



New Plants

Concepts

Senior family or community members are primary sources of historical information.

Family recipes are historical and scientific clues.

Human families who came to Hawaii shaped the cultural and biological diversity of our islands through food.

All people rely on plants and animals for food.

Plants are adapted to particular environments.

HCPS III Benchmarks

SC.2.3.1

SC.2.5.1

SS.2.1.1

SS.2.2.1

SS.2.7.3

Duration

2 40-minute periods for writing, homework, and one art period.

Vocabulary

Primary source

Secondary source

Adaptation

Environment

Recipe

History

Lesson 7: Family Heritage Cookbook

Summary

Each student will conduct an interview with one or more family members to collect information about their family origins and their family food traditions. Students will copy down a favorite family recipe, which includes a food plant that may or may not be grown in Hawaii. Teachers help students turn interviews, artwork, and recipes, and gardening ideas into a cookbook that can be bound and used for fund-raising, planning a class garden, or donated to the school library.

Objectives

- Students will be able to investigate the history of families using grade-level appropriate primary sources (i.e. interviews, recipes).
- Students will be able to organize information in chronological order.
- Students will recognize that they are animals that depend on plants to survive.
- Students will be able to describe a variety of the earth's natural resources (plants, animals, water, soil) and how people use them.

Materials

Per student:

- Paper and pencil
- 5 x 8 index card

For Class:

- Art materials of teacher's choice for recipe book (watercolors, crayon, or colored pencils).
- Binding materials for recipe book (some suggestions at end)
- Computer Lab time, if available



Making Connections

Kids love food! Share your favorite family recipe—bring it in, or just describe it in all its mouthwatering glory. Ask students to describe their favorite foods! What does grandma make better than anyone else? You may need to steer them away from listing all their favorite desserts towards good, healthy meals that might include a vegetable. Remind students about their bok choy plants and how the plants were developed for very cold climates in northern China, and then re-selected for growing in Hawaii’s hot, humid weather.

Teacher Prep for Activity

1. DECIDE ON SCOPE/SPECIAL CONSIDERATIONS

This can be a simple two-hour activity or a lead in to an elaborate fund-raising, garden-growing, or weather station activity. Read through the lesson extensions to decide what works for your needs and budget.

The family focus of this activity can bump up against the reality of broken families among our students. One teacher, who was aware of a particularly difficult family situation, asked *all* the students to interview school staff members, instead of relatives. The teacher was very happy with the results: students interacting with the custodians, cafeteria staff, secretaries, and other important members of the school community who often have little recognition or contact with the students.

2. PREPARE A BRIEF FAMILY STORY TO SHARE WITH STUDENTS

Think of your family history in Hawaii, and choose a recipe that has special meaning for you and your family. Think of a story you can share with the students about this food, and how it represents your family arrival in Hawaii.

3. PREPARE A FAMILY RECIPE CARD OF YOUR OWN

Draw a big note-card shape, and write your recipe in it, on a chart paper or the board. Use big letters, with ingredients first, then numbered steps.

4. STAPLE A NOTECARD TO LINED PAPER FOR EACH STUDENT

Students will use the note-card for their recipe, and the paper for their interview questions. If you wish, you can add numbers to the papers ahead of time, with evenly spaced intervals for questions 1-5.

5. SCHEDULE COMPUTER TIME

If your class has access to computers, you may want them to type up the final versions, particularly if you will be binding these to distribute.

SECOND DAY

6. COLLECT COMPLETED INTERVIEWS AND RECIPE CARDS.

7. CHECK TO SEE IF THE WRITTEN MATERIAL LOOKS USEABLE.

Check in with students who have very little written down to see if they will be able to complete the activity, or need more help.



8. ARTWORK

Depending on whether the project will be bound, you may need to set some parameters for the artwork that will accompany the recipe. Decide on a uniform or haphazard collection of media. Either cut paper to the size that will be used, or print sheets with an outline (box) indicating the correct size. Mark paper where the edges will be bound so no important details get lost. You can find “story paper” which has a box for art and wide-spaced lines for text on each page on Internet sites or in packets at Wal-Mart. Also decide if students should only draw/paint the food, the people, the plants growing, or if it’s up to them

Background

Hawaii’s natural environment is remarkable in its incredible diversity of plants, both native and introduced. Hawaii’s cultural environment is no less diverse; our population celebrates a history of frequent arrivals from all around the world, with each wave of immigrants bringing unique ideas, traditions, and of course, food! As described in Lesson 2, whether these people arrived by voyaging canoe, or jet plane, almost all new arrivals made sure to bring their favorite food plants. Some were already adapted to tropical islands, such as breadfruit, bananas, or taro. Others, like bok choy, had to be carefully adapted from their cold-weather origins in Northern China. Farmers in Hawaii today are still carefully filling out permits to import raspberry varieties that just might be able to tolerate our warm autumn nights, or peaches that will flower without the shock of winter. They cross-pollinate Kona avocados to try to achieve buttery fruits on trees that can survive the bacteria in Hilo’s wet soil. The University of Hawaii uses historical, low-tech hybridization, and futuristic, high-tech genetic engineering to provide farmers with the best plants to produce the best food for Hawaii’s people. Why?

The answer is because all plants (and animals!) are adapted to particular environments. Adapted means that over long periods of time, through either natural (evolution) or artificial (breeding) selection, they grow and reproduce best in a climate and in soil conditions that are just right for them. It doesn’t mean they *can’t* grow where the climate is a little different...but they could do better in a place more like “home.” And if the environment is *very* different, they really might not be able to survive—it’s easy to imagine a pineapple freezing to death in Alaska but an Arctic plant may not do very well in humid Hilo either. The kinds of foods people brought to Hawaii give modern anthropologists clues to what was common, valued, and available in the homelands of immigrant peoples. These same foods can give biologist (or primary students) a clue as to what the environment must be like in those places—without ever picking up an atlas, or taking any measurements.

In this activity students will collect family stories and recipes using relatives as primary resources. The idea of primary (first person recollections) and secondary (retellings, history books, internet) sources is demonstrated in the interview (primary) and the recipe book they create (secondary). Recipes should, if at all possible, include a food plant connected to their ethnic background, that is now commonly grown or used in Hawaii—but it doesn’t have to be. If you have a student from blueberry country, that’s a pretty neat thing to talk about; why *don’t* we grow blueberries here? If many students share a similar ethnic background, teachers may want to assign the food item to each student, and ask parents to help them to find a recipe that



uses it. Students will “publish” their family history, example of plant or cultural artwork, and their recipe in a classroom cookbook.

Note: This activity requires active participation from parents or relatives. Where this seems unlikely to occur, teachers can help students identify “interview-ees” from among school staff who are willing to participate.

Recipe: an ordered list of instructions describing how to prepare a food item

Primary source: a source of information in the first person: autobiography, story, artwork.

Secondary source: a source of information written or recorded by someone other than the person who observed it or to whom it happened.

History: that which is past; the study of the past; a factual account of something in the past

Adaptation: hereditary trait that improves an organisms ability to survive and reproduce

Environment: the abiotic and biotic factors experienced by an organism; the world that surrounds you, including all living and non-living parts.



Procedure

1. DISCUSS YOUR FAMILY HISTORY IN HAWAII

Share a recipe from your family history, either by making and sharing it, or describing it in detail to the students. Tell a story about your own childhood and the occasions on which you ate this meal, and why it represents your family culture or history in Hawaii in some way (an example is given at the end of the lesson). Be sure to tie the discussion back to bok choy from China.

2. ASK STUDENTS TO TELL ABOUT THEIR FAVORITE FOODS

Ask students if they have any favorite family meals. Ask if anyone in their family grows their own food. Can anyone tell how their family came to Hawaii?

3. INTRODUCE RECIPE BOOK IDEA

- a. Explain that you would like to learn more about their families and food traditions, and put them in a book to share with others (next year's class, put in the library, sell for class fundraiser...).
- b. Review the fact that you just shared a story, and a recipe.
- c. Ask: If you were making a storybook, what else would you put in it? [pictures!]

4. WHO WOULD YOU INTERVIEW?

Ask students, if they wanted a recipe and a history about their family, whom should they ask? [Oldest auntie, grandparent, mom]

5. BRAINSTORM INTERVIEW QUESTIONS:

Ask students what they would like to ask their relative. On a chart paper or board, list good interview questions students the students generate. Interview questions are usually not Yes/No questions!

Some good questions might include:

- a. Tell me the story of how the first person in our family arrived in Hawaii.
- b. How did the first people from our family's ethnic group(s) come to Hawaii?
- c. When did they arrive?
- d. When and where were you born?
- e. Why did you/they move to Hawaii?
- f. What were things like in _____ (place of origin) at that time?
- g. What did they do for a job there? What about in Hawaii?
- h. Where did they get their food?
- i. What did they miss most about home?
- j. What were some things they might have brought with them to Hawaii?
- k. Foods:
- l. Tools:
- m. Celebrations and customs:
- n. Would any of those have been new to Hawaii?
- o. What is your favorite old family recipe?
- p. Does it have anything in it that our ancestor might have grown in a garden?



6. NARROW DOWN THE LIST:

Many students are just beginning writers. Writing the answers to all these questions would be too much. Have students individually choose a few they really want to know the answers to.

- a. Pass out lined paper
- b. Students number their paper 1-5, evenly spaced down the left side of the page.
- c. Students title the paper “Interview with _____” (so they are thinking of a specific person when they choose their questions).
- d. Students choose 5 questions from the list, and write them down next to the numbers on their paper, leaving space for the answers.

7. REVIEW TAKING NOTES DURING THE INTERVIEW

- a. How can they best jot down a lot of information, quickly, without writing down long sentences?
- b. What are the key words that will help them remember the answers to these questions tomorrow in class?
- c. Discuss strategies, including having the adult write the answers for beginning writers.
- d. Tell the students it is important to listen, understand what their relative is saying, and then ask for help writing.

8. POINT OUT NOTECARDS STAPLED TO THE PAPER.

- a. Show the students your example of an enlarged recipe card.
- b. Your example should have a list of ingredients and amounts (with units!) first, followed by numbered steps.
- c. Tell students they will write down the family recipe on this card.
- d. Ask students to try to write down the recipe themselves, but if it is too hard, their relative can help them.

BREAKPOINT



9. COLLECT RECIPES AND INTERVIEWS

Check for completion and to see if some students may need more help completing their assignments, then pass back.

10. PASS OUT NEW LINED PAPER/GO TO COMPUTERS

- a. Discuss ways to turn their interviews into stories.
 - i. Do their questions follow a logical order?
 - ii. A time sequence maybe?
 - iii. Is it a list of items? Or is each answer more like a short chapter in a story?
- b. Allow students to begin working on a draft of their story. Circulate to watch for students getting overwhelmed by including too much, or who chose only questions with single-word answers.

11. PASS OUT NEW RECIPE CARDS OR USE COMPUTERS

Help students neatly reprint or transcribe their recipes so they are legible.

12. ARTWORK

- a. Can be done any time.
- b. Pass out prepared paper and art supplies
- c. Remind students of binding edges or to stay within designated size/box
- d. Tell students what you want them to paint (Family? Food? Growing plants?)
- e. After art is dried, scan into computer for easy book making or to make copies to go home.

Assessments

Assignments that meet or exceed expectations will have well-organized, chronological histories. History will describe the family arrival or early days in Hawaii. History will include at least one reference to food or growing plants. Recipe will include at least one edible plant that is grown in Hawaii or in the family's homeland. Recipe will include a list of ingredients, including amounts, units, and numbered steps on a note-card. Artwork will use materials assigned by teacher, in a specified size, and will follow guidelines set by teacher (a picture of food, family, or farm, but not a sports car, for instance).

Resources

Bookbinding: From high tech to low tech, the Internet is your friend here. If you are working from computers, and a nice budget, you can scan in artwork, and digitally send the whole class project to a company like www.blurb.com, which can make a real, bound book starting at \$13. At the other end of the scale (but no less worthy) you might prefer to paste the recipe card below the artwork, line it up with the matching story, stack the whole class's work neatly, punch holes, and tie with yarn. Then there is everything in between. One very nice option is to send all the original work through a color scanner/copier, then you can send the originals home, and have nice crisp sheets to bind.



Irene Taylor's Teaching Children Writing website had some great instructions, tips, and encouragement for the teacher interested in bound books:
<http://www.suite101.com/lesson.cfm/17372/612/1>

Extension Activities

With all this talk about food, is anyone hungry? Arrange a class party/picnic when parents can bring or send the prepared creations. Combine this with groundbreaking for your class garden, or another event you could really use some well-fed volunteers to help you with!

Math Extensions:

All those measurements: cups, teaspoons, temperatures, and fractions. Whatever unit of math you are in, extract some flavor from these recipes. Plastic measuring cups are a great manipulative for expressing fractions as words or pictures, and if you have a feast day, there will be lots of chances to slice into food fractions.

Example history and recipe:

My mother left Georgia for Hawaii in 1965, to experience the "Beach Boy" surfing era of Waikiki. Among the foods she experienced for the first time were ripe guava, rice balls with ume, and Chinese foods from McCully Chop Suey. Although she loved Hawaii, she was not able to find anyone who made good "Southern" food that she was used to. No salty cornbread, collard greens, black-eyed peas, or country fried steak. One familiar food she was able to find everywhere, however, was the vegetable that at one time saved the Georgia State economy: the peanut. A Georgia man named George Washington Carver was the hero who invented peanut butter, peanut oil, and dozens of other uses for the humble, ground-dwelling bean, which was once only pig food. This Georgia favorite was probably introduced to Hawaii by the Chinese, who had first obtained them from the Americas! Living on a tiny salary, my mother was very happy to find the cheap, filling boiled peanuts everywhere.

Recipe for boiled peanuts:

1-pound loose raw peanuts (in the shell)
1/4 cup rock salt
Four anise stars (for Chinese style)

Place peanuts in a large pot. Add water to 2 times the depth of the peanuts. Add salt and star anise. Bring to a boil, then simmer, covered, for one hour, or until most peanuts have sunk to the bottom of the pot. Remove one peanut and cool under running water to check if done. Peanuts are pau when they sink to bottom of pot: husks split easily, and nuts are tender, but not mushy.