

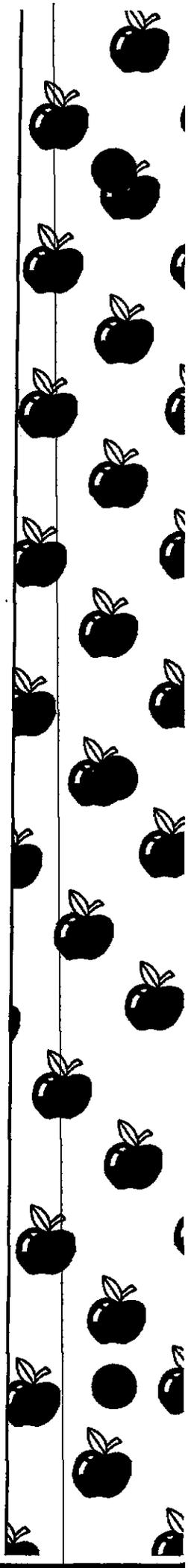
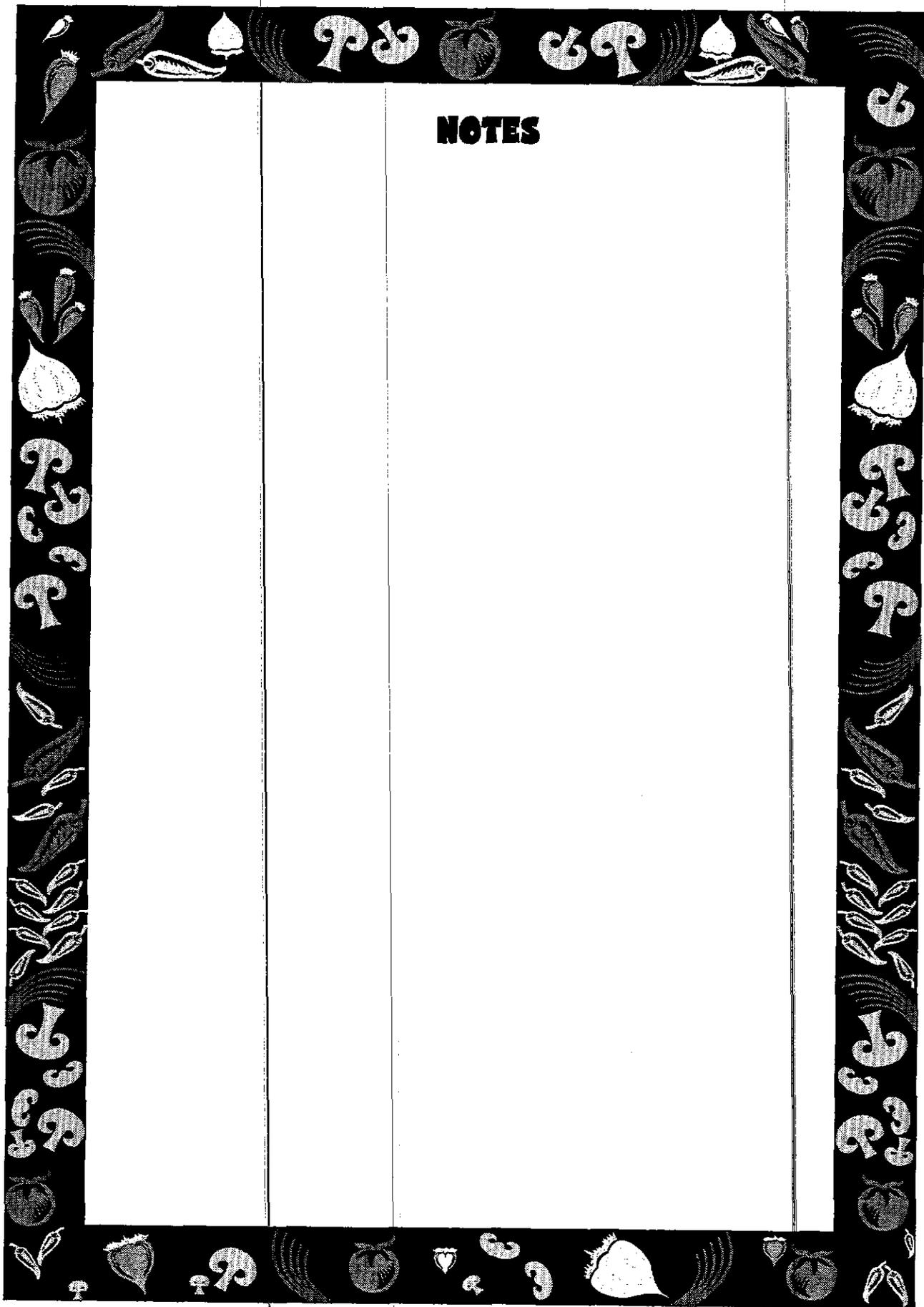
Section 4

Recipe Analysis – Contributions of Ingredients to Component Requirements

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

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NOTES

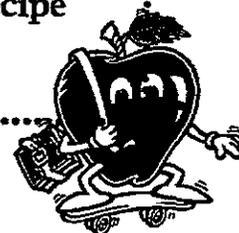




SECTION 4: RECIPE ANALYSIS: CONTRIBUTIONS OF INGREDIENTS TO COMPONENT REQUIREMENTS

Performance Objectives

The participant will demonstrate an understanding of recipe analysis by using the Recipe Analysis Worksheet for determining the component contributions.



Introduction to Recipe Analysis

USDA has provided Child Nutrition Programs with tested and standardized recipes.

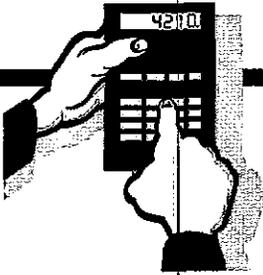
1. *USDA Quantity Recipes for School Meals* (1988)
2. *A Tool Kit for Healthy School Meals: Recipes and Training Materials* (1995)
3. American School Food Service Association (ASFSA) School Food and Nutrition monthly periodical
4. USDA Web Site - Healthy School Meals Resource System: Recipes and Menus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

These recipes have been developed and tested with the target student customers and provide all the information necessary to be used with Traditional or Enhanced Food-Based Menus. However, some schools and child care facilities use recipes for student-favorite menu items and need to determine the component contribution of each portion. In order to know how to count (or credit) ingredients toward meeting a required component of a Food-Based Menu, the recipe must be analyzed using a form like page 6.

Analyze a recipe for contributions of ingredients to required meal components when

- A major ingredient is changed in a USDA recipe (example: increase the amount of ground beef)
- A new recipe is tested and standardized

In your own words, describe when you would need to analyze a recipe to determine the contribution of ingredients to the component requirements of a Food-Based Menu (Traditional or Enhanced).



Math Reminder

Follow the suggestions below to correctly use a calculator.

1. Be familiar with the symbols used on the keys of a calculator.

- | | |
|--------------------------------|-------------------------------|
| + plus sign | add |
| - minus sign | subtract |
| ÷ division sign | divide |
| X multiplication or times sign | multiply |
| . decimal point | beginning of a decimal number |
| = equal sign | equal to |

2. Enter numbers in your calculator using the correct order.

To multiply (X), enter written numbers and symbols from left to right.

Example: $10 \times 17 = 170$

To change a fraction to a decimal number divide (÷). First, enter the top number of the fraction (numerator) and press the divide sign (÷). Second, enter the bottom number of the fraction (denominator) and press the equal sign (=).

Example: $\frac{10}{17} = 0.58823$

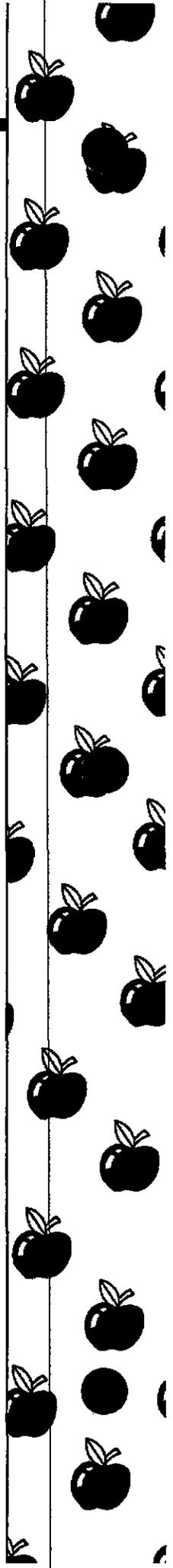
3. Round numbers down when determining contribution (crediting). If your answer includes two or more numbers to the right of the decimal, round down to the second number. Determine the nearest practical amount for rounding down using a practical measure for the component.

Round down after determining the creditable amount of a meal pattern component or an ingredient in a recipe. The reason that you round down is to ensure that each portion served will provide the minimum contribution towards meal pattern requirements.

Meat/Meat Alternate (M/MA) – Round down to the nearest .25 ounce (1/4 oz)
Example: $38.35 \text{ oz.} \div 25 \text{ portions} = 1.53$. Round down to 1.50 oz

Fruits/Vegetables (F/V) – Round down to the nearest 1/8 cup
Example: $34.30 \div 4 = 8.57 \text{ cups} \div 25 \text{ portions} = 0.34 \text{ cups}$.
Round down to 0.25 (or 1/4) cup

Grains/Breads (G/B) – Round down to the nearest 1/4 grains/breads serving
Example: $13.25 \text{ portions} \div 25 \text{ portions} = 0.53$. Round down to 0.50. (1/2 svg.)





Steps for Recipe Analysis to Calculate the Contributions of Ingredients Toward Component Requirements

The following description of steps for recipe analysis is provided in more detail in Appendix A, *Food Buying Guide for Child Nutrition Programs* (Revised November 2001). Follow the steps to complete a Recipe Analysis Worksheet.

Write the Recipe Name and the Portions per Recipe at the top of the Worksheet. Have a copy of the tested recipe for which you need to determine component contributions.

- ▶ **Column 1 – Ingredients.** In the space provided under each component list each ingredient that contributes to that component. List all ingredients that contribute to the meat/meat alternate (M/MA), fruit/vegetable (F/V), and grains/bread (G/B). Provide a complete description of the ingredient (example: spaghetti, dry).
- ▶ **Column 2 – Quantity of Ingredient As Purchased.** Record the “as purchased” weight or volume measure of each ingredient. Convert ounces to their decimal equivalent using the Chart of Decimal Equivalents on page 7. Information is provided in the Food Buying Guide for Child Nutrition Programs (A-2) on how to convert the weight of prepared/ready-to-serve foods to the as purchased weight.
- ▶ **Column 3 – Purchase Unit.** Record the purchase unit in which you buy the ingredient (examples: pound, No. 10 can, dozen, etc.) The same purchase unit must be used in this column as was used on Column 2 (example: Col. 2 pounds and Col. 3 pounds).
- ▶ **Column 4 – Servings per Purchase Unit.** Record the number of servings per purchase unit of the ingredient. This information is found in Column 3 of the Food Buying Guide. Be sure that the form of the food you select from the Food Buying Guide for Child Nutrition Programs is like the food in the recipe after preparation (example: If the recipe specifies raw, sliced carrots as an ingredient and the carrots are cooked in the recipe, use the information from Column 3 in the Food Buying Guide for cooked sliced carrots.)



Grains/Bread Ingredients:

Use the correct serving information based on your recipe.

1. Yield data by number of grains/breads servings for foods such as crackers, taco shells, bread, buns. If the ingredient in your recipe provides yield data by number of servings (example: recipe for 100 hamburgers lists 100 hamburger buns (2 G/B), the purchase unit you need to record in Column 4 of the Worksheet must be the yield data for 1 serving. In the example, the yield data would be 200 G/B.
2. Yield data by volume for foods such as cereal grains, pasta, and rice. The yield data is usually provided in 1/4 cup, 1/2 cup, or 3/4 cup servings. Determine the total number of 1/2-cup servings needed; if you vary portions and some students receive 1/4-cup servings, convert the 1/4 cups to 1/2 cups (divide by 2). See the *Food Buying Guide for Child Nutrition Programs* for more detail when analyzing breakfast recipes (page A-4).

- ▶ **Column 5 – Calculation of meat/meat alternate (M/MA) contribution per serving.** For each M/MA ingredient in the recipe, multiply the number recorded in Col. 2 by the number recorded in Col. 4 and write your answer in Col. 5. Record the answer to two decimal places.

If more than one M/MA ingredient is used in the recipe, add all numbers recorded in Col. 5 to determine the total ounces of M/MA ingredients in the recipe. Record the sum in the space provide for the total.

Divide the total of Col. 5 by the number of portions in the recipe yield to determine the contribution per portion.

Round down to the nearest 1/4 ounce (0.25 oz).

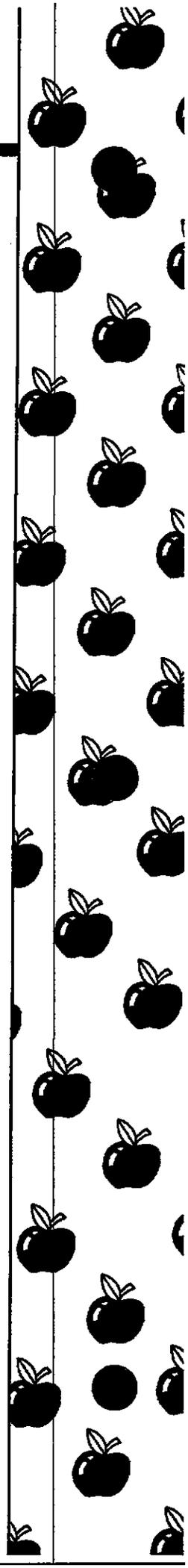
- ▶ **Column 6 – Calculation for the fruit/vegetable (F/V) contribution per serving.** For each F/V ingredient in the recipe, multiply the number recorded in Col. 2 by the number recorded in Col. 4 and write your answer in Col. 6. Record the answer to two decimal places.

If more than one F/V ingredient is used in the recipe, add all numbers recorded in Col. 6 to determine the total number of 1/4 cup F/V servings in the recipe. Record the sum in the space provided for the total.

Divide the total number of 1/4-cup servings by 4 to convert to cups.

Divide the total number of cups by the number of portions the recipe yields to determine the contribution per portion.

Record the answer to two decimal places and convert decimal places to the nearest portion of a cup using the Chart on page 7. Round down to the nearest 1/8 cup since that is the minimum amount that can be counted toward meeting the F/V component requirement.



► **Column 7 – Calculation for the grains/breads (G/B) contribution per serving.** For each G/B ingredient in the recipe, multiply the number recorded in Col. 2 by the number recorded in Col. 4 and write your answer in Col. 7. Record the answer to two decimal places.

If more than one G/B ingredient is used in the recipe, add all numbers recorded in Col. 7 to determine the total number G/B servings in the recipe. Record the sum in the space provide for the total.

Divide the total figure in Col. 7 by the number of portions the recipe yields to determine the contribution per portion.

Round down to the nearest 1/4 G/B serving.

Totals – This row is used to record the totals for the numbers recorded in each component column (Col. 5, 6, and 7).

Portions per Recipe – Record the total number of portions a recipe provides or yields. The same number of portions should be recorded in Col. 5, 6, and 7 (example: 100 portions).

Calculations – Write the numbers you will use to calculate the contribution of each component in the recipe.



.....
← **Always round down after determining the creditable amount of a meal pattern component.** →
.....

Each Portion Contributes: This row provides a space to record the final rounded down, calculated answers of how one portion will credit towards each meal pattern component (M/MA, F/V, G/B).

Page 6 is a blank Recipe Analysis Worksheet for you to copy and use at your school. The same form can be found in the *Food Buying Guide for Child Nutrition Programs* (Revised November 2001), page A-7.



Recipe Analysis Worksheet

Recipe Name: _____

Portions per Recipe: _____

Ingredients (1)	Quantity of Ingredient As Purchased (number of purchase units) (2)	Purchase Unit (3)	Servings per Purchase Unit in <i>Food Buying Guide</i> (4)	Meat/ Meat Alternate (ounces) (2) X (4) = (5)	Fruits/ Vegetables (1/4 cup) (2) X (4) = (6)	Grains/ Breads (Servings) (2) X (4) = (7)
M/MA						
F/V						
G/B						
Totals					(1/4 c)	
Portions per recipe						
Calculations				total divided by number of portions	total divided by 4 (to get units in cups), then divide by number portions	total divided by number portions
This recipe provides _____ portions.		Each Portion Contributes		oz Meat/Meat Alternate	cup(s) Fruits/ Vegetables	servings Grains/ Breads

(page numbers refer to 2001 *Food Buying Guide*)
Notes:

- Oz to lb conversion chart is on page I-36 FBG
- Remember to convert ready-to-use products to their "as purchased" amount
- The values for Col. 5, 6, & 7 are found by multiplying the value of Col. 2 by the value in Col. 4.
- Remember to divide the total 1/4 cup servings of F/V by 4 to get the cups of that component.
- Grains/bread in portions of a cup: convert all needed servings in to the same portion of a cup and use the corresponding yield data or that same size.
- Grains/bread in numbers of servings: use the yield data provided for 1 grains/bread serving.

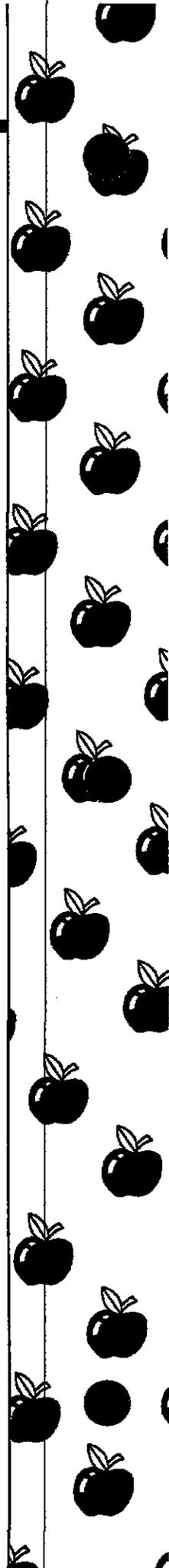


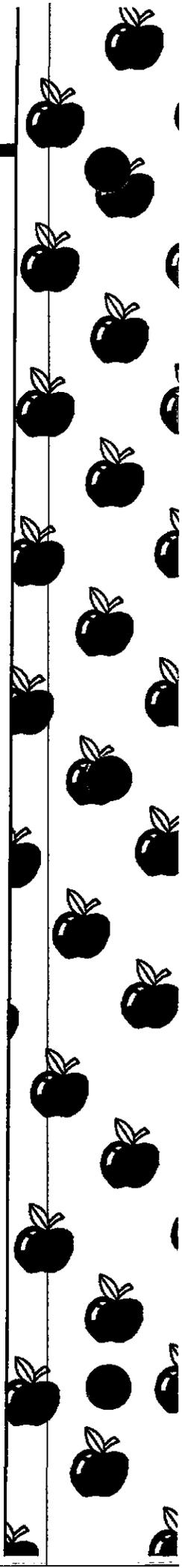
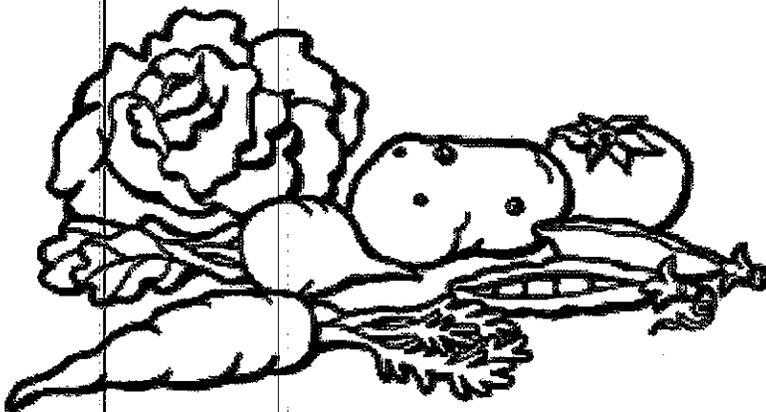
Chart of Decimal Equivalents for Common Measures

<p>Common Fractions to Decimals</p> <p>1/4 = .250 1/3 = .333 3/8 = .375 1/2 = .500 2/3 = .666 3/4 = .750</p>	<p>Teaspoons to Tablespoons</p> <p>1 t = .333 T 2 t = .666 T 3 t = 1.0 T</p>
<p>Ounces (oz) to Pounds (lb) (16 oz = 1 lb)</p> <p>1 oz = .063 lb 2 oz = .125 lb 3 oz = .188 lb 4 oz = .250 lb 5 oz = .313 lb 5 1/3 oz = .333 lb 6 oz = .375 lb 7 oz = .438 lb 8 oz = .500 lb 9 oz = .563 lb 10 oz = .625 lb 10 2/3 oz = .666 lb 11 oz = .688 lb 12 oz = .750 lb 13 oz = .813 lb 14 oz = .875 lb 15 oz = .938 lb 16 oz = 1.000 lb</p>	<p>Cups (c) to Quarts (qt) (4 c = 1 qt)</p> <p>1/4 c = .063 qt 1/2 c = .125 qt 3/4 c = .188 qt 1 c = .250 qt 1 1/4 c = .313 qt 1 1/3 c = .333 qt 1 1/2 c = .375 qt 1 3/4 c = .438 qt 2 c = .500 qt 2 1/4 c = .563 qt 2 1/2 c = .625 qt 2 2/3 c = .666 qt 2 3/4 c = .688 qt 3 c = .750 qt 3 1/4 c = .813 qt 3 1/2 c = .875 qt 3 3/4 c = .938 qt 4 c = 1.000 qt</p>
<p>Tablespoons (T) to Cups (c)</p> <p>1 T = .063 c 1 1/3 T = .083 c 2 T = .125 c 3 T = .188 c 4 T = .250 c 5 T = .313 c 5T 1 t = .333 c 6 T = .375 c 7 T = .438 c 8 T = .500 c 9 T = .563 c 10 T = .625 c 11 T = .688 c 12 T = .750 c 13 T = .813 c 14 T = .875 c 15 T = .938 c 16 T = 1.000 c</p>	<p>Quarts (qt) to Gallons (gal) (16 cups = 4 qt = 1 gal)</p> <p>1 1/4 qt = .313 gal 1 1/3 qt = .333 gal 1 1/2 qt = .375 gal 1 3/4 qt = .438 gal 2 qt = .500 gal 2 1/4 qt = .563 gal 2 1/2 qt = .625 gal 2 2/3 qt = .666 gal 2 3/4 qt = .688 gal 3 qt = .750 gal 3 1/4 qt = .813 gal 3 1/2 q = .875 gal 3 3/4 qt = .938 gal 4 qt = 1.000 gal</p>

Converting Decimal Equivalents to the Nearest Portion of a Cup for Fruits and Vegetables

If the decimal equivalent is:	the recipe contributes:
0.125 - .249	1/8 cup
.250 - .374	1/4 cup
.375 - .499	3/8 cup
.500 - .624	1/2 cup
.625 - .749	5/8 cup
.750 - .874	3/4 cup
.875 - .999	7/8 cup
1.000 - 1.124	1 cup

Table 7. (page I-37, *Food Buying Guide for Child Nutrition Programs* (Revised November 2001))





Recipe Analysis Worksheet EXAMPLE

Recipe Name: Spaghetti and Meat Sauce Portions per Recipe: 100
(Modified USDA Recipe #D-35)

Ingredients (1)	Quantity of Ingredient As Purchased (number of purchase units) (2)	Purchase Unit (3)	Servings per Purchase Unit in <i>Food Buying Guide</i> (4)	Meat/ Meat Alternate (ounces) (2) X (4) = (5)	Fruits/ Vegetables (1/4 cup) (2) X (4) = (6)	Grains/ Breads (Servings) (2) X (4) = (7)	
M/MA Ground Beef (no more than 20% fat)	14.37 lb	Pound	11.8 (for 1 oz serving)	169.56			
Cheddar Cheese,* Shredded	2 lb	Pound	16.0 (for 1 oz serving)	32.00			
*The addition of cheese is a modification to the original USDA recipe #D-35.							
F/V Onions, fresh, AP (to provide 6 lb chopped)	6.88 lb (6 lb 14 oz)	Pound	7.90 (for 1/4 c svq)		54.35		
Tomato Paste	3.50 lb (3 lb 8 oz)	Pound	27.6 (for 1 tbsp = 1/4 c)		96.60		
Tomatoes, canned, diced, with liquid	8.50 lb	Pound	7.71 (for 1/4 c svq)		65.53		
G/B Spaghetti, regular, dry, broken (1/2 cup cooked pasta = 1 grains/bread serving)	9.50 lb (9 lb 8 oz)	Pound	10.6 (for 1/2 c svq)			100.70	
Totals				201.56	216.48(1/4 c)	100.70	
Portions per Recipe				100	100	100	
Calculations				total divided by number of portions 201.56 ÷ 100 = 2.01 rounds down to 2.00 oz	total divided by 4 (to get units in cups), then divided by number portions 216.48 ÷ 4 = 54.12 cups 54.12 ÷ 100 = 0.54 cup rounds down to 0.50 (1/2) cup	total divided by number portions 100.70 ÷ 100 = 1.00 serving (for pasta 1 G/B = 1/2 cup)	
This recipe provides 100 portions.				Each Portion Contributes	2.00 oz Meat/Meat Alternate	1/2 cup(s) Fruits/ Vegetables	1 serving Grains/ Breads

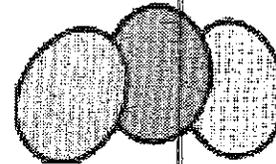
(page numbers refer to 2001 *Food Buying Guide*)
Notes:

- Oz to lb conversion chart is on page I-36 FBG
- Remember to convert ready-to-use products to their "as purchased" amount
- The values for Col. 5, 6, & 7 are found by multiplying the value of Col. 2 by the value in Col. 4.
- Remember to divide the total 1/4 cup servings of F/V by 4 to get the cups of that component.
- Grains/bread in portions of a cup: convert all needed servings in to the same portion of a cup and use the corresponding yield data or that same size.
- Grains/bread in numbers of servings: use the yield data provided for 1 grains/bread serving.

Recipe Analysis Worksheet PRACTICE 1

Directions: You will need the following materials to complete the practice.

1. *Food Buying Guide for Child Nutrition Programs* pages-- pages 1-23 (cheddar cheese); 1-24 (cottage cheese); 1-36 (eggs); 2-26 (broccoli)
2. The recipe shown below.



Recipe Name:

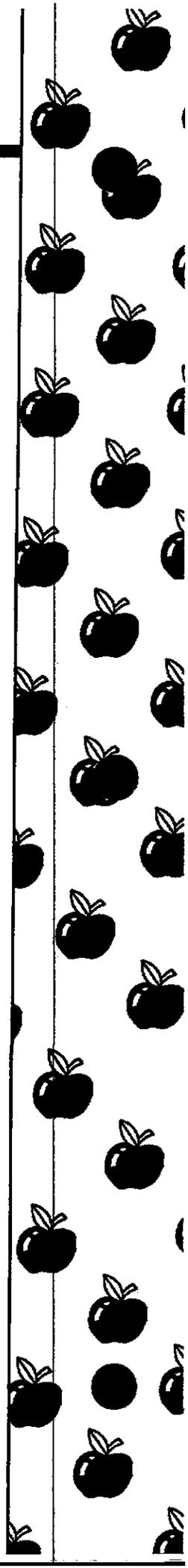
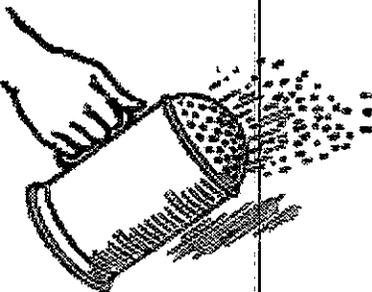
Broccoli and Cheese Casserole

Source: Adapted from *Food for Fifty* (9th Edition), Macmillan Publishing Company, New York, page 322

Number of Portions: 100 portions (2 pans 20" X 12" X 2")

Ingredient	Amount	Directions
Eggs, large, whole	30 eggs	Beat eggs and flour together until smooth.
Flour, all-purpose	15 oz	
Broccoli, cuts, thawed, drained	7 lb	Thaw, drain (do not cook). Fold into the egg-flour mixture.
Cottage cheese, lowfat, drained	10 lb	Drain cottage cheese. Add cheeses and salt to eggs/flour mixture.
Cheddar cheese, Shredded	6 lb	
Salt	2 tsp	

Pour casserole mixture into two long steam table pans (approx. 12+ lb per pan). Bake at 350 degrees for 1 hour 15 minutes or until the center of the mixture registers 165 degrees F on a food thermometer. Let stand 15 minutes before cutting for 50 portions per pan (5" X 10"). Garnish pan on service line with fresh broccoli florets.





Recipe Analysis Worksheet PRACTICE 1

Recipe Name: Broccoli and Cheese Casserole

Portions per Recipe: 100

Ingredients (1)	Quantity of Ingredient As Purchased (number of purchase units) (2)	Purchase Unit (3)	Servings per Purchase Unit in <i>Food Buying Guide</i> (4)	Meat/ Meat Alternate (ounces) (2) X (4) = (5)	Fruits/ Vegetables (1/4 cup) (2) X (4) = (6)	Grains/ Breads (Servings) (2) X (4) = (7)	
M/MA Eggs, large (Weight 2 oz per egg = 2 oz M/MA)	2.5 (30 eggs)	Dozen (24 oz)	(from Col.3 FBG) 24 (1 oz svg)				
Cottage cheese, lowfat (2 oz = 1 oz M/MA)	10 lb	Pound	8.0 (1 oz svg)				
Cheddar cheese	6 lb	Pound	16.0 (1 oz svg)				
F/V Broccoli cuts, frozen	7 lb	Pound	9.60 (1/4 c svg)				
G/B							
Totals					(1/4 c)		
Portions per recipe				100	100	100	
Calculations				total divided by number of portions ___ ÷ 100 = ___ rounds down to ___ oz	total divided by 4 (to get units in cups), then divided by number portions ___ ÷ 4 = ___ cups = ___ cup rounds down to ___ cup cup	total divided by number of portions	
This recipe provides <u>100</u> portions.				Each Portion Contributes	OZ	cup(s)	serving
				Meat/Meat Alternate	Fruits/ Vegetables	Grains/ Breads	

(page numbers refer to 2001 *Food Buying Guide*)
Notes:

- Oz to lb conversion chart is on page I-36 FBG
- Remember to convert ready-to-use products to their "as purchased" amount
- The values for Col. 5, 6, & 7 are found by multiplying the value of Col. 2 by the value in Col. 4.
- Remember to divide the total 1/4 cup servings of F/V by 4 to get the cups of that component.
- Grains/bread in portions of a cup: convert all needed servings in to the same portion of a cup and use the corresponding yield data or that same size.
- Grains/bread in numbers of servings: use the yield data provided for 1 grains/bread serving.

Recipe Analysis Worksheet Practice 2

Directions: You will need the following materials to complete the practice.

1. *Food Buying Guide* pages 2-25 (broccoli florets); 2-30 (carrot sticks ready-to-use); 3-28 (wagon wheels pasta)
2. The recipe shown below.



Recipe Name:

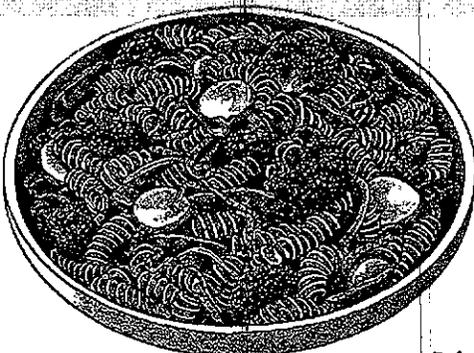
Pasta Wagon Wheels and Vegetables

Source: Adapted from *Food for Fifty* (9th Edition), Macmillan Publishing Company, New York, page 419

Number of Portions: 50 servings, 3/4 cup (6 oz. spoodle or ladle)

Ingredient	Amount	Directions
Pasta wagon wheels*	3 1/2 lb	Cook according to directions. Drain. Place half of the cooked pasta into two 20"x12"x2" steam table pans.
Water	4 gal	
Salt	2 oz	
Vegetable oil	2 Tbsp	
Margarine, melted	12 oz	Combine margarine and basil. Ladle 1/2 over each pan of pasta. Toss to coat. Keep hot.
Basil, crumbled, dried	1/2 cup	
Broccoli florets, fresh	3 lb	Steam vegetables separately until tender crisp. To each pan of pasta, add 1/2 of each vegetable. Toss. Serve warm.
Carrot sticks, fresh, matchstick cut	3 lb	

*Purchase wagon wheel pasta in various colors for a more attractive dish.





Recipe Analysis Worksheet PRACTICE 2

Recipe Name: Pasta Wheels and Vegetables Portions per Recipe: 50 $\frac{3}{4}$ cup svg

Ingredients (1)	Quantity of Ingredient As Purchased (number of purchase units) (2)	Purchase Unit (3)	Servings per Purchase Unit in <i>Food Buying Guide</i> (4)	Meat/ Meat Alternate (ounces) (2) X (4) = (5)	Fruits/ Vegetables (1/4 cup) (2) X (4) = (6)	Grains/ Breads (Servings) (2) X (4) = (7)	
M/MA							
F/V			(from Col.3 FBG)				
Broccoli florets, fresh	3 lb	pound	(1/4 c svg)		(1/4 c svg)		
Carrots, fresh	3 lb	pound	(1/4 c svg)		(1/4 c svg)		
G/B							
Pasta, wagon Wheel	3 1/2 lb	pound	(1/2 c)			(1/2 cup svg)	
(page numbers refer to 2001 Food Buying Guide)			Totals		(1/4 c)	(1/2 c)	
Notes:			Portions per recipe		50	50	
<ul style="list-style-type: none"> • Oz to lb conversion chart is on page I-36 FBG • Remember to convert ready-to-use products to their "as purchased" amount • The values for Col. 5, 6, & 7 are found by multiplying the value of Col. 2 by the value in Col. 4. • Remember to divide the total 1/4 cup servings of F/V by 4 to get the cups of that component. • Grains/bread in portions of a cup: convert all needed servings in to the same portion of a cup and use the corresponding yield data or that same size. • Grains/bread in numbers of servings: use the yield data provided for 1 grains/bread serving. 			Calculations		total divided by number of portions	total divided by 4 (to get units in cups), then divided by number portions $\frac{\text{---}}{\text{---}} \div 4 =$ $\text{--- cups} \div$ $50 = \text{---} =$ $\frac{1}{4} \text{ cup}$	total divided by number of portions $\text{---} \div 50 =$ --- svg $= \frac{1}{2} \text{ cup}$
This recipes provides 50 portions.			Each Portion Contributes		0 oz	(1/4 c)	(1/2 c) svg Grains/ Breads
					Meat/Meat Alternate	Fruits/ Vegetables	

Recipe Analysis Worksheet ASSESSMENT

Performance Objective

The participant will demonstrate an understanding of recipe analysis by using the Recipe Analysis Worksheet for determining the component contributions.

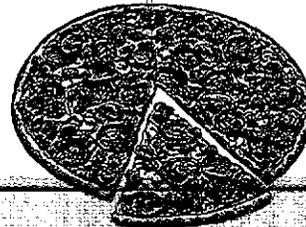
Assessment – complete this activity independently. Show your calculations.

Directions: You will need the following materials to complete the practice.

1. *Food Buying Guide* pages 1-16 (ground beef); 1-23 (cheddar cheese); 2-59 (bell pepper); 2-70 (hashed brown potatoes)
2. The recipe shown below.

Recipe Name:

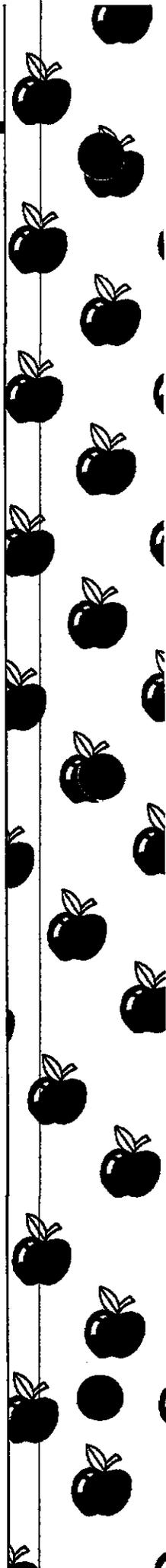
Cowboy Pizza



Source: Adapted from School Foodservice & Nutrition, May 2002, page 48

Number of Portions: 100 slices

Ingredient	Amount	Directions
Pizza crusts, frozen, pre-baked, thawed (26X18-in)	5	Heat oven to 425°F. Place one pizza crust on each of five full-size sheet pans. In a large pan, cook beef and bell peppers stirring until beef is done. Add potatoes and barbecue sauce; stir to combine.
Ground beef, raw	10 lbs	
Green bell peppers, chopped	4 1/4 lbs	
Barbecue Sauce	2 1/4 qts	
Hashed brown potatoes, frozen, shredded, thawed	8 lbs	
Cheddar cheese, reduced-fat, shredded	6 lbs	Spread 2 qts of barbecue mixture onto each pizza crust. Top each pizza with 1 lb 3 oz. shredded cheese. Bake 10 to 15 minutes until heated through and cheese is melted. Cut each pan into 20 (4 1/4 x 5 1/4-in) pieces.



Recipe Analysis Worksheet ASSESSMENT – Complete this form independently.

Recipe Name: Cowboy Pizza

Portions per Recipe: 100 slice

Ingredients (1)	Quantity of Ingredient As Purchased (number of purchase units) (2)	Purchase Unit (3)	Servings per Purchase Unit in Food Buying Guide (4)	Meat/ Meat Alternate (ounces) (2) X (4) = (5)	Fruits/ Vegetables (1/4 cup) (2) X (4) = (6)	Grains/ Breads (Servings) (2) X (4) = (7)
M/MA Ground beef, raw (not more than 20% fat)	10 lbs	pound	11.8 (1 oz)			
Cheddar cheese, reduced-fat, shredded	6 lbs	pound	16 (1 oz)			
F/V Green bell pepper, chopped	4.25 lb	pound	9.7 (1/4 cup)			
Hashed browns potatoes, shredded	8 lbs	pound	7.70 (1/4 cup) (diced)			
G/B Pizza crusts (purchased)	5	26X18	20 slices (Each slice=1 svq)			
Totals				(1 oz)	(1/4 c)	
Portions per recipe				100	100	100
Calculations				total divided by number of portions ____ ÷ 100 = ____ oz = ____ oz	total divided by 4 (to get units in cups), then divided by number portions ____ ÷ 4 = ____ cups ÷ 100 = ____ c = ____ c	total divided by number of portions
This recipe provides <u>100</u> portions.				Each Portion Contributes ____ oz Meat/Meat Alternate	(1/4 c) Fruits/ Vegetables	____ servicing(s) Grains/ Breads

(page numbers refer to 2001 Food Buying Guide)

Notes:

- Oz to lb conversion chart is on page I-36 FBG
- Remember to convert ready-to-use products to their "as purchased" amount
- The values for Col. 5, 6, & 7 are found by multiplying the value of Col. 2 by the value in Col. 4.
- Remember to divide the total 1/4 cup servings of F/V by 4 to get the cups of that component.
- Grains/bread in portions of a cup: convert all needed servings in to the same portion of a cup and use the corresponding yield data or that same size.
- Grains/bread in numbers of servings: use the yield data provided for 1 grains/bread serving.

Recipe Name: _____

Portions per Recipe: _____

Ingredients (1)	Quantity of Ingredient As Purchased (number of purchase units) (2)	Purchase Unit (3)	Servings per Purchase Unit in <i>Food Buying Guide</i> (4)	Meat/ Meat Alternate (ounces) (2) X (4) = (5)	Fruits/ Vegetables (1/4 cup) (2) X (4) = (6)	Grains/ Breads (Servings) (2) X (4) = (7)
M/MA						
F/V						
G/B						
Totals					(1/4 c)	
Portions per recipe						
Calculations				total divided by number of portions	total divided by 4 (to get units in cups), then divided by number portions	total divided by number of portions
This recipe provides _____ portions.		Each Portion Contributes	oz	c(s)	servings Grains/ Breads	

(page numbers refer to 2001 *Food Buying Guide*)
Notes:

- Oz to lb conversion chart is on page I-36 FBG
- Remember to convert ready-to-use products to their "as purchased" amount
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- Grains/bread in numbers of servings: use the yield data provided for 1 grains/bread serving.

