# **Core Skills Analysis**

## Cooking

- Learned how to measure ingredients accurately.
- Developed skills in mixing and blending various components.
- Gained an understanding of the importance of cooking times and temperatures.
- Explored the transforming properties of tomatoes during cooking.

## **Science**

- Discovered the chemical processes involved in cooking and preserving food.
- Gained insights into the role of acidity in preserving homemade ketchup.
- Investigated how different temperatures affect the flavor and texture of the ketchup.
- Learned about the microbiological aspects of homemade food versus commercial products.

#### **Mathematics**

- Practiced fractions and decimals through ingredient measurements.
- Applied basic addition and subtraction to calculate ingredient amounts.
- Developed problem-solving skills while adjusting the recipe to personal taste.
- Understood concepts of volume and weight when using measuring cups and spoons.

#### Nutrition

- Learned about the nutritional benefits of using fresh ingredients compared to store-bought options.
- Explored the impact of sugar and salt on health by comparing different recipes.
- Gained awareness of the importance of ingredients in food quality and dietary choices.
- Discussed how homemade ketchup can be a healthier option due to customizable ingredient selection.

### **Tips**

To improve the homemade ketchup recipe, students can explore using different herbs and spices for unique flavors, experiment with alternative sweeteners to reduce sugar content, and investigate the nutritional value of each ingredient to choose healthier options. Additionally, encouraging students to document their ketchup-making process can foster better understanding of recipe structure and cooking techniques.

### **Book Recommendations**

- <u>The Tomato Adventures of Johnny and Jane</u> by Tyler Seavey: A fun story about two friends who discover the world of tomatoes and create their own ketchup.
- <u>Ketchup: An American History</u> by Susan M. Cheyne: This book dives into the history of ketchup, making it interesting and informative for young readers.
- <u>Food Science: The Ketchup Experiment!</u> by Dylan G. Matchmore: A hands-on guide for kids to learn the science behind their favorite condiments including ketchup.