

Asparagus

GRADE
2-3

Month: April

Time Required: 30 minutes

Alternative Tastings: Celery, Rhubarb

Lesson Goals

- Students will increase their knowledge of fruits and vegetables.
- Students will learn to try new fruits and vegetables and increase their preference for them.
- Students will learn that their peers like to eat fruits and vegetables.
- Students will learn how to ask their parents/caregivers for the fruits and vegetables tasted in class.

Learning Objectives

- Students will be able to define and give examples of “local.”
- Students will be able to compare food miles of fruits and vegetables.

Academic Standards Connection

Coming soon.

Essential Components Checklist

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|--|---|
| <input type="checkbox"/> Physical Activity | <input type="checkbox"/> Newsletters, BINGO Cards, Stickers, and Incentives |
| <input type="checkbox"/> “Asking” Discussion | <input type="checkbox"/> Tasting |
| <input type="checkbox"/> Voting | |

Materials

- | | |
|---|--|
| <input type="checkbox"/> 2-3 printed copies of Food Miles Activity Cards (attached; need 1 per student) | <input type="checkbox"/> Water bottle with water |
| <input type="checkbox"/> Picture of asparagus stalk and plant | <input type="checkbox"/> Rags |
| <input type="checkbox"/> Cooler | <input type="checkbox"/> Food storage bags |
| <input type="checkbox"/> Electric skillet | <input type="checkbox"/> Tasting supplies (plates, napkins, etc.) |
| <input type="checkbox"/> Plastic tote (to transport electric skillet) | <input type="checkbox"/> Asparagus for cooking (depending on class size) |
| <input type="checkbox"/> Spatula | <input type="checkbox"/> Olive oil |
| <input type="checkbox"/> Power strip (with long cord) | <input type="checkbox"/> Salt |
| | <input type="checkbox"/> Pepper |
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Preparation

- ❑ Food preparation:
 - Wash asparagus and cut or snap off the bottom of each stalk
 - Portion asparagus into Ziploc bags (one per lesson)
 - Add olive oil and salt and pepper to the bag
- ❑ Print and cut (perhaps laminate) 2-3 copies of attached Food Miles Activity Cards

Engage

1. Introduction: 2 minutes

The “Introduction” section is a time to introduce yourself, recap previous lessons, establish norms, or introduce the day's lesson.

*You may want to preheat your electric skillet for the cooking activity and alert students to the hot skillet. Preheat to medium, depending on the skillet.

2. Engage Activity: 6 minutes

The “Engage Activity” section has two purposes: 1) to activate students' prior knowledge and 2) to engage every student.

Gather students in a large circle. *In our town of (*community name*), there are lots of places nearby that we visit by car, by bus, by bike, by walking.* Educator can share a personal example of a place they like to visit and how they get there.

Think-Pair-Share: *What are some places you like to visit in your neighborhood or town? Do you go to your local library, park, gas station, school, splash pad, etc.?*

- *Think to yourself quietly.* Have students close their eyes, put their fingers to their temples, and think real hard.
- Then, have students turn to a partner and share their favorite local places.
- After a couple minutes, bring the class back together and select students to share out. The educator can get students' attention with a special word (perhaps “asparagus” or a clap back). If you use “pick-a-stick,” this is a good way to randomly select students to share.
- Ask students how they get to their favorite places as they share aloud.

Thank students for sharing, and introduce a new vocabulary word: **local**. Write “local” on the board and repeat together. *All of your favorite places are called “local” because they're close to where you live. For example, the park next to your house would be called your “local park.”* Site places that students mentioned, and explain how they are local.

We can also eat local food, meaning food that grows in gardens or farms, close to where we live.

Explore

3. Experiential Learning: 12 minutes

This is a time for students to familiarize themselves with what you'll be tasting. The best way to do this is through a hands-on or exploratory activity.

Our tasting today is a vegetable called asparagus. Asparagus can be local, because it can grow right here in Iowa. Show a picture of an asparagus plant. Asparagus is a stem that moves nutrients from the roots

throughout the rest of the plant.

Show the bag of prepared asparagus stems and explain how you'll be cooking them. Before you add the asparagus to the preheated electric skillet, ask students to listen very carefully for the "sizzle" noises. Add the asparagus to the skillet. Leave uncovered. Stir occasionally. Cook for 8 minutes or until tender.

Physical activity: While the asparagus is cooking, gather students in a large circle for a food miles game.

- Pass out food cards to all students.
- With music playing, students will move around the room to find a partner. Option: vary how students move around the room to increase physical activity, such as walk, hop, high-knees.
- When the music stops, partners will share their cards with one another, looking at the back to see how far away that food grows from them.
- Comparing food miles, have students select the more local food. They will then do jumping jacks (counting by 5s or 10s) up to the number of food miles listed on the card.
- For each round, ask students to raise their hand if they had the more local food (the food with fewer food miles and jumping jacks).
- Play music to find new partners. Repeat until desired time.

Option: If time permits, have students work together to line-up in a half circle from most local to least local (or "global" food) and read their cards aloud.

4. Tasting Activity: 3 minutes

The "Tasting Activity" section is when students get to try the fruit or vegetable. Don't forget to review your food tasting norms (for example, "don't yuck my yum").

Before you pass out any samples, be sure to review your brave tasting rules (for example, don't yuck my yum, we all try together, etc.). As students receive their samples, ask them to use their senses while they wait. Invite students to taste asparagus.

Reflect

5. Voting Activity: 2 minutes

This is a time for students to give their opinion on what they tried!

As students taste the asparagus, have them vote with their thumbs. Observe their voting and offer positive reinforcement regarding the Brave Taster Rules. If a student dislikes the tasting, perhaps ask what they would change about it.

6. Reflection: 5 minutes

Reflection is one of the most important processes for students to process and retain new information or experiences. Give students an opportunity to reflect on what they've learned or tried in your lesson. This is an excellent place for students to practice the "Asking Discussion".

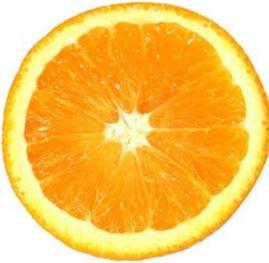
Reflection questions:

- Will someone share what they liked or loved about the asparagus? Select a couple students to share.
- Will someone share what they would change about the asparagus? Select a couple students to share.
- Raise your hand if you're excited to go home and tell your family about tasting asparagus.
 - Ask a student with a raised hand: *if you wanted to try this at home, how might you ask your grown-ups?*
 - You might also ask additional questions like, *where could you buy asparagus?*

Leave newsletters, incentives, stickers, and BINGO sheets with the teachers to pass out.

Food Miles Activity Cards

Instructions for Grades K-1: For Grades K-1, only use the front of the cards for this activity.

<p><u>Asparagus</u></p>  <p>Local to Iowa</p>	<p>Asparagus grows <u>number of</u> miles away from <u>name of PABS school community</u> at <u>name of farm or town.</u></p>	<p><u>Banana</u></p>  <p>Not Local to Iowa</p>	<p>Bananas grow 3,000 miles away from <u>name of PABS school community</u> in Costa Rica.</p>
<p><u>Apple</u></p>  <p>Local to Iowa</p>	<p>Apples grow _____ miles away from <u>name of PABS school community</u> at <u>name of farm or town.</u></p>	<p><u>Orange</u></p>  <p>Not Local to Iowa</p>	<p>Oranges grow 1,000 miles away from <u>name of PABS school community</u> in Florida.</p>
<p><u>Cabbage</u></p>  <p>Local to Iowa</p>	<p>Cabbage grows _____ miles away from <u>name of PABS school community</u> at <u>name of farm or town.</u></p>	<p><u>Pineapple</u></p>  <p>Not Local to Iowa</p>	<p>Pineapples grow 4,000 miles away from <u>name of PABS school community</u> in Hawaii.</p>

<p><u>Broccoli</u></p>  <p>Local to Iowa</p>	<p>Broccoli grows _____ miles away from <u>name of PABS school community</u> at <u>name of farm or town.</u></p>	<p><u>Watermelon</u></p>  <p>Local to Iowa</p>	<p>Watermelon grows _____ miles away from <u>name of PABS school community</u> at <u>name of farm or town.</u></p>
<p><u>Carrot</u></p>  <p>Local to Iowa</p>	<p>Carrots grow _____ miles away from <u>name of PABS school community</u> at <u>name of farm or town.</u></p>	<p><u>Lemon</u></p>  <p>Not Local to Iowa</p>	<p>Lemons grow 1,500 miles away from <u>name of PABS school community</u> in Arizona.</p>
<p><u>Beet</u></p>  <p>Local to Iowa</p>	<p>Beets grow _____ miles away from <u>name of PABS school community</u> at <u>name of farm or town.</u></p>	<p><u>Green Bean</u></p>  <p>Local to Iowa</p>	<p>Green beans grow _____ miles away from <u>name of PABS school community</u> at <u>name of farm or town.</u></p>

Lesson Supplement

Recommended Books

“The Mighty Asparagus” by Vladimir Radunsky

“The Vegetables We Eat” by Gail Gibbons

Physical Activity

“Exercise Your Name” in “Brain Breaks” (consider spelling “local” or “asparagus”)

More ideas for physical activity are available at <https://idph.iowa.gov/inn/play-your-way/brain-breaks>.

What You Need to Know About Asparagus

- Asparagus grows in Iowa in the spring.
- Asparagus is a perennial plant (meaning it grows back year after year) member of the lily family.
- The plant can grow for 15 years and can be harvested after three years.
- After two to three months of harvesting, the plant looks like a fern and then goes to a dormant stage.

Facts About Asparagus

- Asparagus is believed to have originated in Greece 2,500 years ago.
- The name asparagus is from a Greek word meaning short or sprout.
- A spear can grow 10 inches in 24 hours (illustrate with a ruler).
- There are green, white and purple varieties. The green variety is the most popular.

Health Connection

- Good source of Vitamin C, to keep you healthy and heal cuts and scrapes (cross arms to reinforce the super defense shield)
- Good source of Vitamin A, to help your eyes, especially at night (reinforce with super goggles on the eyes)

References and Resources

<https://spendsmart.extension.iastate.edu/produce-item/asparagus/>

<https://snaped.fns.usda.gov/seasonal-produce-guide/asparagus>

<http://www.iowaagriculture.gov/AgDiversification/pdf/asparagusbrochure3.pdf>

https://harvestofthemonth.cdph.ca.gov/documents/Spring/Asparagus/Asparagus%20-%20Educator%27s%20Newsletter_Final.pdf

