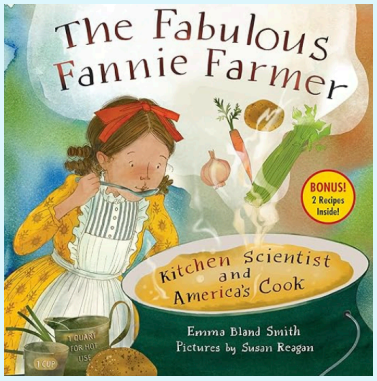

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Fannie Farmer revolutionized cooking by making precise measurements and directions part of our modern approach for food preparation.

Ages: 6 to 8 years

ATOS Reading Level:
n/a

Lexile: 850L

ISBN: 9781635926125

The Fabulous Fannie Farmer

How did Fannie change the way that people cook?

Topics: precision, measurement

Activities To Do Together:

In the late 1800s, recipes didn't include precise measurements and directions. Food cooked with the same recipe might turn out very differently depending on the cook's interpretation. Fannie Farmer approached cooking as a science. She realized precise or exact measurements and step-by-step directions were necessary to produce the best results. Explore precision and measurement with this book.

Before reading the book:

- Explore several modern recipes. Do they include an ingredient list, precise amounts, and a list of directions? Most modern recipes do, thanks to Fannie Farmer.

While reading the book:

- Notice some of the imprecise ways that measurements used to be described in recipes in this book, for example: "sugar to your taste" and a "suspicion of nutmeg."

When you have finished reading the book:

- Discuss how cooking and the way we think about cooks has changed since the 1800s.
- Explore common kitchen measuring tools together, how they are used and how they are related. For example, 3 teaspoons equal 1 tablespoon.
- Consider making one of the recipes in the book or pick another recipe that you'd like to try. Measure ingredients exactly and follow the recipe directions in order. Think about how a computer responds to commands. This is because the computer is given a step-by-step recipe called an algorithm.
- A long time ago a recipe might have said to use an egg-size chunk of butter. On your next trip to a grocery store, look at chicken eggs. What sizes of eggs do you see? Would you know the exact quantity to use in a recipe that says, "use an egg-size chunk of butter"?

Questions for Mathematical Thinking:

1. What does it mean to be precise? Why is it important?
2. What activities (for example: brushing teeth, feeding your pets) in your daily routine depend on precision for good results?
3. How do you think other workers, like carpenters, farmers, computer programmers, or doctors have to be precise in their jobs?
4. Do you think Fannie Farmer was a determined person? Why do you think so? How would you describe Fannie's personality?
5. What math and science did you notice in Fannie Farmer's approach to cooking and the publication of *The Boston Cooking-School Cook Book*?
6. If a recipe calls for a "suspicion of nutmeg," do you think that would be a large amount or a small amount? Why?

Early Math Project Resources:

Visit The Fabulous Fannie Farmer (countplayexplore.org/book/the-fabulous-fannie-farmer) to find activities and related California Learning Foundations and/or Mathematics Standards for this book.

Vocabulary

Math words found in the story: 1/2 cup, 1/4 cup, cup, circles, circular, eighths, measurements, money, precise, quart, standard, strategy, tablespoons, teaspoons, temperature, timeline, trial and error, vertical

Related math words: algorithm, formal measurement, informal measurement

Words to build reading comprehension: active, attitude, carefree, chemistry, confident, consistent, determined, embarrassment, enthusiasm, exact, fermentation, generations, impeccable, instincts, instructions, inventive, level, nutrition, obsessively, passion, practical, recipes, results, revolutionary, savvy, scientist, serious, simmered, sufficient, suspicion, technology, tenderized, urged

Related Books: *Measuring Penny* by Loreen Leedy; *Pretend Soup* by Ann Henderson and Mollie Katzen

Click this link to the World Catalog or enter bit.ly/42fMSvP to find *The Fabulous Fannie Farmer* in the public library.

Math Connections: Fannie Farmer's approach to cooking required communicating with precision and using measuring tools. This allowed more consistent and predictable cooking results. Fannie's approach was aligned in many ways with our modern Standards for Mathematical Practice.

It is important for children to have opportunities to use appropriate tools strategically (like teaspoons, measuring cups, rulers, calculators, scales). Consider different types of mathematical tools that can be used to solve problems. Encourage children to:

- Use different types of age-appropriate tools and materials to solve and represent mathematical situations and problems.
- Evaluate and decide which tools (for example: crayons, pencils, drawings, models, rulers, charts, or infographics) to use when solving problems.
- Identify the technological tools that can be used to solve problems.

Discuss with children the types of tools and approaches that Fannie used to revolutionize cooking. How did this change the way that people approached cooking? Why do you think so many people were eager to buy *The Boston Cooking-School Cook Book*?

We help children to be precise when we encourage them to:

- Explain their mathematical thinking and describe how they figure out problems.
- Use descriptive language, for example, a young child might compare the heights of three objects using the words tall, taller, and tallest and an older child might measure the objects and describe their height in inches or feet.
- Calculate, measure, and use mathematical symbols accurately.
- Explain situations, steps, and directions with precise vocabulary.
- Decide how much precision a situation calls for. For example, when is it appropriate to round a number and use estimation and when is it appropriate to use exact numbers?

Use this story to practice and reinforce measurement concepts.

Before children learn to measure with formal tools like rulers and scales, give them opportunities to measure with informal tools, like the length of a toy car or the width of a hand.

Explore measurement together with these ideas:

- Practice walking heel-to-toe. Count how many heel-to-toe steps it takes to walk across a room.
- Find out how many paper clips can be placed end-to-end across a sheet of paper.
- Measure several different objects and compare their lengths. Arrange them in order by size.
- Measure an object with different measuring tools, like the length of a pencil, the width of a hand, and a ruler.
- Compare formal measuring tools like rulers, measuring tapes, yardsticks, and meter sticks. Measure the lengths of a collection of spoons. Ask your child if they think it would be more precise to describe an object as five feet tall or 10 spoons tall. Why do they think so? Which is more precise, formal or informal measurement? Why?
- Explore formal measuring tools used for cooking like cups, half cups, tablespoons, and teaspoons. How many quarter cups equal one cup? What does it mean to have one level tablespoon?
- Discuss what you might measure in inches, feet, yards, or miles.
- Encourage your child to estimate the length or height an object. Then measure to find the actual length or height.
- Weigh different types of produce on a scale at the grocery store. Which is heavier: a cabbage or a jalapeño? Can you find another item that weighs about the same as an apple?