



PEARS

HISTORY

Pears are a member of the rose family and have been enjoyed by people for thousands of years. Pears originated in southeastern Europe and were a favorite food of the ancient Greeks and Romans. The ancient Greek author Homer described them as "gifts from the gods" likely due to their sweet, juicy flavor. The early Romans developed 50 varieties of pear and planted them across Europe. Pears are not native to the United States.

FUN FACTS

Pear trees start to produce fruit 4 years after planting. The US is 3rd in the world in pear production.

The Endicott pear tree in Danvers, MA is America's oldest fruit tree. It was planted between 1623 and 1649.

Pears in Massachusetts mature from September through November.

Every pear harvested is picked by hand.

FARMER BIO

Brafi

Brad Morse of Outlook Farm and Market farms 60 acres of fruits and vegetables in Westhampton, Massachusetts. He grows apples, peaches, pears, cherries, plums and blueberries and all types of mixed vegetables. Outlook Farm and Market sells their fruit and produce through their farm store, to a small supermarket in the area and to Gateway Regional High School. Brad's family has been selling fruit to Smith College since the 1960's! Brad's favorite variety of Pear for fresh eating is the Bartlett and his favorite pear to eat with is the Bosc. Photo Credit: Outlook Farm.



FRUIT DISSECTION

PEARS

Grades K-2 • 45 minutes

OBJECTIVES

Students will understand the concept that a fruit is anything with seeds in it. Students will infer that the size of a fruit does not indicate the size or amount of seeds.

ESSENTIAL QUESTIONS

Where do seeds come from? How are seeds and fruits different from one another?

MA STATE FRAMEWORK(s)

K-2 Life Science Standards

- K-LS-2(MA)
- · K.CC
- 1-LS1-1
- 1LS3-1
- 1.MD
- · 2LS2-3(MA
- · 2.MD

MATERIALS

A variety of colorful fruits with enough for classroom pairs to each have 1 (pear, squash, eggplant, pepper, tomato, okra, bean pod, gherkin, cucumber, squash, pumpkin, cranberry, etc.)

The book, "A Fruit is a Suitcase for Seeds"; cutting boards and knives for slicing fruits; measuring tapes; paper or worksheet for seed counting

PROCEDURE

Introduction:

Play "Silent Museum" to model the examples of fruit you've brought in. Pair up students. One person from each pair will start as a statue holding a fruit. The other person from the pair will start as a tourist. Statues must not move once they've been placed. Tourists must not touch the statues. Hand each statue a different fruit on the way to their "platform," which can be a rubber dot, a mat, or another designated area. At the sound of the signal, statues must be frozen in place and tourists may begin going through the exhibit. At the second signal, pairs will switch spots – tourists become statues and vice versa. At the third signal, all pairs come back to the blanket/meeting space together.

Think, pair, share: how are all of these items alike? What category do they all fit in? Why is an eggplant like a squash? Why is a cranberry like an okra?

Guide your students to get to the answer: They are all fruits. They all hold seeds inside them.

Lessons developed in partnership with: <u>Island Grown Initative</u>

FRUIT DISSECTION

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PROCEDURE

Activity 1

Read "A Fruit is a Suitcase for Seeds". Reinforce that a fruit's job is to protect seeds and attract humans and animals to eat/spread the seeds around. That's why fruit is usually so colorful and delicious!

Activity 2

Give each pair of students a fruit to draw and label. Students should work together to write a detailed description of their fruit, and should be sure to include its size. They can use measuring tapes, rulers or a simile. "A gherkin is about the size of my thumb." Or "the tomato is 9 inches around."

Once the fruit is illustrated and described, go around the room and dissect (aka cut in half lengthwise) the fruits for students. Then they can count and write down the number of seeds each fruit has. Create a class chart and ask students to add their seed count.

Wrap Up

Draw the class attention to the seed count. Ask students to infer the number of plants that could grow from those seeds. If a pumpkin has 100 seeds inside, how many pumpkin plants could we grow? If an okra pod has 34 seeds, how many okra plants can we grow?

EXTENSIONS & VARIATIONS

Extension

Dissect and count seeds from the same type of fruit and compare how many seeds are in each one. What accounts for the difference?

