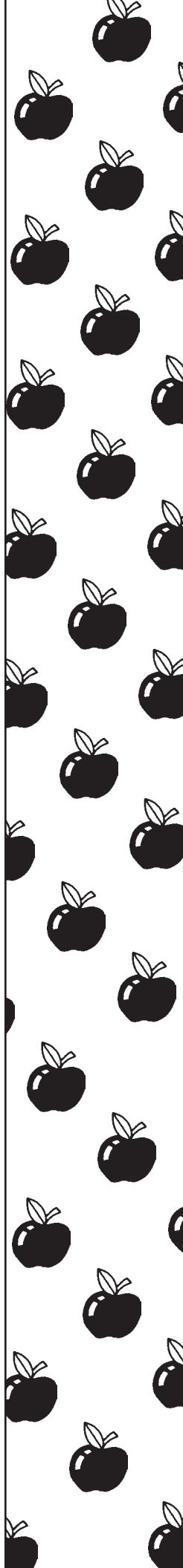
## Developing and Standardizing Recipes

South Dakota Department of Education and Cultural Affairs  
Division of Education Services and Resources  
Child and Adult Nutrition Services

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**NOTES**



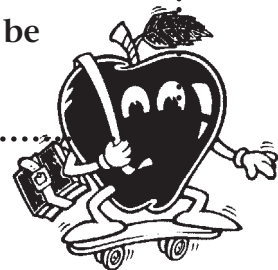


## SECTION 3: DEVELOPING AND STANDARDIZING RECIPES

### Performance Objectives

The participant will demonstrate an understanding of developing and standardizing recipes by:

1. Identifying tested recipes that need to be standardized for your own facility kitchen using the process described.
2. Determining the correct sequence of steps to follow a recipe.
3. Identifying menu items for which a recipe needs to be developed.





## Introduction to Developing and Standardizing Recipes

### Why follow a recipe?

#### 1. Using recipes helps ensure good quality.

The foodservice manager and cooks should follow recipes and package directions in order to prepare quality food products. It is the manager's responsibility to coach and supervise cooks to follow recipes and to hold them accountable for preparing quality products.

A standardized recipe is one that has been tested and adapted for use in a specific kitchen so it will provide the same results every time. By following recipes, cooks know how much will be prepared, how it will look, how it will taste, and how to count the portions toward meal pattern requirements. Package directions on a convenience food are like a recipe and should always be followed.

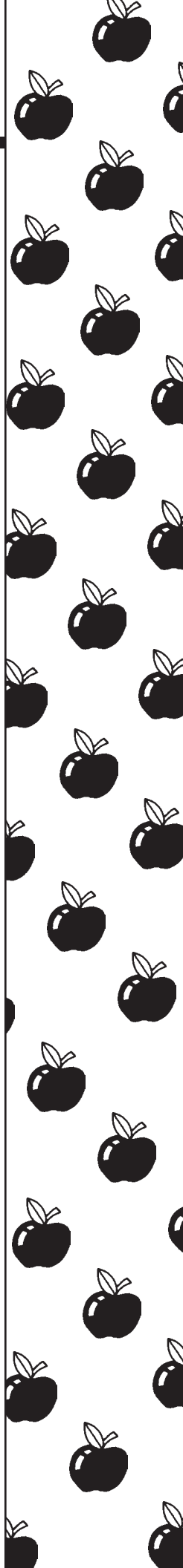
#### 2. Recipes are required for all menu items with two or more ingredients or that require any preparation.

Examples of simple recipes of only two ingredients:

- Steamed vegetables with herbs
- Convenience pizza with extra cheese topping
- Lettuce and tomato salad
- Citrus fruit cup with oranges and pineapple
- Gelatin salad with peach slices

Examples of menu items that require minimal preparation

- Canned peaches that are portioned in cups
- Portioned condiments such as ketchup, mustard, cranberry sauce
- Final cooking of convenience products such as hamburger patties, burritos
- Steaming frozen vegetables



## KEY WORDS

tested  
correct  
preparation, cooking  
crediting  
nutrient analysis  
standardized



A recipe used in a Child Nutrition Program (schools or child care) should

1. Have been \_\_\_\_\_ in the Child Nutrition Program settings where it will be used (schools or child care). All USDA recipes have been tested and standardized in schools or child care settings.
2. Provide \_\_\_\_\_ information on the amount (measure and weight) of each ingredient.
3. Provide instructions on \_\_\_\_\_ and \_\_\_\_\_.  
What are important things you need to know?  
*Example:* Cooking time
4. Provide \_\_\_\_\_ information per portion. If this information is not provided on the recipe, the manager is responsible for analyzing the recipe to determine the crediting information.  
  
*Example:* Each 3/4-cup portion provides 2 oz meat/meat alternate, 1/4-cup fruits/vegetables, and 1 grains/breads.
5. Provide per portion \_\_\_\_\_ of the recipe, if this information is available.
6. Be \_\_\_\_\_ for the specific kitchen where it will be used.



## How to Standardize a Tested Recipe

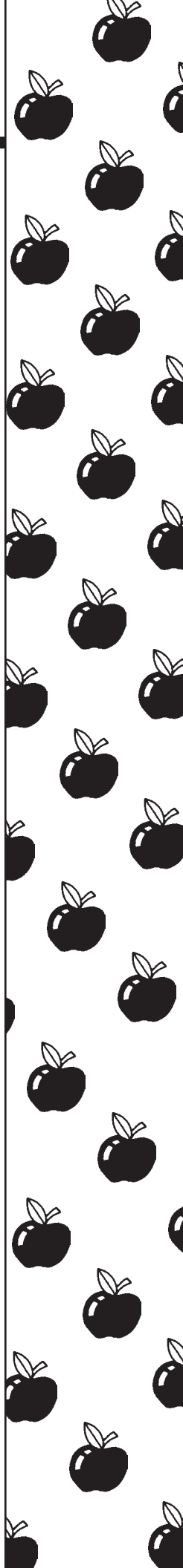
A tested recipe is one that has been developed under “controlled conditions” to ensure the correct proportion of ingredients, the correct procedures for mixing and cooking, and the correct yield using the listed ingredients and procedures. All USDA recipes have been tested in schools or child care centers. Foodservice establishments should use tested recipes and then standardize them for their own facility.

Standardizing recipes means that culinary techniques or methods are tested and adjusted for preparation equipment, time, and temperatures to accommodate the differences in each foodservice facility. Although USDA recipes have been tested and standardized for a typical school setting, there may be differences in your own kitchen that will affect the preparation of the recipe.

Standardizing a recipe does not mean that the proportion of the ingredients or seasonings are changed. To do so would change the nutrient content of a recipe. After you have standardized the recipes for your own school foodservice operation, you can be sure that a good quality product will be prepared each time the recipe is properly followed.

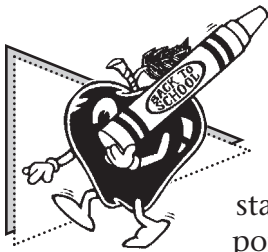
### A Process for Standardizing a Tested Recipe

1. Begin with a tested recipe from a reliable source.
2. Review the ingredients and directions to be sure the recipe can be prepared with the equipment and staff available. Consider the pan sizes and portioning utensil needed.
3. Prepare the recipe for a 25-portion yield. Make sure that ingredients are weighed or measured exactly. Note any problems with preparation.
4. Taste the product and judge it for quality. Consider appearance, taste (flavor), and texture.
5. Taste test the product with a small number of students. Remember that students’ taste preferences may be different than those of the foodservice staff. Offer tastes as a choice on the service line and then ask for feedback, or invite a taste panel to taste and rate the product. Keep in mind that a new menu item may need to be offered several times before it becomes popular with students.



6. If minor recipe changes are necessary, write the changes on the recipe card. If major changes are necessary, retest the recipe. Changes that are sometimes made to standardize a tested recipe include:
  - Changing the pan size
  - Changing the piece of equipment to be used (conventional oven to convection oven)
  - Changing the portion size
  - Changing the cooking time
  - Changing a flavoring ingredient (example: using lemon flavoring in a cake instead of vanilla)
  - Making a small adjustment in an ingredient (example: substituting NFDM (nonfat dry milk) and water for whole milk in a baked item)
7. When the recipe has been finalized and is ready for use, review the recipe with the cook who will be assigned to prepare it.
8. Always taste test each menu item before it is served. Do not serve any food that does not meet quality standards for the type of menu item.

**Remember, the manager is responsible for quality control.**



### **Standardizing a Recipe at Hilltop Elementary School**

The manager plans to include Taco Pie (USDA Recipe D-45) in the next cycle of menus. She has asked the lead cook to standardize the recipe. The cook will prepare the recipe in a 25-portion amount to determine if there are any changes needed. The recipe provides the time and temperature for baking the Taco Pie in a convection oven for 20 minutes at 325 degrees F. The school has only the conventional oven in a stove. How will the cook standardize the recipe?

## Steps to Follow a Recipe

1. Read the whole recipe or package instructions
2. Assemble the ingredients
3. Gather all the equipment needed
4. Weigh or measure the ingredients
5. Prepare the recipe using directions
6. Use portion control to serve the right amount

### Step 1: Read the Whole Recipe or Package Directions

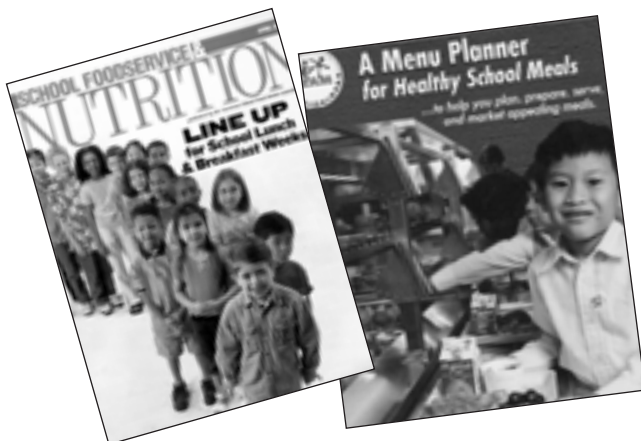
A standardized recipe has been tried, adapted, and retried several times. When it is properly prepared, you can count on a quality product in the amount stated on the recipe.

**School Recipes:** Every school has several good sources of tested recipes. The USDA has developed recipes for preparation of school lunches, breakfasts, and snacks. The recipes from the following sources have been tested and standardized for use in schools or child care centers.

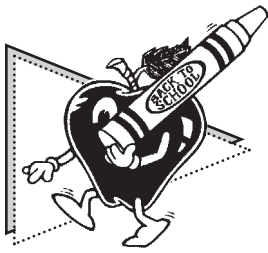
1. USDA Quantity Recipes for School Meals (1988)
2. A Tool Kit for Healthy School Meals: Recipes and Training Materials (1995)
3. American School Food Service Association (ASFSA) School Food and Nutrition monthly periodical
4. USDA Web Site - Healthy School Meals Resource System: Recipes and Menus  
[www.schoolmeals.nal.usda.gov/Recipes/index.html](http://www.schoolmeals.nal.usda.gov/Recipes/index.html)  
(Accessed May 30, 2002)

These tested recipes as well as any other recipes should be standardized for your school kitchen using the process described on pages 4 and 5.

*With training, cooks can learn to standardize recipes from other sources.*







**Directions:** Read the whole recipe before you begin preparing the food. Read USDA recipe D-35 Spaghetti and Meat Sauce on pages 8 and 9. On the recipe, circle the parts listed below.



## Circle on the recipe

Ingredient list

Weight and measure for 50 servings and 100 servings

Yield in gallons

Serving size

How to count (credit) the serving toward meal requirements

## Step 2: Assemble the Ingredients

What are the ingredients needed from the storeroom?

What are the ingredients needed from the refrigerator?

What are the ingredients needed from the freezer?

## Step 3: Gather All the Equipment Needed

What small equipment is needed to prepare the recipe for Spaghetti and Meat Sauce?

What small equipment is needed to serve the Spaghetti and Meat Sauce?

What are the pieces of large equipment that would be used to prepare the Spaghetti and Meat Sauce?



# Spaghetti and Meat Sauce

## Main Dishes D-35

### Meat-Vegetable-Bread Alternate

Ingredients	50 Servings		100 Servings		For _____ Servings	Directions
	Weight	Measure	Weight	Measure		
Raw ground beef (no more than 24% fat)	8 lb 10 oz.		17 lb 4 oz.			1. Brown ground beef. Drain. Add onions and garlic powder. Cook for 5 minutes.
Dehydrated onions	6 oz.	1 3/4 cup.	12 oz.	3 1/2 cups.		
<b>OR</b>						
*Fresh onions, chopped	3 lb	2 qt.	6 lb	1 gal.		2. Add pepper, canned tomatoes, tomato paste, water, and seasonings. Simmer about 1 hour.
Garlic powder		1 Tbsp 1 1/2 tsp		3 Tbsp		
Black pepper		1 1/2 tsp		1 Tbsp		
Canned tomatoes, with liquid, chopped	4 lb 4 oz.	2/3 No. 10 can	8 lb 8 oz.	1 1/2 No. 10 cans		
Tomato paste	1 lb 12 oz.	1/4 No. 10 can	3 lb 8 oz.	1/2 No. 10 can		
Water		1 1/2 qt.		3 qt.		
†Seasonings						
Flaked basil		3 Tbsp 2 tsp		1/4 cup 3 Tbsp		
Flaked oregano		3 Tbsp 2 tsp		1/4 cup 3 Tbsp		
Flaked marjoram		2 Tbsp 2 tsp		1/4 cup 1 Tbsp		
Flaked thyme		1 1/2 tsp		1 Tbsp		
Water		3 gal		6 gal		3. Heat water to rolling boil. Add salt.
Salt		1 Tbsp		2 Tbsp		
Spaghetti, broken into thirds	3 lb 1 oz.		6 lb 2 oz.			4. Slowly add spaghetti. Stir constantly, until water boils again. Cook 10-12 minutes or until tender; stir occasionally. DO NOT OVERCOOK. Drain well.
						5. Stir into meat sauce.
						6. Pour into serving pans.
						7. Portion 3/4 cup per serving.

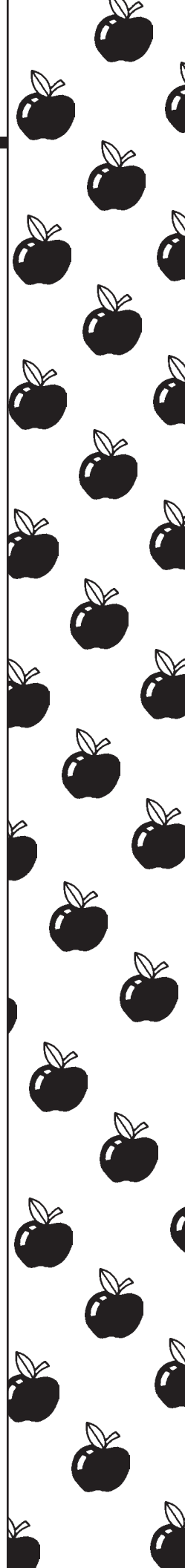
**YIELD:** 50 servings: about 2 3/4 gallons  
100 servings: about 5 gallons

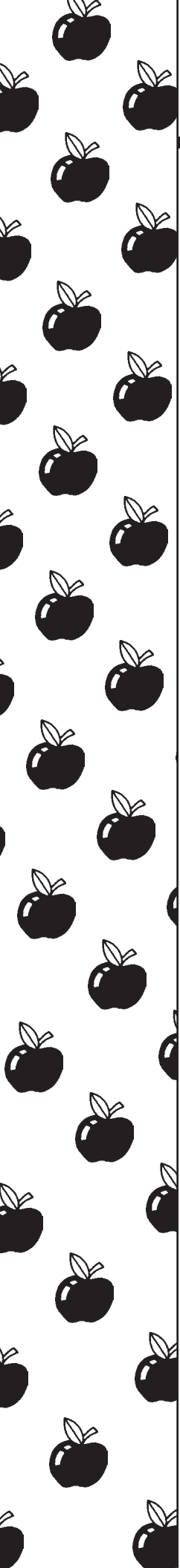
**SERVING:** 3/4 cup provides 2 ounces of cooked lean meat, 3/8 cup of vegetable, and 1 serving of bread alternate.

\*See marketing guide on back.

†Italian Seasoning Mix (see G-1, Sauces, Gravies, and Seasoning Mixes) may be used to replace these ingredients. For 50 servings, use 1/2 cup 2 Tbsp Italian Seasoning Mix. For 100 servings, use 1/4 cups Italian Seasoning Mix.

(Continued on back)





Main Dishes D-35

## Spaghetti and Meat Sauce (Continued)

### Variation

**a. Spaghetti and Meat Sauce (Ground Beef and Ground Pork)**

**50 servings:** In step 1, use 5 lb 10 oz raw ground beef and 3 lb raw ground pork (no more than 24 percent fat). Continue with steps 2-7.

**100 servings:** In step 1, use 11 lb 4 oz raw ground beef and 6 lb raw ground pork (no more than 24 percent fat). Continue with steps 2-7.

### Nutrients Per Serving

Calories	288	Vitamin A	75 RE/628 IU	Iron	3.0 mg
Protein	18 g	Vitamin C	14.0 mg	Calcium	44 mg
Carbohydrate	26 g	Thiamin	0.20 mg	Phosphorus	180 mg
Fat	12 g	Riboflavin	0.24 mg	Potassium	526 mg
Cholesterol	49 mg	Niacin	4.73 mg	Sodium	191 mg

### Marketing Guide for Selected Items

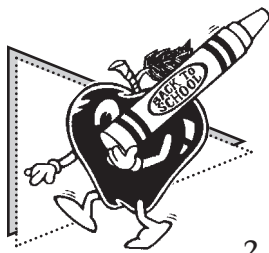
Food as Purchased	For 50-Serving Recipe	For 100-Serving Recipe	For _____ Serving Recipe
Mature onions	3 lb 7 oz	6 lb 14 oz	

**Step 4: Weigh or Measure the Ingredients**

Standardized recipes give both weight and measure for most of the ingredients. Weighing is more accurate than measuring, so weigh whenever you can. For liquid ingredients, use liquid measures.

When measuring an ingredient, use the largest measure. For example, when a recipe calls for  $\frac{3}{4}$  cup, use a cup measure filled to the  $\frac{3}{4}$ -cup mark. Do not use a  $\frac{1}{4}$ -cup measure three times since this triples the possibility for inaccuracy.

**Digital Scale****Stainless Steel Over/Under Scale****Universal Dial Scale**



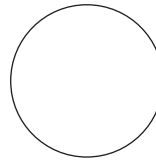
**Directions:** This is a quiz to see how well you follow directions. Read through the entire quiz below before you begin.

1. Write your name in the upper right corner of this page.

2. In the box to the right, spell CAT backward.

3. Write the numbers from 1 to 10 across the bottom of this page.

4. Write 4 Xs in the circle to the right.



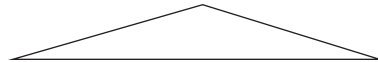
5. Draw a happy face in the upper left corner of this page.

6. Turn this page upside down and write the number "7" in the upper right-hand corner.

7. Write any three-letter word that begins with the letter "b" on this line. \_\_\_\_\_

8. Write the sum of  $2 + 2$  in the box to the right.

9. Write five odd numbers in the triangle below.



10. Draw a rectangle around the word "box" in item number 2 above.

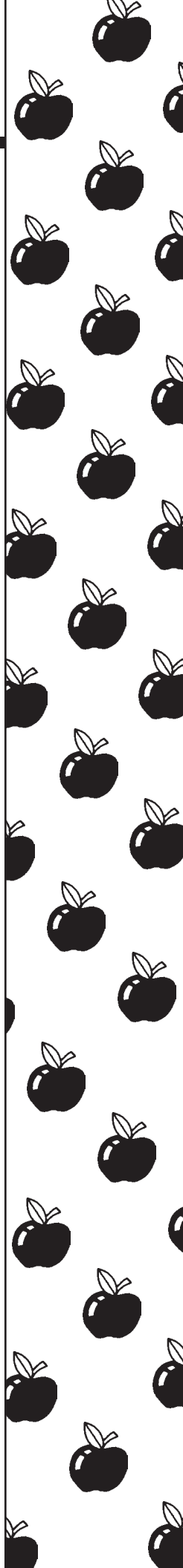
11. Sign your name under the title of this paper.

12. Underline all even numbers on this paper.

13. Multiply  $702 \times 2 =$  \_\_\_\_\_

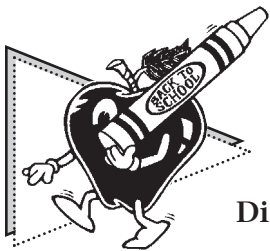
14. Circle the word "triangle" in item number 9 above.

15. Now that you have finished reading the whole page, complete only the activity in item 1 above. Then fold the right-hand side of your paper into the center and wait quietly until the time is up.



### Step 5: Prepare the Recipe Using Directions

Why do people avoid following directions?

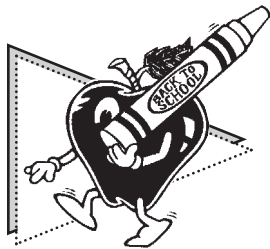


**Directions:** Describe a situation in your kitchen where cooks have problems following directions on a recipe or the package of a convenience food item.

#### Directions on Recipes

#### Package Directions for Convenience Food Items

The directions on a standardized recipe or on the package of a convenience food item have been written by cooking experts to tell you the best way to prepare the recipe. When you **DO NOT** follow the directions, you will produce a poor product. In order to follow directions, cooks need to know the definitions of cooking terms.



**Directions:** Check your knowledge of what some cooking terms mean by matching the cooking term to the definition. Read the cooking term and then find the correct definition. Write the letter of the definition in the space provided beside the cooking term.

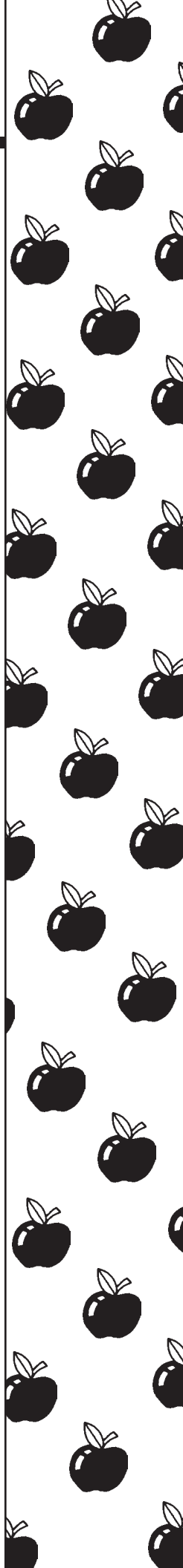
## Cooking Terms

- \_\_\_\_\_ 1. Blending (as in blending the ingredients)
- \_\_\_\_\_ 2. Scaling
- \_\_\_\_\_ 3. Proofing
- \_\_\_\_\_ 4. Sauté
- \_\_\_\_\_ 5. Roux
- \_\_\_\_\_ 6. Slurry
- \_\_\_\_\_ 7. Dice
- \_\_\_\_\_ 8. Julienne
- \_\_\_\_\_ 9. Chop
- \_\_\_\_\_ 10. Whip



## Definitions of Cooking Terms

- A. A dry-heat cooking method where a food is cooked in a hot pan with a small amount of hot fat over high temperature
- B. A method of mixing two or more ingredients so they are evenly distributed using a spoon, spatula, whisk, or paddle attachment for a mixer
- C. To measure ingredients by weighing, usually for baked products; to divide dough or batter into portions by weight
- D. A cooked mixture of equal parts of flour and fat, by weight, used as a thickener for sauces and other dishes. The mixture may be cooked to varying degrees (white, pale blond, or brown) depending on its use.
- E. A mixture of raw starch (flour or cornstarch) and cold liquid used for thickening
- F. The rise given shaped yeast products just before baking
- G. A method of mixing food vigorously to incorporate air, using a whisk or a mixer with a whip attachment (example: beating egg whites for baked meringue)
- H. To cut food into small cubes, from 1/4-inch to 5/8-inch
- I. To cut foods into stick-shaped pieces (about 1/8-inch square by 1-2 inches long)
- J. To cut a food into small pieces, where uniformity of size is not important (example: cut-up onions for a stew)



**Step 6: Use Portion Control to Serve the Right Amount**

Portion control means getting the specified number of servings from a recipe and serving the specified amount of food to meet the meal pattern requirement for the age group. It is a quality practice that ensures the correct quantity is served.

Importance of Portion Control

Why is portion control important?

- To serve the correct portion size to meet USDA meal pattern requirements
- To meet meal requirements for USDA reimbursement
- To provide the planned nutrients for the meal
- To ensure the correct portion yield for the recipe
- To control food costs
- To maintain customer satisfaction

Lack of portion control can be very expensive. Review the examples below.

Menu Item	Serving Size	Food Cost
<b>Example 1</b>		
Taco meat	1/4 cup (served with a No. 16 scoop)	\$.18
Actual serving size	1/3 cup (served with a No. 12 scoop)	\$.24

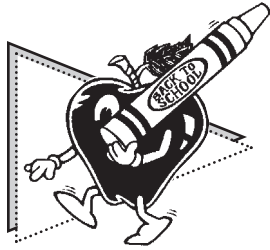
Increased food cost per portion = \$.06  
 500 students served = \$30.00 over planned cost of meat/meat alternate for this menu item

<b>Example 2</b>		
Tuna salad	1/2 cup (served with a No. 8 scoop for 2 oz)	\$.35
Actual serving size	3/4 cup (served with a spoon, not measured)	\$.51

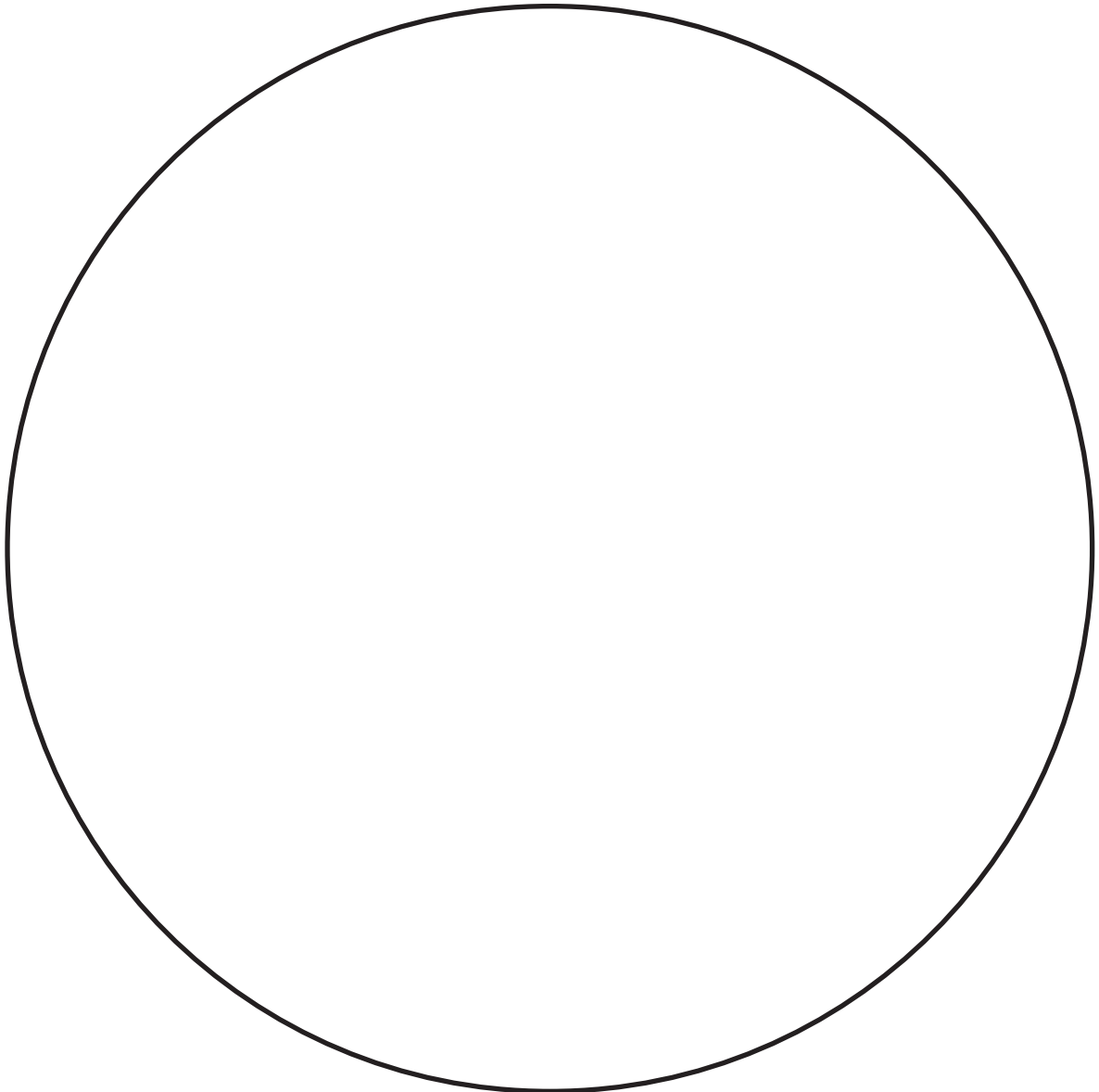
Increased food cost per portion = \$.16  
 500 students served = \$80.00 over planned cost of meat/meat alternate for this menu item

If this kind of mistake were made for just one menu item each school day, the cost to the School Nutrition Program for one school year would be \$5,400 (taco meat example) and \$14,400 (tuna example). Imagine the potential cost increase if portion control was not practiced in a school kitchen.





**Directions:** This is an activity that will make you think about portion control. Even though you see only the top of this cake, it actually has a top, bottom, and sides. Divide the cake into 14 pieces using only 4 straight lines.



## Portion Control Methods

### 1. Cutting

- Useful for foods such as lasagna, pizza, meat loaf, cornbread, fruit gelatin, sheet cake, and brownies
- Divides food into equal servings
- Usually cutting is done before food is placed on the service line
- Sometimes food is cut before cooking, such as biscuits and rolls
- Use the pan size specified in the recipe and cut according to recipe directions
- The eye can most easily measure a distance in half. Therefore, when cutting a pan, cut in half, then half again, and so on to equal the portion size specified in the recipe.

### 2. Counting

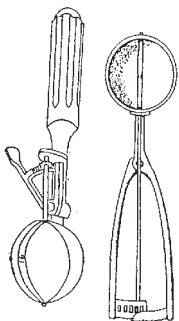
- Useful for foods such as pieces of chicken, patties, nuggets, fish sticks, fresh fruits, vegetable sticks, crackers, and cookies
- CN labeled main dish items specify the count to equal the minimum portion size for a meal pattern component (example: four chicken nuggets provide 2 ounces meat/meat alternate)

### 3. Weighing

Useful for foods such as meat and cheese for sandwiches, school-made bread  
Weigh using a portion scale

### 4. Measuring

- Useful for mixed dishes, sandwich fillings, cobblers, and pre-portioning before cooking such items as meatballs, muffins, and cookies
- Use the right utensil for the item and the portion size



#### *Scoops*

Scoops come in many different sizes and have a variety of uses. Scoops come in sizes from No. 6 (2/3 cup) to No. 100 (approximately 2 teaspoons). When a scoop is filled to level, the portion is exact every time.

The scoop size is imprinted on the metal strip, called the vein, that moves across the bowl of the scoop. Some manufacturers also color code the handle to indicate the scoop size.

The number of a scoop (on the vein) means the number of scoops in a \_\_\_\_\_.

How does the number tell you the scoop size?

Divide the number (size) of the scoop into \_\_\_\_\_ fluid ounces. Then convert the fluid ounces in one scoop to the nearest practical measure (teaspoons, tablespoons, or cup measure).

1 fluid ounce =	1/8 cup (2 tablespoons)
2 fluid ounces =	1/4 cup
2.667 fluid ounces =	1/3 cup
3.1 fluid ounces =	3/8 cup
4 fluid ounces =	1/2 cup
5.334 fluid ounces =	2/3 cup
6 fluid ounces =	3/4 cup
8 fluid ounces =	1 cup

See Table 12, page I-42, for "A Guide to Volume Equivalents for Liquids" *Food Buying Guide for Child Nutrition Programs*, Revised November 2001.

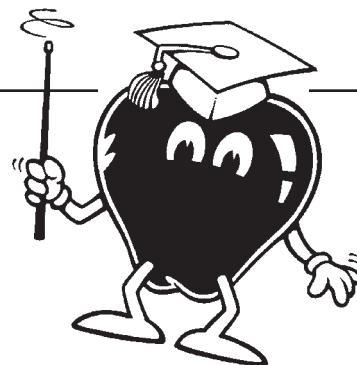
*Example:*

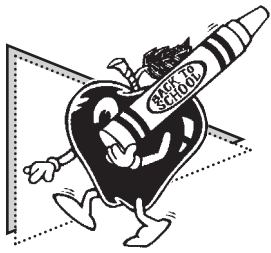
What measure is a No. 24 scoop?

**Step 1:** 32 fluid ounces  $\div$  24 = 1.333 fluid ounces

**Step 2:** 1 fluid ounce = 2 tablespoons (or 6 teaspoons)

**Step 3:** 1.333 fluid ounces = 2 tablespoons + 2 teaspoons is the nearest practical measure (the measure for a No. 24 scoop)





**Directions:** Write the measure beside the scoop number. Write an example of when this scoop size could be used.

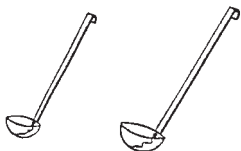
Scoop Number (size)	Approximate Scoop Measure	Example of Use
No. 100	2 teaspoons	Portion cookies
No. 30	_____	_____
No. 16	_____	_____
No. 12	_____	_____
No. 10	_____	_____
No. 8	_____	_____
No. 6	_____	_____

See Table 13, page I-43, for “Sizes and Capacity for Scoops (Dishers)” *Food Buying Guide for Child Nutrition Programs*, Revised November 2001.

**Spoodles**

A spoodle is a portion control tool that is a combination of a spoon and ladle. A spoon alone is not a portion control tool because the amount served is variable. A spoodle may be solid or slotted. Spoodles come in sizes for 2 fluid ounces up to 8 fluid ounces. The size is usually shown on the handle.

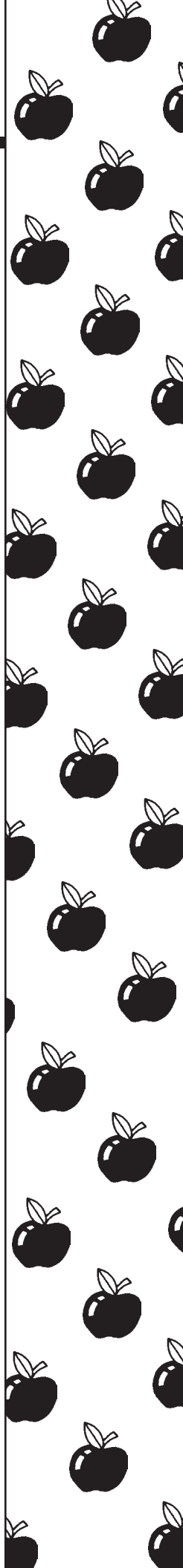
Use a spoodle to serve \_\_\_\_\_

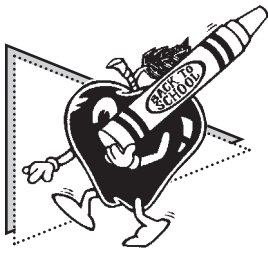


**Ladles**

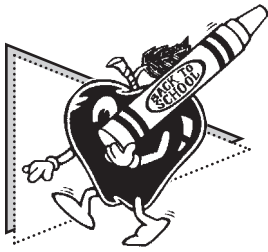
Ladles measure from 1 fluid ounce (2 tablespoons) up to 8 fluid ounces. The size is shown on the handle.

Use a ladle to serve \_\_\_\_\_





**Directions:** Circle on the Spaghetti and Meat Sauce recipe where the serving size or portion is shown (see recipe on pages 8 and 9). How should this menu item be portioned?



**Directions:** Read the situation and then determine which “steps to follow a recipe” were probably not followed and caused the problem described. Be ready to explain what should have been done and what the manager can do to correct the problem.

## Steps to Follow a Recipe

1. Read the whole recipe or package instructions
2. Assemble the ingredients
3. Gather all the equipment needed
4. Weigh or measure the ingredients
5. Prepare the recipe using directions
6. Use portion control to serve the right amount

1. The manager has been called to the service line because of a problem. The last group of students is soon to come through the service line and one of the main dish choices has run out. The manager had carefully calculated the amount that was needed and she knows that there should have been enough of the barbecued beef for the sandwiches. The cash register shows that only 120 students have chosen Barbecue Beef on a Bun and the manager knows there should have been enough for 200 sandwiches.

What step was probably not followed?

How could this have happened?

What can the manager do now?

- The manager has a taste test of every menu item each day before the service line opens. She has just tasted Spaghetti and Meat Sauce. Although the taste is acceptable, the layer of cooked spaghetti at the bottom of the steam table pan is almost solid. The spaghetti appears to be overcooked.

What step was probably not followed?

How could this have happened?

What can the manager do now?



## How to Develop a Recipe

All schools are required to have a recipe for menu items that include two or more ingredients or require any preparation. Written recipes are required to provide the necessary information for nutrient analysis of menus. List some menu items below that are prepared in your kitchen without recipes.

*Examples:* Tossed salad, fruit cup, chef salad, sub sandwich, ham and cheese sandwich

**Menu items prepared without a recipe:**



**Have a written recipe for all menu items that**

- **Include two or more ingredients**
- **Require any preparation**

Whenever possible, use tested recipes because they include necessary information and have been developed by food experts. If you need to develop recipes, follow the steps provided on the next page. An example of a school-developed recipe is shown below.

### STANDARDIZED RECIPE FORM

\_\_\_\_\_  
Your School USA  
(School Name)

Recipe Title: Tossed Salad      Recipe Number: V-1      Source: Another School USA  
 Serving Size: 1 cup      Portion Utensil: tongs      Contribution per serving: M/MA \_\_\_\_\_ (oz)  
 Total Yield: 100 cups      (loaves, buns, cups, gallons, etc.)      F/V 1 c (cup)  
 G/B \_\_\_\_\_ (svg)

Ingredients	<u>100</u> Servings		____ Servings		Preparation Instructions
	Weight	Measure	Weight	Measure	
Iceberg lettuce, shredded	10.5 lb				Ready to use
Carrots, fresh, raw, without tops	3.25 lb				Clean carrots, shred
Red cabbage, raw, shredded	2.25 lb				Ready to use
					Mix altogether. Cover and refrigerate until ready to serve.

**Special Instructions:** Prepare on the day for planned serving. Keep refrigerated at 40°F.



## HOW TO DEVELOP A RECIPE FOR A MENU ITEM

1. Identify the cook who prepares the menu item for which a recipe is needed. Work together to record the recipe, evaluate it for quality, and standardize it for your school kitchen.
2. Use a USDA standardized recipe as a pattern. If you can find a recipe similar to the one you need to record, refer to it also.
3. Record the following information on the recipe form on page 23. Write in pencil so you can change information as needed.

**RECIPE TITLE and SOURCE:** Name of food and where the recipe was obtained. If it was developed in your kitchen, write the name of your facility as the source and also record the date.

**CREDIT PER SERVING:** When using Food-Based Menus, analyze the recipe to determine how to credit each portion to meet meal pattern component requirements.

**SERVING SIZE:** Serving size for one portion (if the portion size varies for different age groups, record the serving size for each age group).

**YIELD:** Number of portions or total yield (in volume measure or weight).

**INGREDIENTS:** Name and description of each ingredient. List the ingredients in the order in which they are used in the recipe.

**QUANTITY:** Weight or measure of each ingredient. Use the nearest practical measure and provide weight in pounds and ounces.

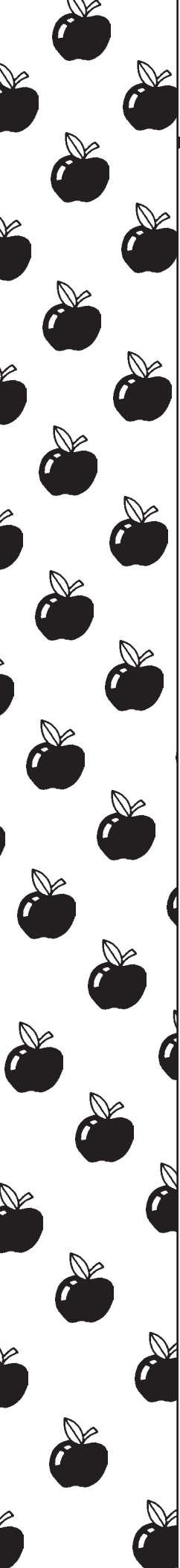
**DIRECTIONS:** Directions for combining ingredients. Group the ingredients and provide directions for the group.

- Directions for scaling (amount per pan and pan size)
- Directions for baking/cooking
- Directions for serving (portion control tool to use, garnish)

**SPECIAL INFORMATION:** Any special information that is necessary to ensure a quality product.

4. Confirm the accuracy of the written recipe by having a cook who has not recently prepared the product prepare it exactly according to the recipe. Evaluate the food product according to appearance, flavor (taste), and texture. Record your comments on the recipe card if improvements are needed.
5. If any changes are necessary, write the changes on the recipe.
6. Review the new recipe with the cooks and emphasize the importance of preparing the food product from the recipe, exactly as it is written. Store the recipe where it is easily accessible.

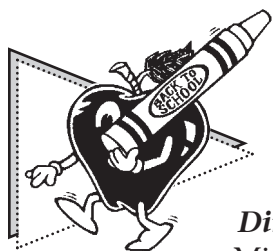




Recipe Title: \_\_\_\_\_ Recipe Number: \_\_\_\_\_ Source: \_\_\_\_\_  
 Serving Size: \_\_\_\_\_ Portion Utensil: \_\_\_\_\_ Contribution per serving: M/MA \_\_\_\_\_ (oz)  
 Total Yield: \_\_\_\_\_ (loaves, buns, cups, gallons, etc.) F/V \_\_\_\_\_ (cup)  
 G/B \_\_\_\_\_ (svg)

Ingredients	_____ Servings		_____ Servings		Preparation Instructions
	Weight	Measure	Weight	Measure	

**Special Instructions:**



## ACTIVITY

### DEVELOP A RECIPE FOR ITALIAN MIXED VEGETABLES

**Directions:** Use the information below to write a recipe for Italian Mixed Vegetables (green peas, carrots, green beans, corn, lima beans). Use the form on page 25.

#### Recipe for Mixed Vegetables (source Hilltop High School Foodservice)

**Ingredients for 50 servings:** frozen mixed vegetables (12 pounds 5 ounces); dried Italian herb mixture (2 T)

**Directions:**

**Steaming:**

Place frozen vegetables in a solid steam table pan (12" X 20" X 2-1/2"). Pour Italian herb mixture over the vegetables and stir. Steam 3-4 minutes.

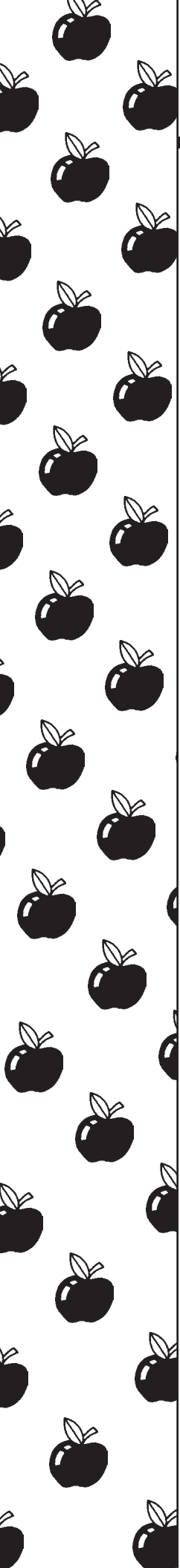
Serve immediately or cover with plastic wrap and place in warmer until ready for service.

Portion 1/2 cup with a perforated 4-ounce spoodle or No. 8 scoop.

**Yield:** 50 servings is 1 steam table pan (12" X 20" X 2 1/2")

*One serving provides 1/2-cup fruit/vegetable*





Recipe Title: \_\_\_\_\_ Recipe Number: \_\_\_\_\_ Source: \_\_\_\_\_  
 Serving Size: \_\_\_\_\_ Portion Utensil: \_\_\_\_\_ Contribution per serving: M/MA \_\_\_\_\_ (oz)  
 Total Yield: \_\_\_\_\_ (loaves, buns, cups, gallons, etc.) F/V \_\_\_\_\_ (cup)  
 G/B \_\_\_\_\_ (svg)

Ingredients	_____ Servings		Preparation Instructions
	Weight	Measure	

**Special Instructions:**

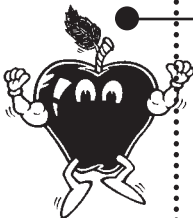
## Action Plan to Develop and Standardize Recipes

Name \_\_\_\_\_ Facility \_\_\_\_\_

### Performance Objectives

The participant will demonstrate an understanding of developing and standardizing recipes by:

1. Identifying tested recipes that need to be standardized for your own facility kitchen using the process described.
2. Determining the correct sequence of steps to follow a recipe.
3. Identifying menu items for which a recipe needs to be developed.



**Directions:** Write your plans for using your new knowledge and skills in the spaces provided.

1. List three tested recipes currently used in your kitchen that you plan to standardize. See pages 4 to 5 on for "How to Standardize a Tested Recipe."

Recipe name \_\_\_\_\_

Recipe name \_\_\_\_\_

Recipe name \_\_\_\_\_

2. The steps to follow a recipe are listed below in a random sequence. Write the number of the correct sequence in the space provided.

\_\_\_\_\_ Use portion control to serve the right amount

\_\_\_\_\_ Assemble the ingredients

\_\_\_\_\_ Gather all the equipment needed

\_\_\_\_\_ Weigh or measure the ingredients

\_\_\_\_\_ Read the whole recipe or package instructions

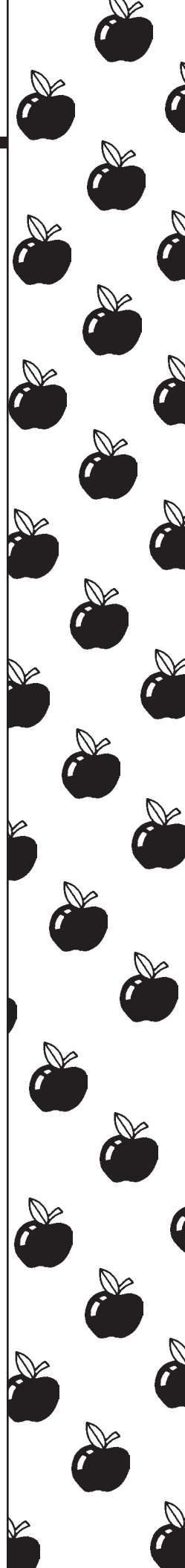
\_\_\_\_\_ Prepare the recipe using directions

3. Using your answer on page 21, select three menu items for which you will develop a recipe. Remember that a written recipe is needed for all menu items that include two or more ingredients or require any preparation.

Recipe name \_\_\_\_\_

Recipe name \_\_\_\_\_

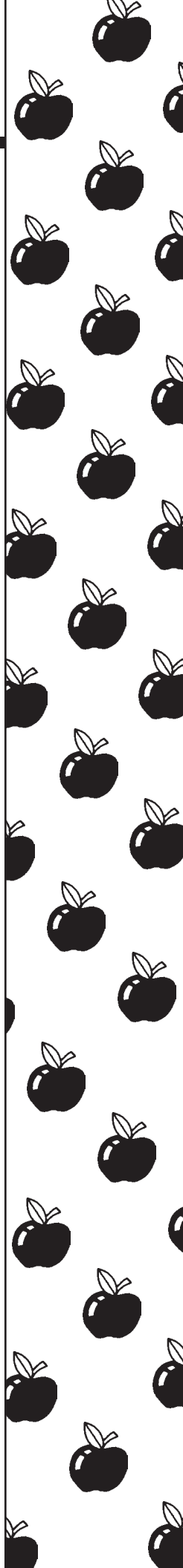
Recipe name \_\_\_\_\_



**Table 12**  
**A Guide to Volume Equivalents for Liquids**

1 tablespoon	= 3 teaspoons	= 0.5 fluid ounces
1/8 cup	= 2 tablespoons	= 1 fluid ounce
1/4 cup	= 4 tablespoons	= 2 fluid ounces
1/3 cup	= 5-1/3 tablespoons	= 2.65 fluid ounces
3/8 cup	= 6 tablespoons	= 3 fluid ounces
1/2 cup	= 8 tablespoons	= 4 fluid ounces
5/8 cup	= 10 tablespoons	= 5 fluid ounces
2/3 cup	= 10-2/3 tablespoons	= 5.3 fluid ounces
3/4 cup	= 12 tablespoons	= 6 fluid ounces
7/8 cup	= 14 tablespoons	= 7 fluid ounces
1 cup	= 16 tablespoons	= 8 fluid ounces
1/2 pint	= 1 cup	= 8 fluid ounces
1 pint	= 2 cups	= 16 fluid ounces
1 quart	= 2 pints	= 32 fluid ounces
1 gallon	= 4 quarts	= 128 fluid ounces
1 peck	= 8 quarts (dry)	
1 bushel	= 4 pecks	

**SOURCE:** *Food Buying Guide for Child Nutrition Programs*, revised November 2001.



Careful portioning is an important part of any food service operation. It helps to ensure that each serving will be the appropriate size and that a recipe will produce the expected yield (see page I-3 for definitions of yield).

Scoops or dishers, ladles, and measuring-serving spoons of standard sizes are fairly dependable measures for portioning by volume and serving food quickly. Below is portion information on each. Remember, whichever measuring utensil you choose, it must be filled level with the top to maintain equal portioning for each measure.

■ Scoops, Dishers, or Dippers

Scoops (sometimes called dishers or dippers) are useful for portioning specific volumes of foods such as drop cookies, muffins, meat patties, and some vegetables and salads.



The number on the scoop tells you how many scoopfuls make 1 quart (946 milliliters). The higher the number the smaller the scoop. For example, a Number 24 scoop is smaller than a Number 6 scoop, because it takes more scoopfuls to make 1 quart.

Table 13 (below) shows the approximate measure of each scoop or disher in cups, tablespoons, and teaspoons. (Remember, the same volume of different foods will not all weigh the same. If you want to measure by weight, use a scale.)

**Table 13**  
**Sizes and Capacities of Scoops (Dishers)**

Number On Scoop (Disher)	Level Measure
6	2/3 cup
8	1/2 cup
10	3/8 cup
12	1/3 cup
16	1/4 cup
20	3-1/3 tablespoons
24	2-2/3 tablespoons
30	2 tablespoons
40	1-2/3 tablespoons
50	3-3/4 teaspoons
60	3-1/4 teaspoons
70	2-3/4 teaspoons
100	2 teaspoons

SOURCE: Food Buying Guide for Child Nutrition Programs, revised November 2001.