

MENU PLANNER

Performance Standard 6C.C

Plan a menu for a family of 4 for a day; estimate the cost of purchasing items on that menu based on a \$50.00 budget; calculate the actual costs of those items; and compare the estimated and actual costs accordingly:

- *Mathematical knowledge:* estimate the costs of all the individual items and total cost of the menu; research and calculate the exact costs of items; show the exact differences between the estimated and actual costs of the individual items and the total menu,
- *Strategic knowledge:* use appropriate estimation and calculation methods completely and correctly, and
- *Explanation:* explain completely and clearly what was done and why it was done: explain and justify how menu items for 3 meals and 2 snacks were selected and costs estimated based on a family of 2 adults and 2 children; explain how the estimated and actual costs compared.

Procedures

1. ***In order to compute and estimate using mental mathematics, paper-and-pencil methods, calculators, and computers (6C)***, students should experience sufficient learning opportunities to develop the following:
 - Select appropriate methods and tools for computing with whole numbers from mental computation, estimation, calculators, and paper/pencil according to the context and nature of the computation and use the selected method or tool.
 - Determine whether exact answers or estimates are appropriate for solutions to problems.
2. Provide each student a copy of the “Menu Planner” recording sheet. Have students review and discuss the task to be completed and how the rubric will be used to evaluate it.
3. Tell students they have \$50.00 to spend and that sales tax should not be considered when doing this task. Ask students to plan a one-day menu (3 meals and 2 snacks) for a family of four (2 adults and 2 children). They should write the menu items in the first column and complete all of the following:
 - Part A: ask students to estimate the cost of each meal and each snack. Then tell them to calculate the total estimated cost for the day. Students should write their estimates in the second column.
 - Part B: ask students to find food advertisements in newspapers and magazines. Some items like milk must be purchased in amounts greater than needed for menu entry. As a class, students may calculate a unit cost (e.g., gallon of milk = \$2.80; 8 oz. = \$.35) or have each student figure it out. Students should calculate the cost of each meal, each snack, and a total cost and record it in the third column.
 - Part C: ask students to compare the actual cost of the day’s menu plan to the estimated cost. They should show the comparison in the last column and write a summary of the comparison.
 - Part D: ask students to write an explanation/justification of each step involved in completing this task.
4. Evaluate each student’s work using the rubric as follows and use the guide on the rubric to determine the performance level:
 - 4 = estimates were reasonable for items planned; all actual costs were calculated correctly; strategy to determine the menu selections were appropriate, explanations/justifications of answers were complete and sound.
 - 3 = calculations had minor errors or were written incorrectly, but not both; strategies were somewhat unclear or incomplete; explanation/justification included unclear parts.
 - 2 = responses had major calculation errors, but the problem was set up correctly; strategies were ineffective; strategy used or why it was used was indicated, but not both.
 - 1 = work included very major calculation errors, but at least an attempt was made; strategies were totally ineffective; explanations were unrelated to the task.
 - 0 = task not attempted.

Examples of Student Work not available

Time Requirements

- One class period

Resources

- Newspaper and magazine advertisements containing costs of food items used for breakfast, lunch, and dinner
- Calculators (to be used only if necessary)
- Copy of the “Menu Planner” recording sheet
- Mathematics Rubric

NAME _____ DATE _____

MENU PLANNER

Plan a one-day menu for a family of four (two adults and two children). Plan 3 meals and 2 snacks and write your menu items in the first column. You have \$50.00 to spend. Do not include sales tax.

One-Day Menu for a Family of Four	Estimates	Actual Costs	Comparisons
Breakfast			
Lunch			
Afternoon Snack			
Dinner			
Evening Snack			
TOTAL			

Part A: How much do you think you will spend on this menu? Write your estimates in the second column.

Part B: Get advertisements from newspapers or magazines. Find the exact cost of the items you have chosen for each meal. Write the cost of the items in the third column.

Part C: How did the actual cost compare with the estimated costs? Write the difference between your estimates and your actual costs in the last column. For example, if the estimate was \$1.00 too high, write + \$1.00; if \$.50 too low, write - \$.50.

Part D: Explain how you completed this task on the back of this page. Be sure to tell what you did and why you did each step.