

Name _____

Constraint Kitchen Answer Key

Sample Acceptable Response:

New Ingredients:

- Pasta
- Olive oil
- Garlic
- Salt
- Plant based milk

New Steps:

- Boil water and cook pasta.
- Heat olive oil in a pan and add garlic for one minute.
- Stir in plant based milk and heat for three minutes.
- Add pasta and salt, then toss to coat.

Justification: Heavy cream and butter were removed to make the recipe dairy-free. Olive oil and plant-based milk were used instead. The number of ingredients was reduced to five, and cooking time was shortened by simplifying the sauce.

Teacher's Guide

- This worksheet strengthens **text based problem solving**, **procedural adaptation**, and **evidence based justification** for Grades 9 to 12.
- For differentiation, allow some students to work with only one constraint at first before attempting all three.
- Increase engagement by assigning different constraint sets to different groups and comparing their solutions.
- As an extension, have students research real dietary restrictions and create an adapted recipe with written justification.