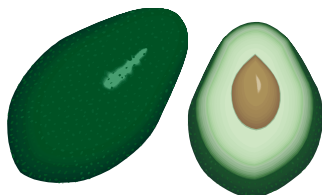


SEEDS, SEEDS, SEEDS

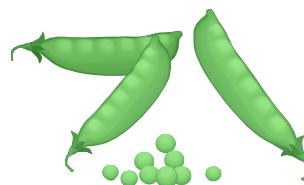


BENCHMARKS and TASKS

SC.A.1.1.1 The student knows that objects can be described, classified, and compared by their composition (e.g., wood or metal) and their physical properties (e.g., color, size, and shape).

SC.F.1.1.5 The student compares and describes the structural characteristics of plants and animals.

- The student observes and describes seeds.
- The student locates where seeds are found.



KEY QUESTION

Where can seeds be found?

MATERIALS

Teacher

sharp knife

fruits and/or vegetables

chalkboard or chart paper

bar graph

The Tiny Seed by Eric Carle

Pumpkin Pumpkin by Jeanne Tiherington

The Seed Song by Judy Saksie

Counting Seeds (Benchmark Education Co.)

Per pair of students

1 fresh fruit or vegetable

paper towel

paper plate

glue

Per student

sheet of construction paper

markers or crayons

TEACHING TIPS

1. Select fruits and vegetables that have different numbers of seeds, but do not select those with seeds too small or too numerous (e.g., peppers, cucumbers, cantaloupe) to be frustrating to examine and count.
2. Since fruits and vegetables are going to be used over a period of several days, store them in a refrigerator between activities.

DAY ONE

ENGAGE

1. Distribute one fruit or vegetable to each student or group. Allow students or groups to show the fruits/vegetables they have to the class. Encourage students to discuss how the fruits and vegetables are alike and how they are different.

2. Give students a piece of construction paper. Have them fold the paper into three sections. On the first section, students should draw and color a picture of the whole fruit or vegetable that was given to them or their group. The second and third sections will be completed later with a picture of the inside of the fruit or vegetable and the actual seeds.

Whole	Cut in Half	Seed
	I think:	
	I saw:	

3. Store fruits and vegetables in the refrigerator until the next day.

DAY TWO
EXPLORE

1. Give each student or group a paper plate containing the same fruit or vegetable the student or group observed the previous day.
2. Have students predict what might be inside the fruits or vegetables. In the second section of the record sheet in the “I think” box, students should draw what they think the inside of the fruit will look like. (If the students do not include seeds in their responses, allow them to discover the seeds for themselves through the exploration activities.)
3. The teacher should cut each fruit or vegetable in half. Students should then draw in the “I saw” box in the second section of the record sheet a picture of the fruit cut in half, showing where any seeds are located.
4. Next, ask students to remove and examine the seeds, noting the color, shape, size, and location of the seeds. Tell students to count the number of seeds as they remove them.
5. Students should each glue at least one of the seeds on the third section of the record sheet with their drawings of the whole and half fruit or vegetable.

DAY THREE
EXPLAIN

1. On the board or on chart paper, label a bar graph with the names of the fruits/vegetables the different groups explored. Ask the students to complete the graph by marking the number of seeds that were found in the fruit they observed on their copy of the graph. If any students have seedless fruits/vegetables, the bar for that fruit/vegetable will not be colored but will remain on the graph.
2. Using the graph and the drawings completed previously by the students, discuss their discoveries. Ask:
How many seeds were in the fruit/vegetable?
Did all of the fruits and vegetables have seeds?
What color were the seeds?
Do all fruits and vegetables have the same number of seeds?

*Which fruit/vegetable had the most seeds?
Do all big fruits/vegetables have big seeds?
Do all small fruits/vegetables have small seeds?
Where in the fruit/vegetable did you find the seed?
Do we ever eat the seeds of a fruit or vegetable?
Can we eat all the seeds found in the fruits and vegetables? (Students may observe that many seeds are edible, but others are not.)*

EXTEND/APPLY

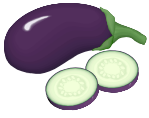
1. Since students' experiences with locating seeds have been limited to observing common fruits and vegetables, take the students outside and point out some other types of seeds - pine tree seeds (located in the cones), flower seeds, weed seeds, etc.
2. Incorporate the supplemental literature books for information and discussion.

EXTENSIONS

Encourage students to plant their seeds.

ASSESSMENT

Have students write 2 or 3 true statements from the class bar graph comparing the seeds of the fruits and vegetables.



Number of Seeds in Fruits and Vegetables



10

9

8

7

6

5

4

3

2

1

pole bean

pea

green bean

pear

grapefruit

orange

apple