

Lesson Plan: The Three Sisters

Common Core Standards:

NGSS.5.LS2.1

Next Generation Science Standards

Grades 5-5

Standard: Develop a model to describe the movement of matter among plants, animals, decomposers, and the environment. [Clarification Statement: Emphasis is on the idea that matter that is not food (air, water, decomposed materials in soil) is changed by plants into matter that is food. Examples of systems could include organisms, ecosystems, and the Earth.]

[Assessment Boundary: Assessment does not include molecular explanations.]

Time: 3 weeks, two sessions at an hour each, one at 30 minutes.

*This is a more technical project and should span between two school years to see success; planting in late May and Harvesting in the Fall of the upcoming year.

Objectives:

- Learn about Native American culture
- Introduce codependent plants (ecosystems)

Resources:

- “Three Sisters” Story
- “Three Sisters” powerpoint
- Corn seeds
- Bean seeds
- Pumpkin/squash seeds
- Soil
- Water

Activities:

Week 1: (Early May) Learn the story of “The Three Sisters” and begin the process of planting the sisters

Share the story about the “three sisters”.

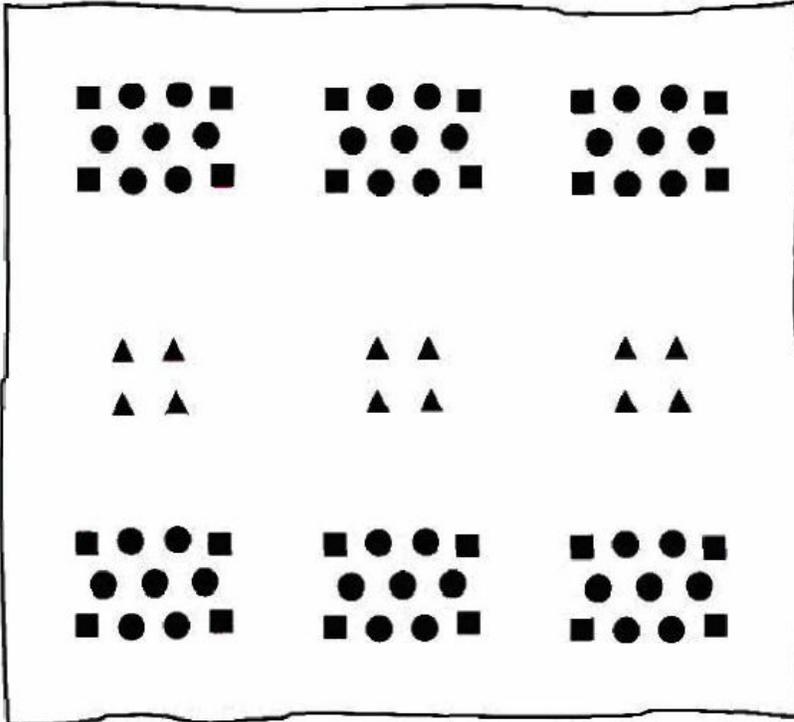
- <http://thefoodproject.org/blog/2010/06/04/legend-three-sisters>
- A hard copy can also be found at any local library

Discuss the importance of conscience farming to the Native Americans, and how they needed to produce enough food to last them through the winter.

It is key to have the students understand that the three crops will be planted almost at the same

time, almost on top of each other so they can use one another for resources.

Following the discussion, visit the garden. Plant the corn, or show the students where you have planted the corn. Use the diagram below as a guide to the planting process. Know that you are not limited to this design and feel free to try other patterns. Just make sure that the plants are close enough together to use each other as resources.



Alternative planting method: Try planting the pumpkins in a row of hills between the corn and beans. This method is used more frequently among other native peoples, such as the Hidatsa. Do not feel limited to these designs. Feel free to try your own planting methods!

● corn seed ■ bean seed ▲ pumpkin seed

Week 2 - (Beginning of June) Learn how the Native Americans used the three sisters. Plant beans and squash

Revisit the story of the “Three Sisters.”

Using “The Three Sisters” Powerpoint engage the students more about Native American culture and how they used corn, beans, and squash as food.

When the corn plants are about 6 inches high, pole beans and pumpkins/squash can be planted around the corn plants. Genuine Cornfield or Scarlet Runner bean and Connecticut Field or Small Sugar pumpkins are heirloom, non-hybrid varieties that are readily available, yet “authentic” crops for your project.

Week 3 - (Early September) harvesting of crops

All three crops should be ready to harvest. Take the kids out and show how all three crops (the corn, beans, and squash) grew together at the same time. Show what each crop should look like if ripe, then have the students go and harvest all the ready plants.