



4th Grade Fall

Center 1: Nutritious Harvest Activity

Location: Garden

1. Once in the garden, take a few minutes for students to acquaint themselves with what is currently happening in the garden. This is a good time to share about what they **notice or wonder**. Remind students that many of them planted these very plants as seeds or sprouts back in the spring in 3rd grade!
2. To set the goal of the lesson, ask the class a series of questions about common foods, challenging them to pick the more nutritious options between two foods. Rather than saying that a food is bad for you (which might convey judgment and create negative feelings that follow), ask which food has more nutrients. After each one, you can ask, “Does that nutritious food grow in a garden?” For example:
 - Carrots or Ice Cream. Which one has more nutrients? Do carrots grow in the garden? (yes!)
 - Zucchini or Cheetos. Which one has more nutrients? Does zucchini grow in the garden? (yes!)
3. See if the students can draw any conclusions or find patterns from that set of questions and answers. Hopefully they start to notice that there are many health benefits from plants that grow in the garden, and that more processed foods are less nutritious, and not directly grown in a garden. Students will likely know what is healthy, but maybe not why. Explain that today, they will try to figure out why the garden produce is considered healthy.
4. Give each pair of students up to two laminated Garden Nutrition cards (21 total) from the GTT Lesson Bin. Remove the two laminated cards that list the health benefits of vitamins and minerals, and tell students that these two special cards (pictured) will be out on display for reference as they learn about their vegetables. They will also need a clipboard, a Garden Nutrition worksheet (from bin), and a pencil. Tell the students their assignment:

- **They will need to find the vegetables represented on the cards.** Locating their assigned vegetables may be simple, or it may take some detective work as some of the plants may have flowered or gone to seed (for example, the lettuce plant will no longer look like a big head of lettuce, it will have a large stem with flowers).
 - **Students should read their laminated nutrition cards and record the natural history and health benefits** related to vitamins and minerals for their plant on the Garden Nutrition Worksheet. After this lesson, the charts can be pasted into their science notebooks (each student can use one half of the page).
 - **They will have ~10 minutes for this activity.**
 - **After the activity** students should turn in their laminated pages to be placed back into the bag. Also, students can return clipboards, pencils, and split their worksheets in half to add to their science notebooks in the classroom.
5. Now that the students have learned about the health benefits of some of the garden plants, it would be great to sample some of the produce. Explain that they will be working with the help of adult volunteers to harvest **some** of the ripe vegetables, and then will have a chance to sample some too! Refer to the [Harvesting Tips and Recommendations \(Bilingual\)](#) sheet in the bin for specific guidance on how to harvest, handle, and wash produce. Set the following expectations for the class:
- This activity will be done by each 4th grade class, so we need to be careful to only harvest some of what is available and ripe, not all.
 - Not all students will harvest each type of vegetable.
 - Be gentle! Most plants will continue to produce food, so harvesting should be carefully and with intent to preserve growing plants.
 - **Please do not harvest the following, as other classes have lessons with harvests too (see chart).**
 - **Pumpkins**
 - **Sunflowers**
 - **Garlic**
 - **Root vegetables**
 - Bring back harvested produce to the outdoor classroom.
 - Sanitize their hands.
6. Gather all the students in a circle. Celebrate the bounty of their harvest and give appreciation for the soil and plants that provided the nourishing food, along with the

PreK	Pumpkins and Winter Squash
Kindergarten	Garlic
1st Grade	Sunflower Seeds
2nd Grade	Root Vegetables (not radish or garlic), Lettuce (Spring)
3rd Grade	Radish
4th Grade	All other vegetables (not root vegetables, sunflowers, or pumpkins).
5th Grade	Anything left when winterizing the garden

students and volunteers that tended the garden! Remind students that many of them planted these very plants as seeds or sprouts in the spring in 3rd grade!

7. **One or more adults should start to prepare some vegetables for sampling**, and can choose students to help wash the produce in the freshwater bins first. Students are not to be in charge of the cutting board and knife, but may assist with the child friendly knives. Refer to the [Harvesting Tips and Recommendations](#) for washing and storage tips. Suggested veggies to taste are pole or bush beans, cucumber slices, small tomatoes, kohlrabi (avoid the peel), and herb leaves. While waiting to sample, take a few minutes to reinforce the nutritional elements of the foods that the group has harvested. Hold up a vegetable and have a student who studied that vegetable earlier explain something they learned about that vegetable.
8. **Time to sample!** Some students may not have sampled these vegetables before and may be hesitant. Encourage them to try something new and celebrate it if they do, but sampling is not required. Students can share what ***they notice and what they are reminded of*** as they sample the vegetables.
9. Remaining produce can be sent home or given to the teachers. You can use the bags, twist ties, sharpies and rubber bands to facilitate the distribution of produce. It would be great to send produce home and follow up in a few days with how families were able to make use of their harvest share!

Center 2: Indigenous Uses of Plants Activity

Location: Outdoor Classroom

1. Now that we discussed the nutritiousness of garden fruits and vegetables, to set the goal of this lesson, ask the class to consider other uses for plants in the school garden. Ask students to turn and talk to a partner about the ways these plants are useful in their lives and the lives of others. After students have brainstormed, ask them to share their answers with the class.
2. Put the students in groups so that there are 6 groups total. Pass out the [Plant Uses Worksheets](#) (laminated sheets) as well as a dry erase marker, and give the students 5 minutes to fill out the front side (pg. 1) of the worksheet. Ask students to consider other ways (more than providing food) that humans use the plants on the worksheet, keeping in mind there are no incorrect answers. There might be many ideas for each plant, so take a few moments after the worksheets are complete to have the students share their answers.
3. Focus the students attention on the guiding question: **How is our relationship with the garden similar or different to Indigenous People's relationship with plants?** Explain that most cultures have a history of relying on plants for many parts of their lives, including the Indigenous Peoples. Help students understand that **Indigenous People** refers to the original inhabitants of a region. From your studies in the classroom, students may already know that in Colorado, different tribes have influenced modern day Colorado, including the Ute, Kiowa, Arapaho, Apache, Comanche, and Shoshone. Take a moment to make sure students consider that this is both a part of Colorado's history, but also a current diverse population in our state. Explain that the next worksheet will allow students to investigate the relationships between these Indigenous People and regional plants.
4. Have students flip over their worksheet, and give the groups of students some time to match the plant with the illustration of how it is used.
5. Review the correct answers ([Plant Uses Worksheet Answer Key](#)) with the students, allowing time to explore how plants are more than just a food source for Indigenous People. Allow students to ponder how different cultures use plants by comparing and contrasting the two sides of the worksheet.
6. Students can listen as you read the [excerpt from the Southern Ute Tribe](#), (on the back of the folder) or they can take turns reading aloud if time allows. Flip to the illustrations in the red folder as you read, emphasize how important plants are to Indigenous cultures, providing

necessities like food, medicine, tools, construction, ceremonies, baskets, textiles, rope, and dyes.

7. Ask the students to imagine that they lived in a different time and place. They don't have stores and cannot shop online, but they do have this wonderful, productive garden. Taking inspiration from Indigenous People, in what ways can the plants be used for purposes other than food? Pass out one [More than Just Food Worksheet](#) to each group, as well as a pencil and clipboard. Allow groups of students to explore the garden, imagining ways to use the plants for more than just food. Remind students that this is no longer a time to harvest or take parts of plants from the garden, but just to observe and be creative.
8. Back at the gathering spot, students can share their inventive ideas about how to use the plants.
9. Please ask students to help clean up, erase the laminated worksheets, and remind them that they will need to wash their hands with soap once inside the building.