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 define pollination.
- Students will be able to give examples of how plants and animals help each other.

Materials

- Pollination Demonstration necklaces (attached, one per student)
- Sticky notes (pollen)
- Beach ball (bee)
- 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 re-use from class to class.
- (Optional) Prepare bee beach ball: use black tape to transform a yellow beach ball into a bee!

Recommended Books

"What is Pollination?" by Bobbie Kalman
"What if There Were No Bees?: A Book About the Grassland Ecosystems" by Suzanne Slade
"You Wouldn't Want to Live without Bees" by Alex Woolf
"Flight of the Honey Bee" by Raymond Huber
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 taste a fruit that needs help from animals to grow. But first I want to know, What are ways you help others? 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. Another question I have is, what are things you like getting help with? Again, when I say “buzzzz,” turn to a partner and share your thoughts. Randomly select a few students to share aloud (pick a stick would work well here).

Discuss responses and then say, just like we help each other by (insert students’ examples), plants and animals help each other, too.

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). Bees are one of the animals that help plants grow. Bees get their food - nectar and pollen - inside flowers. Let’s watch a video of bees flying from flower to flower to eat. Play and narrate a portion of this 1-minute video: Bees in slow motion pollinating apple blossoms.

Something else important is happening as the bee is eating: pollination. Note vocabulary word. Write out and repeat with students. When a bee visits a peach flower to eat, pollen - the yellow powder that flowers make - sticks to the bee’s body. Looking for more food to eat, the bee carries the pollen to the next flower. Here, some of the pollen falls off the bee’s body and onto this new flower. Now, that flower is fertilized and can grow fruit and seeds. Now, this flower can grow into fruit because it has been pollinated (say this word together; compare the word to pollinator). Let’s watch the video again. Play and narrate the entire 1-minute video: Bees in slow motion pollinating apple blossoms (pause to show a picture of pollen).

The bee gets food and the flower grows into fruit! This is how bees and peaches help each other. In fact, they could not survive without each other. 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 Simulation
(Adapted from Science and Health Education Partnership Pollination lesson)

- Set-up: Have students stand in a circle, wearing flower-fruit necklaces (cards attached). The flower side of their necklace should be facing forward, with a small sticky note attached to the center (this represents pollen). Use a beach ball to represent the bee, a pollinator.

- Start by telling students they are flowers. Toss the beach ball to a student in the circle. The bee just left the hive in search of food. This one bee can pollinate many flowers. This first student attaches the sticky note to the ball and tosses the ball to another student. The bee is now carrying pollen to another flower.

- The second student takes the sticky note off the beach ball (flower is now pollinated) and attaches their sticky note to the ball. When this happens, the flower turns over their flower-fruit necklace to show that they turned into a fruit. The flower is now pollinated and will become a fruit!
  - Option: have students say “thank you, bee” as they become pollinated and toss the ball to another flower. Educator can respond as the bee, “thank you flower.”

- Students continue tossing the ball and becoming pollinated, taking and leaving a sticky note on the ball and turning their necklaces until all flowers are pollinated. The demonstration ends when all of the flowers have been pollinated and turned into fruits. Wow, look around and see how one bee can help many flowers. The bee can survive thanks to food from the flower, and the flowers can survive thanks to pollination.
  - Option: students may sit down once they become pollinated, to make it clear they have already caught the beach ball.

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.”

**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)
- How do flowers help bees survive? (By providing food/nectar)
- How do bees help flowers survive? (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
Physical Activity
Select a student volunteer. Ask student to choose a physical activity for the class to perform for 15 seconds. Then student chooses another activity. See “Energizers Movement Bank” (page 52) for activity ideas. Select a new student leader as appropriate.
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.nrdc.org/sites/default/files/bee-deaths-FS.pdf
https://gardenatschool.wordpress.com/2012/06/16/pollination-games/
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