

Objective

By the end of this lesson, Miranda will understand the basic principles of baking bread while integrating concepts from art, history, math, physical education, science, and social studies. She will learn how to make a simple bread recipe, explore the history of bread, calculate measurements, and discuss the nutritional aspects of bread in a fun and engaging way.

Materials and Prep

- All-purpose flour
- Water
- Yeast (dry or fresh)
- Salt
- Mixing bowl
- Measuring cups and spoons
- Oven
- Baking sheet or loaf pan
- Clean kitchen surface for kneading

Before starting, ensure that the kitchen is clean and all ingredients are at room temperature. It's also helpful to have a timer handy for tracking rising and baking times.

Activities

- **Baking Bread:**

Miranda will follow a simple bread recipe, measuring out ingredients, mixing them together, kneading the dough, and allowing it to rise. She will then shape the dough and bake it, experiencing the whole process of bread-making.

- **History of Bread:**

Miranda will research the history of bread, learning about its origins, how it has evolved over time, and its significance in various cultures. She can create a timeline or a poster to showcase her findings.

- **Math in Baking:**

Miranda will calculate the measurements for the bread recipe, adjusting the quantities to make either a larger or smaller batch. This will involve fractions and basic multiplication or division.

- **Physical Activity:**

Miranda will engage in a short physical activity, like stretching or a quick workout, to understand the importance of physical health and how it relates to nutrition, especially when consuming carbohydrates like bread.

- **Science of Baking:**

Miranda will learn about the science behind baking, including how yeast works and the chemical reactions that take place when baking bread. She can conduct a simple experiment to observe yeast activation.

- **Social Studies Discussion:**

Miranda will discuss the role of bread in different cultures and how it has been a staple food

throughout history. She can think about how bread is made in various parts of the world and share her thoughts.

Talking Points

- "Did you know that bread is one of the oldest prepared foods, dating back over 14,000 years?"
- "What do you think happens to the yeast when we add it to the warm water? It activates and starts to eat the sugar, producing carbon dioxide!"
- "When we measure ingredients, we are using math skills! Can you help me calculate how much flour we need if we want to double the recipe?"
- "Baking bread involves physical activity too! Kneading the dough works out your arms and helps develop muscle strength!"
- "The process of baking bread is a great example of chemistry in action. Can you guess what happens to the dough when it rises?"
- "Bread is a staple in many cultures. What types of bread do you know from different countries?"