



Counting

INTRODUCTION

These activities focus on learning numbers and practicing counting. Both in the planning and harvest, the school garden can be a great place for students to practice counting. The first activity relates to garden planning and invites students to actively participate in the decision-making process. The second activity involves harvesting and grouping the same produce items together to determine the yield.

KEY CONCEPTS

- Learning numbers and counting
- Practice decision-making
- Introduce garden planning
- *Variation:* Introduce concepts of addition and subtraction

MATERIALS

Seed Counting Activity

- 1 packet of the selected fruit, vegetable or herb seeds
- 5 pennies per student for voting (or small tokens)
- Bowls for voting - 1 bowl per fruit, vegetable or herb
- Bowls for collecting the seeds
- Labels for each type of seed
- Tape

Harvest Counting Activity

- Whiteboard or large piece of paper
- Markers
- Harvested fruits, vegetables or herbs



SEED COUNTING ACTIVITY

Preparation

Prior to the lesson, identify the location where your class can plant in the school garden. Determine a selection of what the students can plant. We recommend choosing familiar foods that mature quickly, so that students can be involved in the planning, planting and harvesting aspects of the garden. In addition, you will want more plant options than are able to fit in the garden; we recommend giving 3-5 more options than there is room.

Prior to the lesson, determine a table for voting on the different types of seeds. Label the bowls with the selected fruits, vegetables or herbs and disperse them on the voting table.

In Class

Present the students with the selection of fruits, vegetables and herbs for your school garden. With a show of hands, have students volunteer to share whether they have tasted and/or grown that food item in the past.

Describe the voting activity: students will each get five pennies with which they can indicate what they want to grow. There are ____ [#] of items that can be planted, but there are ____ [#] of options. To vote, the students will place as many pennies as they want (of their five) in the labelled bowl for that fruit, vegetable, or herbs. The ____ [#] bowls with the most pennies will be planted in the garden. Help the students determine which foods they want to vote for and then 'cast' their vote.

Once the students have voted, collect the bowls. Practice counting as a class to tally all the votes on a whiteboard. Ask students to help rank the number of votes from biggest to smallest. Share with the class the items that the class will be planting and the items that received the least number of votes, so will not be planted this year.



HARVEST COUNTING ACTIVITY

Preparation

Prior to the lesson, harvest a select number of fruits, vegetables and herbs from your class's plot in the school garden.

In Class

Present the students with the harvested fruits, vegetables and herbs from your school garden. Work with the students to divide the harvest up by fruit, vegetable and herb type discussing comparisons (shape, size, color) as you go.

Once the harvest is divided, split the students into groups and different tables. We recommend one adult per table. At each table, place 1+ different fruits, vegetables or herbs. Work with the students to practice counting and writing down the amount of each fruit, vegetable or herb type. Talk to the students about which foods you have the most of, least of, and any amounts that are the same. When faced with the same or close amounts, talk about comparing the food items. For example, the same amount of spinach will look different than the same amount of tomatoes.

Once everything is counted, bring the class back together and ask students to share out the amounts of each food item.

VARIATIONS

- Seed Counting Activity
 - Create a tally on a whiteboard or large piece of paper with the number of students who have tasted or grown the fruits or vegetables in the past. Work with students to practice counting and identify the fruit or vegetable with the most and least ticks documenting student experience.



- Introduce concepts of addition and subtraction by comparing the final number of votes. "How many more votes would ____ [vegetable] need to have to be the same as ____ [vegetable]?"
- Harvest Counting Activity
 - Involve the students in the harvest process. Have them practice counting as they harvest and practice harvest techniques with different vegetables.
 - When sharing out the final amounts of each food item, document the amounts on a whiteboard or large piece of paper. Then work with students to identify the biggest and smallest numbers.
 - Connect to Description and Observation lesson guide by counting the number harvested vegetables with similar colors, sizes, texture, or density.
 - Introduce concepts of addition and subtraction by comparing the final number of votes. "How many more votes would ____ [vegetable] need to have to be the same as ____ [vegetable]?"
 - Follow up with the Vegetable Tasting lesson guide by having students taste what they harvest for a complete experience with the food from planning to tasting.