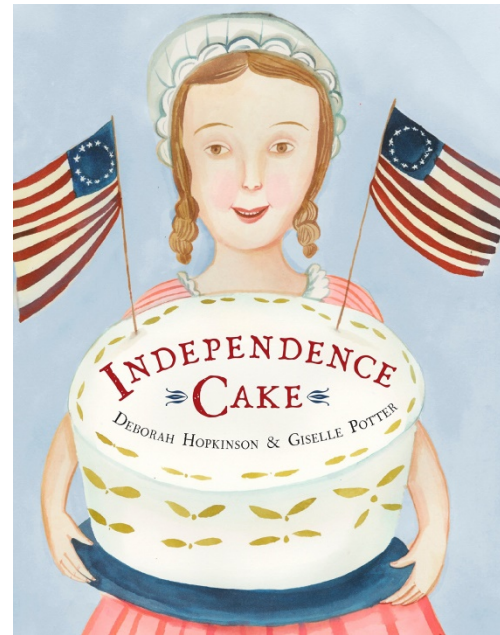


February 2020 Book of the Month

Independence Cake

By: Deborah Hopkinson & Giselle Potter

Next to nothing is known about Amelia Simmons, whose *American Cookery*, published in 1796, was the first cookbook to be written by an American and to incorporate native ingredients. This book is a lively *possible* backstory about the culinary revolutionary. Orphaned and sent to work as a housemaid for the frazzled Mrs. Bean, Amelia impresses with her unflappable demeanor and soon takes over the kitchen. “We are independent now,” she tells Mrs. Brea. “I want to learn good, plain American cookery and share recipes with my fellow citizens.” She wows the Bean children with flapjacks and the new President, General George Washington, with a slice of Independence Cake created for his inauguration¹ in this cheerful tale. Readers will get a glimpse of life during the time that Amelia lived, which includes growing and harvesting their own crops, and being completely self-sustainable.



Fun Facts

- George Washington’s Birthday was February 22, 1732. He was inaugurated as President of the United States on April 30, 1789. His birthday is a United States federal holiday, celebrated on the third Monday in February (called President’s Day).
- Before George Washington was a military leader or the President of the United States, he was a farmer and surveyor. He was primarily a tobacco farmer, but eventually diversified into growing wheat, corn, carrots, and cabbage. He was a firm believer in enriching the soil through composting, and crop rotations.²
- North Carolina was one of the original 13 colonies, established in the late 17th century before the Revolutionary War.
- The biggest crop farmed in North Carolina in the 17th and 18th centuries was tobacco.³
- Basic cooking techniques in the 17th century are similar to cooking techniques today. Colonial cooks fried, roasted, baked and broiled. They used beef, lamb, pork, chicken, fish, vegetables, and baked goods. Then, as now, coffee, tea, and chocolate were popular beverages.⁴
- Amelia Simmons’ cookbook, *American Cookery*, was the first American cookbook to use the Dutch term “koekje,” which Simmons spelled, “cooky.” This term eventually became, “cookie.”

Independence Cake Discussion Questions:

Use the book as a reference and cite examples in your answers.

1. Is this story fiction or nonfiction? Explain your answer.
2. What is a “bound girl?”
3. What year did Amelia go to live with the Bean family?
4. What was life like back in the late 1700s? What types of chores did Amelia have? How do they differ from chores you have? If they are different, why?

5. Was the Bean family growing food for the family? Do you grow your food?
6. What was Amelia's wish to Mrs. Bean?
7. What are some of the meals and foods Amelia created? What was considered "new" at that time?
8. What is potash?
9. Who was elected as the first American president? What was this person's job or role before he/she were elected?
10. Where was the first presidential inauguration held?
11. What did the Leading Town Ladies ask Amelia to make for the inauguration?
12. What did Amelia call the baked good she prepared?
13. What are the ingredients for Amelia's cakes?
14. How many did she make? What did each signify?
15. What book did Amelia eventually write? Was this a work of fiction or nonfiction? What category would you file the book under?

Wheat Milling⁵

In the book, we see how life was in the late 18th century. Food production was also different back then. Wheat was milled into flour sometimes by hand in the home, but most commonly sent to mills, where it and other grains were processed into cereal or flour. One of Amelia Simmons' chores was probably to retrieve flour from the mill for her cakes and baked goods.

Materials:

- Wheat stalks (can be purchased through National Ag in the Classroom, available on their eStore: <https://agclassroomstore.com/wheat-bundle/>)
- Salt/pepper/spice grinder (optional: Wheat grinder available on the National Ag in the Classroom eStore: <https://agclassroomstore.com/wheat-grinder/>)

Directions:

1. Show the wheat stalks to the students.
2. Go over the parts of the wheat stalk with the student to familiarize the dissection.
 - a. Stalk—the entire plant
 - b. Head—the part of the wheat plant that contains the kernels
 - c. Beard—the bristle-like parts of the wheat plant that cover and protect the kernels
 - d. Kernel—the seed from which the wheat plants are grown or that people harvest from the wheat plant to grind into flour
 - e. Stem/Straw—the part of the wheat plant that supports the head and is known as straw after harvest
3. Dissect the wheat using the following steps:
 - a. Hand out stalks of wheat to the students.
 - b. Break the head off the stem.
 - c. Make a straw out of the stem by breaking it to avoid the nodes.
 - d. Lay the wheat head flat on a hard surface and pat with your hand to shake out the kernels.
 - e. Have students count their kernels.
4. Put the kernels of wheat into a spice grinder and have the students mill their wheat into flour. What simple machines are being used?
5. Talk about different ways to grind wheat. The Native Americas did it using rocks, etc.
6. Discuss the uses of wheat flour. (To make pastas, breads, desserts, etc.)

7. Have students find the gluten in wheat by chewing the kernels. Before there was chewing gum in the store, farmers made their own with grains of wheat.

Combines and Farmers⁶

1. Ask the students, “Who grows wheat?” (Farmers)
2. Next, ask the students if they can describe the steps of growing and harvesting wheat. Write the steps on the board and define each for the students (or ask for answers from the class). Ask the students if they know what machines (if any) are used for the following steps.
 - a. Planting: wheat seeds are put into the ground. (Tractors with seeders attached to them are used for planting wheat and other grains.)
 - b. Germination: seeds start to sprout up from the ground.
 - c. Growth: wheat continues to grow taller, and seed heads form.
 - d. Harvest : wheat stalks are collected using machines, called **combines**.
3. Combines are responsible for three separate operations (within the one machine):
 - a. Reaping: cutting a crop from the field.
 - b. Threshing: separating the grain/seed from the rest of the crop.
 - c. Winnowing: cleaning the seeds from any other debris or parts from the crop.
4. Ask the students, “If a farmer did not have a combine, how would a farmer plant hundreds or thousands of acres of wheat?” In most cases the labor would have to be performed by hand. Help students see that it would not be possible for farmers to produce enough food for our population without machines.⁷
5. Bring it back to the book, *Independence Cake*, and the **Discussion Questions** above and explain to students that in the early days, people would have to provide food and clothing for themselves by raising livestock and crops. Ask the students, “Why is this not always necessary now?” (because we have farmers growing these things for us, which allows us to pursue other careers) Ask the students why they think this is important, or give examples of why it is important in their lives.

Pancakes!⁸

1. Ask students what they ate for breakfast. As students name their breakfast foods, make a list on the board.
2. If anyone says pancakes, ask if their pancakes were the same as the flapjacks Amelia Simmons cooked for the Bean family in the book, *Independence Cake*. How were they similar and how were they different? (the naming; calling them pancakes vs. flapjacks, Simmons’ contained cornmeal, today they are primarily made with flour, etc.)
3. Read the page in *Independence Cake* where Amelia makes the flapjacks. Explain that **potash** is one of the first forms of baking powder, an ingredient often used in baking.
4. Ask students if they can think of any reason why cooking breakfast, or pancakes, would be scientific. Prompt them to consider measuring, mixing and heating ingredients to make something new. Some students may not have had any experience making pancake batter from scratch.
5. Share the ingredients for pancakes with the students:

1 egg
1 1/4 cups buttermilk
2 tablespoons vegetable oil

1 1/4 cups flour
1 tablespoon sugar
1 teaspoon baking powder
1 teaspoon baking soda
1/2 teaspoon salt

6. As you list each ingredient, ask the students if they know where it came from. Point out the source of each ingredient. Flour comes from wheat plants, eggs come from chickens, milk comes from a cow, etc.
7. Tell students they are going to make pancakes by mixing ingredients together inside a Ziploc bag. Write the pancake ingredients list on the board.
8. Ask students to observe and describe the ingredients before they are mixed.
9. Have students make a storyboard or sequencing chart that allows them to describe each step that goes into making pancakes. Separating the steps will make it easier for students to recognize where physical and chemical changes take place.
10. Ask the students:
 - a. Have you ever made pancakes before?
 - b. Did you make the pancakes the same way we are making them today?
 - c. Did you use all the same ingredients in your pancakes?
 - d. Where did the ingredients come from?
 - e. When we measure the flour, are we changing the substance? Why?
 - f. When we crack the eggs open, do the eggs change?
 - g. What happens to the appearance of the flour when we add the buttermilk and eggs?
 - h. What would happen if we didn't mix the ingredients together? Could we still make pancakes?
 - i. Why will the batter look different after it is cooked? How should it look?
 - j. Have you ever used a recipe before? Why are recipes important?
11. Students should use observational skills and questions to think critically about the changes that are taking place.
12. Have the students identify which steps of the process are physical and which are chemical changes (all of the actions are physical changes with the exception of the cooking of the pancake itself).
13. Ask the students why following a recipe would be important in relation to what they know about physical and chemical changes.
14. After the batter is ready, tell students that they are ready to cook the pancakes. Ask them to think about the batter and watch it very carefully as it is poured out onto the griddle.
15. Ask the students:
 - a. What state of matter is the pancake batter? (liquid)
 - b. How can you tell it is a liquid? (it takes on the shape of the container)
 - c. What would happen if we poured this liquid onto a cold griddle? (it would keep running until it reached the edge of the pan)
 - d. Why does the heat make the liquid form a circle? (the batter begins to get solid as the heat starts to cook it)

16. Explain to students that the pancake batter looks different, but it still contains the original ingredients. The batter changed from a liquid to a solid, and the substance is chemically changed because of the heat. It cannot be changed back into its original form.

George Washington Math Problems (ratios, division, and multiplication)

1. George Washington had two stepsons and one stepdaughter. What is the ration of stepsons to all stepchildren? (2 : 3)
2. Washington lived 67 years, and served as President of the United States from 1789 – 1797. What is the ratio of years he was President to his life? (8 : 67)
3. If George Washington plants 9 rows of tobacco and each of the rows have 12 plants, how many total plants does he have? (108 plants)
4. George Washington was born in 1732, and he fought in the Revolutionary War from 1776-1783. How old was he when the war started? (44 years old)
5. George Washington has 784 acres of tobacco, but he lost over half of his acreage due to flooding. How many acres survived? (392 acres)

Links

- What America’s First Cookbook Says About Our Country and Its Cuisine (article)
<https://www.smithsonianmag.com/history/what-americas-first-cookbook-says-about-our-country-its-cuisine-180967809/>
- Biography of George Washington (video)
<https://www.youtube.com/watch?v=3lXnfitSoYw>

Sources

1. <https://www.publishersweekly.com/978-0-385-39017-0>
2. <https://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/newsroom/features/?cid=nrcseprd1316224>
3. <https://www.socialstudiesforkids.com/articles/ushistory/13coloniesfarm.htm>
4. <https://www.history.org/foundation/journal/Autumn04/food.cfm>
5. <https://miaclassroom.org/edu/lesson/social/farmer.pdf>
6. <https://www.agclassroom.org/teacher/matrix/lessonplan.cfm?lpid=380>
7. https://www.agclassroom.org/teacher/matrix/lessonplan.cfm?lpid=135&author_state=0&search_term_lp=tractors
8. https://www.agclassroom.org/teacher/matrix/lessonplan.cfm?lpid=369&author_state=0&search_term_lp=wheat

K-5 Subject Areas

Reading, Speaking and Listening, Mathematics, Science, and Social Studies

Common Core/Essential Standards

Reading

- **RL.K.1** With prompting and support, ask and answer questions about key details in a text.
- **RL.1.1** Ask and answer questions about key details in a text.
- **RL.2.1** Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text.
- **RL.3.1** Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.
- **RL.4.1** Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.
- **RL.5.1** Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text.
- **RI.K.1** With prompting and support, ask and answer questions about key details in a text.
- **RI.1.1** Ask and answer questions about key details in a text.
- **RI.2.1** Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text.
- **RI.3.1** Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.

- **RI.4.1** Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.
- **RI.5.1** Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text.

Speaking and Listening

- **SL.K.4** Speak audibly and express thoughts, feelings, and ideas clearly.
- **SL.1.4** Produce complete sentences to describe people, places, things, and events with relevant details, expressing ideas and feelings clearly.
- **SL.2.4** Tell a story or recount an experience with appropriate facts and relevant, descriptive details, speaking audibly in coherent and complete sentences.
- **SL.3.4** Report on a topic or text, tell a story, or recount an experience with appropriate facts and relevant, descriptive details, speaking clearly in complete sentences at an understandable pace.
- **SL.4.4** Report on a topic or text, tell a story, or recount an experience in an organized manner, using appropriate facts and relevant, descriptive details to support main ideas or themes; adjust speech as appropriate to formal and informal discourse.
- **SL.5.4** Report on a topic or text or present an opinion, sequencing ideas logically and using appropriate facts and relevant, descriptive details to support main ideas or themes; adapt speech to a variety of contexts and tasks.

Mathematics

- **NC.3.OA.3** Represent, interpret, and solve one-step problems involving multiplication and division.
- **NC.3.OA.6** Solve an unknown-factor problem, by using division strategies and/or changing it to a multiplication problem.
- **NC.3.OA.8** Solve two-step word problems using addition, subtraction, and multiplication, representing problems using equations with a symbol for the unknown number.
- **NC.4.OA.1** Interpret a multiplication equation as a comparison. Multiply or divide to solve word problems involving multiplicative comparisons using models and equations with a symbol for the unknown number. Distinguish multiplicative comparison from additive comparison

Science

- **1.L.1.1** Recognize that plants and animals need air, water, light (plants only), space, food and shelter and that these may be found in their environment.
- **1.L.2.1** Summarize the basic needs of a variety of different plants (including air, water, nutrients, and light) for energy and growth.
- **2.P.2.1** Give examples of matter that change from a solid to a liquid and from a liquid to a solid by heating and cooling.
- **3.P.2.2** Compare solids, liquids, and gases based on their basic properties
- **3.P.2.3** Summarize changes that occur to the observable properties of materials when different degrees of heat are applied to them, such as melting ice or ice cream, boiling water or an egg, or freezing water.
- **3.P.3.2** Recognize that energy can be transferred from a warmer object to a cooler one by contact or at a distance and the cooler object gets warmer.
- **3.L.2.1** Remember the function of the following structures as it relates to the survival of plants in their environments:
 - • Roots – absorb nutrients
 - • Stems – provide support
 - • Leaves – synthesize food
 - • Flowers – attract pollinators and produce seeds for reproduction
- **3.L.2.2** Explain how environmental conditions determine how well plants survive and grow.
- **3.L.2.3** Summarize the distinct stages of the life cycle of seed plants.
- **4.P.2.1** Compare the physical properties of samples of matter (strength, hardness, flexibility, ability to conduct heat, ability to conduct electricity, ability to be attracted by magnets, reactions to water and fire).
- **4.P.3.1** Recognize the basic forms of energy (light, sound, heat, electrical, and magnetic) as the ability to cause motion or create change.
- **4.L.2.1** Classify substances as food or non-food items based on their ability to provide energy and materials for survival, growth and repair of the body.
- **5.P.2.3** Summarize properties of original materials, and the new material(s) formed, to demonstrate that a change has occurred.
- **5.P.3.1** Explain the effects of the transfer of heat (either by direct contact or at a distance) that occurs between objects at different temperatures. (conduction, convection or radiation)
- **5.P.3.2** Explain how heating and cooling affect some materials and how this relates to their purpose and practical applications.

Social Studies

- **K.G.2.2** Explain ways people use environmental resources to meet basic needs and wants (shelter, food, clothing, etc.).

- **K.C.1.2** Explain the elements of culture (how people speak, how people dress, foods they eat, etc.).
- **1.H.1.3** Explain why national holidays are celebrated (Constitution Day, Independence Day, Martin Luther King, Jr., Memorial Day, Presidents' Day, etc.).
- **2.H.1.2** Identify contributions of historical figures (community, state, nation and world) through various genres.
- **2.C.1.2** Recognize the key historical figures and events that are associated with various cultural traditions.
- **3.H.1.1** Explain key historical events that occurred in the local community and regions over time.
- **3.H.1.2** Analyze the impact of contributions made by diverse historical figures in local communities and regions over time.
- **3.C.1.3** Use non-fiction texts to explore how cultures borrow and share from each other (foods, languages, rules, traditions and behaviors).
- **4.G.1.4** Explain the impact of technology (communication, transportation and inventions) on North Carolina's citizens, past and present.
- **5.H.2.2** Explain how key historical figures have exemplified values and principles of American democracy.
- **5.H.2.3** Compare the changing roles of women and minorities on American society from the Pre-Colonial era through Reconstruction.
- **5.G.1.3** Exemplify how technological advances (communication, transportation and agriculture) have allowed people to overcome geographic limitations.
- **5.E.1.2** Explain the impact of production, specialization, technology and division of labor on the economic growth of the United States.
- **5.C.1.2** Exemplify how the interactions of various groups have resulted in the borrowing and sharing of traditions and technology.