



Teaching with Math and Me!

Math in the Kitchen

Connection to Standards

Students will use tools to measure and develop common referents for measures to make comparisons and estimates. (NCTM)

Materials Needed:

- Several sets of measuring cups and spoons
- Rice, beans, or another dry, loose material for kids to measure
- Large art trays, cookie sheets, or other items to contain spills



Lexile: 460
Words: 302

PreK-2

Differentiation for ESL

- Review these additional vocabulary words in context: *kitchen, flour, directions, healthy*
- Have each student choose a vocabulary word and write it in a sentence.
- Provide each student with sticky notes. While reading, encourage students to put a sticky note next to any phrase or word in the text that they find confusing. After reading, pair students with a partner and allow them to help each other clarify the confusing points in the text.

Before Reading

Building Background Knowledge:

- If this is students' first time reading this series, explain to them that in each book they'll be reading about different ways they can use math in their everyday lives. Tell them that in this book, they'll be learning about using math in the kitchen.
- Ask students to raise their hands if they have ever helped their families with cooking or baking. Invite these students to share their experiences in the kitchen and to discuss some of the ways they use math when they cook or bake.

Preview:

- Show the cover of the book. Explore the cover photo. Ask students to guess who the people are and what they are doing.
- Lead students on a brief picture walk of the book, exploring the photos on each page. Have students identify one or two details in each photo.

Predict: Ask students to predict what they will read about in the book. Have students support their predictions with evidence they discovered while previewing the book.

Vocabulary: Turn to page 23 (“Words to Know”). Read each vocabulary word and have students raise their hands if they know the word. Call on students to define each word, then read the definition provided. Ask students to consider whether the provided definition matches their understanding of the word.

Strengthen understanding of words students do not know well by modeling how to use the word in a sentence. Create sentences with rich context clues, then review how the context clues help students understand the meaning. Have students come up with their own sentences for each word.

Skill Introduction: Write the word volume on the board. Explain to students that volume is the amount of space something takes up. Tell them that in the United States, most baking recipes use volume measurements in units including teaspoons, tablespoons, cups, ounces, pints, quarts, and gallons.

During Reading

Look for Key Details: Remind students that the main idea of the book is to describe all the ways we use math in the kitchen. As you read each chapter, invite volunteers to share how that chapter supports the main idea. In what ways does the chapter show math being used in the kitchen?

Practice the Concepts: Ask students the following questions as they read.

- **pp. 8–9:** *How many cups of flour would you need to make two batches of the cookies? (4) How many times should you fill the $\frac{1}{2}$ -cup measuring cup to make the two batches? (8)*
- **pp. 10–11:** *How many cups of sugar would you need to make two batches of cookies? (1)*
- **pp. 12–13:** *How many eggs would be left in the carton if you made two batches of cookies? (2)*
- **pp. 16–17:** *If you make two batches of cookies, how many total cookies will you have? (48) How many cookie sheets can you fill? (6)*
- **pp. 18–19:** *If you put the second batch of cookies in as soon as you take the first batch out, what time will they be ready? (2:24)*



After Reading

Reflection: Ask students to share any other activities they like to do at home. Have them discuss the ways in which they use math in those activities.

Skill: Divide students into groups of two to four, depending on how many sets of measuring cups and spoons you have. Give each group the following:

- One set of measuring cups and spoons
- Rice, sand, or other material to measure
- An art tray, cookie tray, or other item to work on

Have students work together to measure out different amounts with the measuring cups and spoons. Challenge them by asking them questions such as the following:

1. Which is bigger, a teaspoon or a tablespoon?
2. How many teaspoons equal a tablespoon?
3. How many tablespoons equal $\frac{1}{2}$ -cup?

Give students time to experiment and share their own observations.