Peach

Month: April
Time Required: 30 minutes
Alternative Tastings: Plum, Apricot, Avocado

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.

Lesson Objectives

- Students will be able to identify sources of food for bees.
- Students will be able to discuss the process of pollination.

Materials

- Pollination demonstration necklaces (attached, one per student)
- Sticky notes (pollen)
- Peach tasting (fresh - sliced, frozen, canned or dried)
- Napkins

Preparation

- Make cards for Pollination Demonstration:
  - Print the attached flower/fruit cards (enough for one per student), and fold the paper in half horizontally, so the flower and the fruit are on opposite sides.
  - Punch a hole in the top of paper, and run a long piece of yarn through the hole to create a necklace.
  - Consider laminating the cards for reuse from class to class.

Recommended Books

- “These Bees Count!” by Alison Formento
- “Animal Pollinators” by Jennifer Boothroyd
- “From Pit to Peach Tree” by Ellen Weis
- “The Beeman” by Laurie Krebs and Valeria Cis
- “Bea’s Bees” by Katherine Pryor
- “The Perilous Pit” by Orel Protopopescu
- “Brilliant Bees” by Linda Glaser

Standards Connection

This lesson supports the following Iowa Core standards.

Health Education Standards 1, 2, 3, 4, 5, 7, 8

Science

Kindergarten - K-LS1-1
LS1.C: Plant survival needs

First grade - 1-LS1-1
LS1.A: Structure and function

Lesson Checklist

- Physical Activity
- Tasting
- Voting
- “Asking” Discussion
- Newsletters, Bingo cards, Stickers, Incentives
- Science Connection: Things plants and insects need (K) & plant and animal structures (1st)
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.

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. Today, we’re going to learn about how flowers and bees share with each other. But first I want to know, what is something that you like to share? Think about this in your head, and when I say “buzzzz,” turn to a partner and share your thoughts. “Buzzzz.” Give students time to discuss, making sure all students have a partner and time to share. “Buzzzz” again to get students attention. Randomly select a few students to share aloud (pick a stick would work well here).

Discuss responses and then say, just like we share (insert students’ examples), flowers share food with bees.

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.

Seat students (opportunity for 3 deep breaths). We’re going to watch a short video of bees visiting flowers. Play this 1-minute video: Bees in slow motion pollinating apple blossoms. What are the bees doing as they visit these flowers? Getting food! Bees get two kinds of food from flowers: nectar and pollen. Note new vocabulary words; write out and repeat. Nectar is a sweet juice and pollen is a yellow powder. Bees have special structures called pollen bags on their back legs so they can collect pollen and bring it home. Bees need flowers! Let’s watch the video again and observe the bees eating nectar and pollen. Again, play and narrate this 1-minute video: Bees in slow motion pollinating apple blossoms (pause to show a picture of pollen).

Something important for the plant is also happening as the bee is eating nectar and pollen: pollination. Note vocabulary word. Write out and repeat with students. When a bee visits a peach flower to eat, some of the pollen sticks to the bee’s body. Looking for more food to eat, the bee carries the pollen to the next flower. Here, the pollen falls off the bee’s body and onto the flower. Plants need pollination because pollination turns the flower into a fruit. Later today we will taste peaches, a fruit that grows thanks to bees pollinating the peach tree flowers. First, let’s play a game to simulate (act out) the process of pollination.

Pollination Demonstration
(Adapted from Science and Health Education Partnership Pollination lesson.)

- Have all students stand in a circle. Pass out flower-fruit necklaces (cards attached) to all but 8-9 students. Tell these students that they are the flowers. (Note: the flower side of their necklace should be facing forward, with a small sticky note attached to the center to represent pollen).
Explore (cont’d)

- The remaining 8-9 students will act as bees. Ask bees to enter the circle and say, *the bees have left their hive in search of food and they found a field of flowers!* As bees buzz around the center of the circle, play this “Bees Buzzing” sound effect. When the buzzing stops, bees will visit a flower.

- The flower will share their pollen (sticky note) with the bee (ask the bees to keep the sticky note stuck to their hand). *Now, the bees are carrying pollen to another flower.*

- Instruct bees to buzz around the center of the circle again. When the buzzing stops, they will choose another flower. *Now, these new flowers and the bees will share pollen* (flowers and bees trade pollen). *When this happens, the flower is pollinated and will become a fruit* (instruct students to turn over their necklace to show that they are now a fruit).

- Bees and flowers will continue to share pollen and flip their necklaces until all flowers are pollinated. The demonstration ends when all of the flowers have been pollinated and turned into fruits.

Facilitation Options:
- Option: have students say “thank you for sharing bee/flower” to one another.
- Once pollinated, ask students to sit to make it clear they are no longer flowers.
- If time allows, consider rotating bee and flower students.

Transition to tasting: Instruct students to deposit their necklaces in a specific location and pick-up a peach segment and napkin before returning to their desks.

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 students receive 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.

Reflect

5. Voting Activity: 2 minutes

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

As students taste the peach, 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.”*

Optional song: Betty and the Turnips, “Little Bees” (1:21)
Choral Response:
I’m going to ask a question and you’re going to quietly think to yourself. When I say “buzzzz,” you can say your answer aloud. Let’s practice…
- What month is it? (April)
- Whose class am I in?
- What food did we try today? (Peaches)
- What do flowers share with bees? (Food - nectar and pollen)
- How do bees help flowers? (Pollination)

Asking Discussion:
Raise your hand if you’re excited to go home and tell your family about tasting peaches.
- 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 peaches?

*Leave newsletters, incentives, stickers, and BINGO sheets with the teachers to pass out.
CANTALOupe
CRANBERRIES
MANGO
STRAWBERRY
PEAR
KIWI
Additional Materials

Physical Activity
Bees communicate by movement. They shake their “bee-hinds” in a line and circle back to the start. This tells other bees where to find food. Lead students in a bee “waggle dance.” Perform an exercise for 15 seconds each (e.g., flap your arms, jog in place, shake a leg, squat, touch elbow to knee, stretch on tiptoes, touch toes). Move around the room if space allows. (Educators, learn more about the waggle dance in video 1 or video 2.)

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

What You Need to Know About Peaches
• Peach season is May to October, peaking in June, July and August.
• Peaches discolor quickly when cut open. To keep from discoloring, sprinkle peach with lime or lemon juice.
• Nectarines are a type of peach with smooth skin (no fuzz). Choose peaches with no blemishes.
• Peach trees are short-lived (only about 20 years).
• Peaches don’t get sweeter once picked, so pick at peak ripeness for the best taste.

Facts About Peaches
• The peach originated in China.
• The Latin name for peach means Persian plum, because Romans imported it from Persia (now Iran) 2000 years ago.
• The Spanish brought the peach to America. It became a favorite of the Native Americans.
• Most peaches grow in California, Georgia and South Carolina in the United States. Georgia is known as the “peach state.” California leads the country in peach and nectarine production.
• The United States is the world’s leading grower of peaches.
• Peaches can be fresh, frozen, dried or canned. Enjoy them plain for a snack or with a meal as well as in appetizers and entrees.

Health Connection
• Peaches are a good source of Vitamin C. Reinforce with defense shield. (Cross arms in front of chest to ward off the germs).
• Peaches have Vitamin A. Reinforce with super goggles. (Make goggles with your hands over your eyes).
• Peaches have fiber, to help you feel full and move food through your body. Reinforce by rubbing your stomach.

References and Resources
https://spendsmart.extension.iastate.edu/produce-item/peaches/
https://snaped.fns.usda.gov/seasonal-produce-guide/peaches
https://fruitsandveggies.org/stories/5-facts-about-canned-foods/
https://kidsgrowingstrong.org/pollinator-works/; https://www.youtube.com/watch?v=zy3r1zIC_IU
https://www.nrdc.org/sites/default/files/bee-deaths-FS.pdf
https://gardenatschool.wordpress.com/2012/06/16/pollination-games/

This institution is an equal opportunity provider.
This material was funded by USDA’s Supplemental Nutrition Assistance Program – SNAP. It was developed by the Iowa Department of Public Health in partnership with the Iowa Department of Human Services. September 2020