

THE THREE SISTERS

NATIVE AMERICAN FARMING TECHNIQUE

Vocabulary: legend

Description

Students learn about the companion-planting group known as the “three sisters,” and compare facts about these plants to Native American legends and stories that feature them.

Guiding Question

Which of our foods grow here in Oregon?

Big Idea

People and their environments affect each other.



FOURTH GRADE

Learning Objectives

At the end of this lesson, students will be able to name the “three sisters” plants, and to compare factual information with legends about them.

Materials

One or more Native American legends featuring the Three Sisters. (Find online or in books. See resources list for likely sources.)
Optional: Illustration 4F2a and 4F2b.

Preparation

Find and choose Native American story or stories. Print, copy, or prepare an oral retelling of the stories.
Copy or enlarge Illustration 4F2a and 4F2b, if using.

Introducing the Lesson

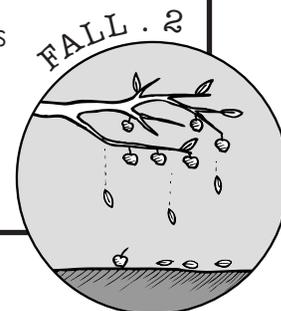
Activate prior knowledge. Show the students some beans, corn, and squash seeds, then discuss each of them. Ask questions such as these: *How do these compare to other bean, corn or squash seeds that you have seen? What colors do they come in? Are there variations in types of beans? Corn? And Squash? What is the difference between fresh beans (corn and squash) and dry (shell) beans, corn, and squash? Do you like to eat these foods? What is your favorite way to eat these foods?*

Engage student interest. Tell students that beans, corn, and squash have a lot of history as foods. People around the world have grown and eaten these foods for thousands of years. Here in Oregon, we know that people have been eating them for hundreds of years. Tell students that they are going to learn more about the history of beans, corn and squash, and learn about Native Americans through their foods and learn some Native American legends, also known as traditional stories, that explain why foods are important to Native American lives.

Procedure

1. *Introduce three sisters stories.* Tell or hand out to students printed copies of the Native American stories that you have chosen. If you've handed out printed copies, allow students time to read silently, or read the story aloud to them (or have volunteers read aloud).

Lesson time: 45 to 60 minutes



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2. *Introduce three sisters facts.* Before or after students read the Native American stories, show students Illustration 4F2a and 4F2b, and provide factual information about the three sisters method of planting (Visit the online resources listed below for more facts):

- Several different Native American tribes refer to corn, beans, and squash as the “three sisters,” because they grow well together in the same mound of soil. The corn stalk provides a ladder or trellis for the bean vines to climb. The beans help make the soil better for the corn and squash. Their vines also keep the corn stalk steady when there is a lot wind. The squash grows on the ground below the corn and beans. Its leaves shade the roots of the corn and bean and help keep the soil from drying out when it is hot. The shade of the squash leaves also discourages weeds from growing near the three sisters plants (good, since weeds compete with other plants for the nutrients in the soil). In addition, the prickly hairs on the stems of the squash plant discourage bugs, racoons, and other pests that would damage the corn and beans.
- Indian nations all over the country include the three sisters in their cooking. A historically popular dish made of beans and corn was called succotash. People all over the U.S. still enjoy eating succotash today.
- Although inland Oregon tribes such as the Klamath or Nez Perce may have grown the three sisters, some of the coastal tribes, such as the Chinook, Tillamook, Coast Salish, and Tlingit, may not have grown much of their own food, instead they foraged for food in fields, marshes, ocean, and forests. Tribes that lived along the Pacific Ocean coast got a lot of their food from the sea. They caught fish and shellfish, and hunted whales and other mammals. Whale oil was very important for cooking and other uses. Tribes that had no ocean nearby got fish and whale oil from the coastal tribes. In exchange, they traded things that they had, such as corn, beans, and squash that they grew.

3. *Compare facts and stories.* Have students point out the similarities and differences between the bean, corn and squash facts you've presented and the legends they read. For example, how do the details of the story compare with the gardening benefits of growing the “three sisters” together?

Assessing Student Knowledge

Conduct informal assessments of your students' knowledge by observing their reading aloud skills, if you have them read stories, and assessing their understanding of the three-sisters stories and facts from their contributions to class discussions.

Extensions

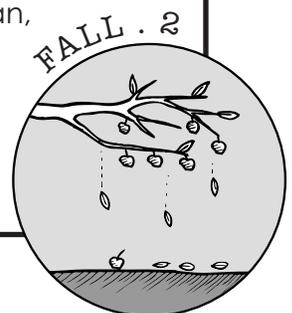
1. *Harvest beans, corn or squash.* Check with the school garden coordinator to see if any of these foods are ready to harvest in the school garden. If so, harvest to share with the school community for immediate eating, or to dry and save shell beans, corn kernels, and/or squash seeds for later planting or eating.

2 *Learn about growing the three sisters.* Read seed packets to learn basic soil, sun and water requirements, or do online research to find out the best bean, corn, and squash varieties for where you live, or to learn more about how beans and other legumes help the soil. Try growing bean or squash seeds indoors. Have each student plant a seed to grow in the classroom. Chart the growth.



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3. *Eat the three sisters.* Consider making succotash, a traditional Native American dish (several recipes are available online); roasted squash, and/or roasted squash seeds. You could also serve corn on the cob or cook dried beans by following the basic bean cooking instructions below.

Basic Dried Bean Cooking Instructions

Pick over beans and rinse thoroughly in cold water. Place cleaned beans in a bowl of fresh cold water, cover and soak overnight at room temperature; drain and rinse well. Next, place beans in a saucepan with water to cover, bring to a boil and simmer gently about 60 minutes, or until tender. Drain and rinse well. Season with olive oil, salt and pepper. Serve with bread, crackers, and fresh vegetables such as carrots.

4. *Pick favorite plant names.* There are many varieties of beans, corn and squash. Print out a list and have the students vote on their favorite name.

Find bean names here: <http://www.purcellmountainfarms.com/Corona%20Beans.htm>

Find corn names here: <http://www.victoryseeds.com/corn.html>

Find squash names here: <http://whatscookingamerica.net/squash.html>

5. *Map beans, corn and squash.* Find out where in Oregon farmers grow the three sisters, and mark the regions on a state map. (Note that among the states Oregon is the #2 producer of snap beans. Does that mean they are grown in a lot of places in the state? or in one area?)

6. *Study plant history.*

Visit <http://www.whfoods.com/genpage.php?tname=foodspice&dbid=59> to learn about the route that lima beans (the most common type of bean eaten by Native American tribes before Europeans settled in North America) may have traveled from their origins in South America before they were introduced to Native American tribes in our area. Visit <http://www.hgtv.com/landscaping/squash-has-close-history-with-humans/index.html> for an interesting article on the ancient history of squash. Native Americans may have developed corn as we know it, according to the article at <http://www.nativetech.org/cornhusk/cornhusk.html>

Map the world travels or create a timeline of the history of one of the three sisters.

Books & Resources

Books:

Keepers of Life: Discovering Plants Through Native American Stories and Earth Activities for Children, by Michael J. Caduto, illustrated by Joseph Bruchac (1997, Fulcrum Publishing)

Native Plant Stories by Joseph Bruchac (1995, Fulcrum Publishing)

The Sun's Daughter by Pat Sherman, illustrated by R. Gregory Christie (2005, Clarion Books) – A *porquoi* tale about the seasons that features the “three sisters,” Maize, Bean, and Pumpkin.

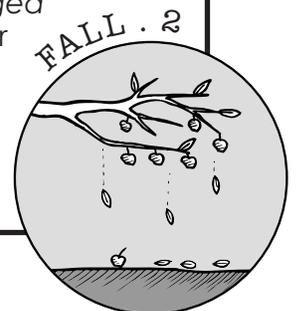
Tomatoes, Potatoes, Corn, and Beans: How Foods of the Americas Changed Eating Around the World by Sylvia A. Johnson (1997, Atheneum Books for Young Readers)

In the Three Sister's Garden by JoAnne Dennee, Jack Peduzzi, Julia Hand, Carolyn Peduzzi (1996, Kendall/Hunt Pub. Co.)



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Web Sites:

American Indians of the Pacific Northwest Collection <http://content.lib.washington.edu/aipnw/> - This digital database maintained by the University of Washington is a better resource for teachers than students. It offers a treasure trove of photos and writings by and about the history of the Pacific Northwest tribes.

Creating a Three Sisters Garden at KidsGardening <http://www.kidsgardening.org/node/12033>

Native American Plant Mythology <http://www.native-languages.org/legends-plants.htm>- links you to several stories from different Native American tribes about or involving the three sisters and many other plants.

Native American Food <http://www.native-languages.org/food.htm> - Part of a section called "Native American Facts for Kids," this page discusses the variations in food growing, gathering, and cooking among different tribes of the Americas.

Native American Tribes of Oregon <http://www.native-languages.org/oregon.html>

Pacific Northwest Native Americans in Olden Times for Kids <http://nativeamericans.mrdonn.org/northwest.html>



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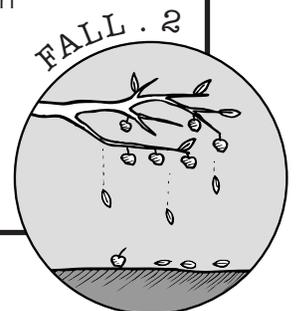
OR. Dept. of Ed. Key Standards

Oregon Social Sciences Academic Content Standards:

- 4.1. Identify and describe historic Native American Indian groups that lived in Oregon prior to contact with Europeans and at the time of early European exploration, including ways these groups adapted to and interacted with the physical environment.
- 4.5 Distinguish between fact and fiction in historical accounts by comparing documentary sources on historical figures and events with fictional characters and events in stories.

Oregon Common Core State Standards for English Language Arts:

- 4.RL.9 Compare and contrast the treatment of similar themes and topics (e.g., opposition of good and evil) and patterns of events (e.g., the quest) in stories, myths, and traditional literature from different cultures.



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Corn... Carbohydrates
Beans... Protein/Amino Acids
Squash... Vitamins (A+C)

