New Earth Classroom

ACTIVITY 4 CORN & COMPANION PLANTING: Four Friends Skit



Following are three activities that focus on corn as a staple food and companion plant. Each activity can stand alone, or students can rotate between them, spending 15-20 minutes at each activity station. We recommend having no more than 10 kids do each activity at one time.

Here is a summary of what each activity entails:

Four Friends Skit

SUMMARY

Students participate in a short skit that shows how the Four Friends, also known as Four Sisters (corn, squash, beans and sunflower), have acted as companion plants for centuries. The adult leader narrates a story while students wearing simple costumes to represent the four crops demonstrate their dependency on each other. Students also fill the roles of the sun, earth, and sound effects for wind and rain.

Masa Grinding Students take turns grinding corn into masa using a replica of a traditional stone metate and mano. If possible, they use corn native to the students' home region that has been soaked in water overnight, which is how corn for masa is customarily prepared. While students are grinding the masa, the adult leader talks about the meanings of "metate" and "mano," where corn comes from, how corn is grown, and how we use corn.

Corn Tortillas

Students flatten prepared masa balls in a tortilla press, or using a rolling pin or jar, and then the adult leader cooks their tortillas on a hot plate. As students prepare and eat their tortillas, the group discusses the translation of "tortilla," how masa harina is prepared, and how tortillas are used in regional cuisine.



FOUR FRIENDS SKIT

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LEARNING	 Students will discuss companion plants and ways plants assist and protect oth- er plants when they grow together.
OBJECTIVES	2. Students will examine specific examples of various companion plants.
	 Through role play, students will demonstrate how four companion plants (maize/corn, beans, squash and sunflowers) help each other grow by providing protection from weather, making nutrients available, and attracting pollinators.
KEY WORDS	maize, companion plant, symbiotic relationship, pollinators
EQUIPMENT	 Simple costumes for Maize (corn), Bean, Squash, Sunflower, Sun, Earth Popsicle sticks or pieces of paper with each role written on them for students to pick Skit script for narrator
	I. <u>COMPANION PLANTS</u>
COMPANION PLANTS	 A. What is a companion? (someone whose company you enjoy; someone you want to spend time with)
	B. Just like people and other animals have companions, so do plants.
	C. Some plants prefer to grow near other plants because they improve growing conditions. Plants that help each other grow have a symbiotic relationship.
	D. Examples of Companion Planting : (Do students know any?)
	1. Tomatoes & basil (Basil repels some pests from tomatoes.)
	 Tomatoes & marigolds (Marigolds attract beneficial insects to help tomatoes pollinate.)
	3. Carrots & leeks/onions (Onions repel the carrot fly.)
	 Radishes & cucumbers (Radish roots break up compacted soil and improve air flow and water drainage for cucumbers.)
	5. Squash & dill (Dill attracts predatory wasps that feed on a wide range of insects that might eat the squash.)
	II. FOUR FRIENDS (aka Four Sisters)
FOUR FRIENDS	A. We are going to focus on four crops cultivated by native people of North America: maize (corn), squash, beans (that climb) and sunflowers.
	B. Native Americans planted these companion crops together be- cause the plants help each other, resulting in healthier plants and more food.
	C. We're going to do a skit to demonstrate how these four plants help each other grow

each other grow.

FOUR FRIENDS SKIT

III. FOUR FRIENDS SKIT

A. Students draw sticks/papers to determine which students are cast in which roles.

Cast Members: Maize (corn), Bean, Squash, Sunflower, Sun, Earth Audience members are Rain and Wind.

- B. Instructions for the skit:
 - 1. When students hear their characters mentioned in the narration, they act or sound out their parts in the story. For example, when the narrator says: "**Squash** sprouted and grew along the ground around Maize and Bean, spreading big leaves to shade the soil, keeping it moist and cool," the student representing squash will stretch along the ground near Maize and Bean.
 - 2. When **Rain** is mentioned, audience members will make rain and thunder sounds. When **Wind** is mentioned, the audience will make whooshing and blowing sounds.
- C. THE SKIT (adult leader narrate):

Once upon a time, a beautiful plant named **Maize** grew in a field. As the summer **Sun** gave its heat, and the monsoon **Rains** poured down, **Maize** grew taller and taller.

But with the monsoon **Rains** came fierce **Winds** that blew across the field, And **Maize** swayed in the winds, worried s/he would fall.

Until one day, **Earth** brought a companion and planted **Bean** at Maize's feet.

Bean grew, wrapping vines around Maize's tall body So when the winds blew across the field, **Bean** held Maize tight, keeping Maize from falling.

As **Bean** grew up toward the sun, **Maize** said: "wrap your vines and tendrils around me, I will support you." And the companions were happy together.

But the **Sun** was so hot, and the ground around the two crops got dry.

So **Earth** brought forth another companion and planted **Squash** at the feet of Maize and Bean.

Squash sprouted and grew along the ground around Maize and Bean, spreading big leaves to shade the soil, keeping it moist and cool.

Squash also helped keep away bugs that would eat Maize and Bean, and her/his leaves blocked other plants that might grow there and compete for water.

Bean was thriving, and s/he invited special bacteria to live on her/his roots, and they helped feed Maize & Squash with nitrogen and nutrients in the soil.

THE SKIT adult leader narrate And **Maize** supported the companions by holding up their vines toward the sun.

But as **Maize** and **Bean** grew, birds became more interested in their delicious fruit and seeds.

So **Earth** brought forth another friend, **Sunflower**, and planted her/him among the other crops.

Sunflower quickly grew tall and helped support **Bean's** vines. S/he also lured the birds away from **Maize** by allowing them to eat her/his own tasty seeds.

Sunflower attracted beneficial insects, called pollinators, for all the plants. These insects helped the Four Friends by visiting their flowers and spreading pollen among them. This helped them make more fruit and seeds.

The people of the land saw how these **companions** helped each other, and to this day, they plant the **Four Friends** together in their fields.

- IV. **REVIEW** how the Four Friends help each other
 - A. How did Bean help Maize? (Bean's vines held on to Maize to keep Maize from blowing over in the wind.)
 - B. How did Maize help Bean? (Maize supported Bean's growing vines.)
 - C. How did Squash help Bean and Maize? (Squash's large leaves shaded the soil around Maize and Bean, keeping it cool and moist. Squash also helped keep bugs away, and Squash's leaves blocked other plants from growing around Maize and Bean and competing with them for water.)
 - D. How did Bean help Maize and Squash? (Bean, and other legumes, host bacteria on their roots that make nitrogen and other nutrients in the soil available for surrounding plants.)
 - E. How did Sunflower help Maize, Bean and Squash? (Sunflower's seeds helped lure birds away from Maize's seeds. Sunflower's colorful yellow petals also attracted pollinators that help plants grow more fruit and seeds.)

REVIEW