Task Title: Calculating Recipes and Ingredients

Learner Name:
Date Started: **Date Completed:**
Successful Completion: Yes___   No___
Goal Path: Employment √   Apprenticeship__   Secondary School √   Post Secondary √   Independence___
Task Description: Preparing menus for a childcare agency

Competency:	Task Group(s):
A: Find and Use Information B: Communicate Ideas and Information C: Understand and Use Numbers	A1: Read continuous text A2: Interpret documents B2: Write continuous text B3: Complete and create documents C3: Use measures

Level Indicators:
A1.2:   Read texts to locate and connect ideas and information
A2.2:   Interpret simple documents to locate and connect information
B3.2b: Create simple documents to sort, display and organize information
C3.2:   Use measures to make one-step calculations
C3.3:   Use measures to make multi-step calculations; use specialized measuring tools

Performance Descriptors: see chart on last page

Materials Required:
    • Pen and paper
    • Calculator
    • Tea Biscuit Recipe - Attached
    • Lasagna Recipe - Attached
    • Food Guide for Preschoolers - Attached

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Learner Information and Tasks

You work for a childcare agency as a cook. Part of your job requires that you plan meals (hot lunches and snacks) in accordance with the Canada Food Guide, taking into consideration special dietary needs based on allergies, special occasions, philosophies, religions, and cultures.

You also purchase all the food.

Therefore, you must be able to do the calculations involved with using recipes and making purchases.

Imperial/Metric Conversion		
1 cup	=	250 mL
1 Tbsp	=	20 mL
1 tsp	=	7 mL
1 pound (lb)	=	454 g
1 fl. oz.	=	28.4 mL

Tea Biscuit Recipe

Task 1: Calculate the quantities for each ingredient in the Tea Biscuit recipe to double the recipe.

Task 2: Calculate the quantities for each ingredient in the Tea Biscuit recipe to triple the recipe.

Task 3: Convert the quantity of each ingredient to metric of the original recipe. Use the conversion chart provided in the introduction.

TEA BISCUITS

2 cups flour	1 tbsp. sugar
1 rounded tbsp. baking powder	1/3 cup oil
2 tsp. salt	2/3 cup milk
½ cup raisins	

Blend the dry ingredients together in a bowl. Add raisins. Mix liquid ingredients in a measuring cup. Add to dry mixture. Mix gently until moisture is absorbed. Turn out onto a floured surface. Knead 15 - 20 times. Roll or pat dough to 1 cm thick. Dip cutter into flour & cut into circles. (You can put two circles on top of each other & press together to make a biscuit that is thicker and will come apart easily.) Bake on an ungreased cookie sheet at 450°F. for 10 minutes.

Lasagna Recipe

Task 4: Convert the quantities in the lasagna recipe to metric.

Task 5: Calculate the quantities of each ingredient you would require to serve 40 people.

Task 6: Circle, highlight, or underline the ingredients in this recipe that make it a healthy choice.

LASAGNA

3/4 lb. - lean ground beef	1 green pepper
2 onions, chopped	9 lasagne noodles
2 cloves garlic, minced	2 cups skim or 2% cottage cheese
19 oz. can tomatoes (not drained)	2 cups shredded part-skim mozzarella cheese
5.5 oz. can tomato paste	1 egg - lightly beaten
2 tsp. dried oregano	2 cups freshly grated Parmesan cheese
1 tsp. dried basil	

Makes 8 servings.

Shopping:

Task 7: Using the **Food Guide for Preschoolers** make a 4-column list using the food groups. List each item for **Tomorrow's Menu** under the appropriate food group.

Task 8: Use the **Food Guide for Preschoolers** to locate and determine the range of serving sizes for the ingredients listed in **Tomorrow's Menu** for one preschool aged child. Write the range of serving sizes beside the food group within the columns you created.

Task 9: Using **Tomorrow's Menu** and the columns you created, estimate the largest quantity of crackers you will need to serve 18 children.

Tomorrow's Menu	
Snack:	Cheese, Crackers, Juice
Lunch:	Grilled cheese sandwiches
	Raw vegetables
	Dip
	Milk
	Apples
	Cookies
Snack:	Yogurt, Bananas, Juice

**Note that two slices of Kraft cheese in a grilled cheese sandwich equal one serving of cheese.

Food Guide for Preschoolers

How many servings from the food groups do preschoolers need?

The Food Guide gives a lower and higher number of servings for each food group. These serving ranges make the food guide flexible to use with family members with different energy and nutrient needs. When choosing the number of servings for preschoolers, the following general guidelines apply:

1. There is a wide range of servings for Grain Products (5-12) and Vegetables and Fruit (5-10). Preschool children will generally choose child-size servings around the lower end of the range for these food groups every day.

2. The Food Guide recommends 2-3 servings per day of Milk Products. Preschoolers should consume 500 mL (2 cups) of milk every day because it is their main dietary source of vitamin D. This can be counted as two servings. In addition, they may also choose to include a child-size serving of other Milk Products such as cheese and yogurt.

3. Preschool children can choose 2-3 child-size servings of Meat and Alternatives each day.

What is a child-size serving?

There is a wide variation in portions of foods consumed by preschoolers. That's why a child-size portion is anywhere from one-half to the full size for foods in each food group, as indicated in Canada's Food Guide to Healthy Eating. Generally, the size of portion increases with age. For example, a two-year-old may eat a half slice of bread, whereas a four-year-old is more likely to eat a whole slice. Both of these can be counted as one child-size serving of Grain Products.

Examples of one child-size serving

Grain Products

1/2-1 slice of bread

15-30 g cold cereal*

75-175 mL (1/3-3/4 cup) hot cereal

1/4-1/2 bagel, pita, or bun

1/2-1 muffin

50-125 mL (1/4-1/2 cup) pasta or rice

4-8 soda crackers

* Approximate volumes for one serving:

- flaked cereal 125-250 mL (1/2-1 cup)
- puffed cereal 250-500 mL (1-2 cups)
- granola or dense-type cereal 30-75 mL (2 Tablespoons-1/3 cup)

Milk Products

25-50 g cheese

75-175 g (1/3-3/4 cup) yogurt

- Preschoolers should consume a total of 500 mL (2 cups) of milk every day.

Vegetables and Fruit

1/2-1 medium-size vegetable or fruit

50-125 mL (1/4-1/2 cup) fresh, frozen, or canned vegetables or fruit

125-250 mL (1/2-1 cup) salad

50-125 mL (1/4-1/2 cup) juice

Meat and Alternatives

25-50 g meat, fish, or poultry

1 egg

50-125 mL (1/4-1/2 cup) beans

50-100g (1/4-1/3 cup) tofu

15-30 mL (1-2 Tbsp) peanut butter

(From Health Canada)

Answer Sheet

Tea Biscuit Recipe

Task 1:	**Task 2:**	**Task 3:**
Double Recipe	Triple Recipe	Conversion
4 cups flour	6 cups flour	500 mL flour
2 Tbsp baking powder	3 Tbsp baking powder	20 mL baking powder
4 tsp. salt	6 tsp. salt (2 Tbsp)	14 mL salt
1 cup raisins	1.5 cups raisins	125 mL raisins
2 Tbsp sugar	3 Tbsp sugar	20 mL sugar
2/3 cup oil	1 cup oil	83.33 mL oil
1 1/3 cup milk	2 cups milk	166.67 mL milk

Lasagne Recipe

Task 4: Conversion	**Task 5:** 40 people (all ingredients x5)
341 (340.5)g ground beef	3 ¾ lb ground beef
540 (539.6) mL tomatoes	10 onions
156 (156.2) mL tomato paste	10 cloves
14 ml oregano	95 oz. tomatoes
7 mL basil	27.5 oz tomato paste
500 mL cottage cheese	10 tsp. oregano
500 mL mozzarella cheese	5 tsp. basil
500 mL parmesan cheese	5 green peppers
	45 noodles
	10 c. cottage cheese
	10 c. mozzarella cheese
	10 eggs
	10 c. parmesan cheese

Task 6: Identify the ingredients in this recipe that make it a healthy choice.

3/4 lb. **- lean** ground beef

2 **onion**s, chopped

2 cloves **garlic**, minced

19 oz. can **tomatoes** (not drained)

5.5 oz. can tomato paste

2 tsp. dried oregano

1 tsp. dried basil

1 **green pepper**

9 lasagne noodles

2 cups **skim or 2%** cottage cheese

2 cups shredded **part-skim** mozzarella cheese

1 egg - lightly beaten

2 cups freshly grated Parmesan cheese

Answer Sheet

Shopping:

Tasks 7 & 8:

Grain Products **(5 – 12 servings)**	Milk Products **(2 cups of milk per day = 2 servings and 2 – 3 servings)**	Vegetables and Fruit **(5 – 10 servings)**	Meat and Alternatives **(2 – 3 servings)**
Crackers	Cheese	Juice	
Bread (grilled)	Cheese (grilled)	Raw vegetables	
	Dip	Apples	
	Milk	Banana	
	Yoghurt	Juice	

Task 9: Using **Tomorrow's Menu** and the columns you created, estimate the largest quantities of crackers you will need to serve 18 children.

(8 crackers x 18 children = **144 crackers**)

Task Title: Calculating Recipes and Ingredients

	Performance Descriptors	Needs Work	Completes task with support from practitioner	Completes task independently
A1.2	• makes low-level inferences			
	• follows the main events of descriptive, narrative, and informational texts			
	• obtains information from detailed reading			
A2.2	• performs limited searches using one or two search criteria			
	• extracts information from tables and forms			
	• uses layout to locate information			
	• makes connections between parts of documents			
	• makes low-level inferences			
B3.2b	• follows conventions to display information in simple documents (e.g., use of font, colour, shading, bulleted lists)			
	• sorts entries into categories			
	• displays one or two categories of information organized according to content to be presented			
	• identifies parts of documents using titles, row and column headings and labels			
C3.2	• calculates using numbers expressed as whole numbers, fractions, decimals, percentages, and integers			
	• makes estimates			
	• understands and uses ratio and proportion			
	• converts units of measurement within the same system and between systems			
	• chooses and performs required operation(s); may make inferences to identify required operation(s)			
	• selects appropriate steps to solutions			
	• interprets, represents, and converts measures using whole numbers, decimals, percentages, ratios, and simple, common			

		fractions (e.g., ½, ¼)			
	•	uses strategies to check accuracy (e.g., estimating, using a calculator, repeating a calculation, using the reverse operation)			
C3.3	•	calculates using numbers expressed as whole numbers, fractions, decimals, percentages, and integers			
	•	manages unfamiliar elements (e.g., context, content) to complete tasks			
	•	makes estimates involving many factors where precision is required			
	•	chooses and performs required operations; makes inferences to identify required operations			
	•	selects appropriate steps to solutions from among options			
	•	identifies a variety of ways to complete tasks			
	•	interprets, represents, and converts measures using whole numbers, decimals, percentages, ratios, and fractions			
	•	uses strategies to check accuracy (e.g., estimating, using a calculator, repeating a calculation, using the reverse operation)			

This task: was successfully completed____   needs to be tried again____

Learner Comments

_____   _____

Instructor (print)   **Learner Signature**