

Overview

How do I grow and harvest enough peas to fill a 5-ounce cup?

Activity

Step 1

Read *First Peas to the Table* by Susan Grigsby

ELA Lessons (RL.3.1, RL.3.2, RL.3.3, RL.3.4, RL.3.7)
Social Studies Lesson (3.H.1.2)

- Discuss the story, how would you like to have a *First Peas to the Table* contest?

Step 2

Announce contest rules

- What size bowl/container must they fill? (peas must be shelled)
- Individuals or partners/teams?
- Can peas be started at home?

Step 3

Determine growing space

Math lessons (3.OA.1, 3.OA.2, 3.OA.3, 3.MD.2, 3.MD.5, 3.MD.7, 3.MD.8)

- Have students measure the garden bed and determine length, width, area and perimeter.
- If we have x number of students how can we divide the bed so everyone has the same amount of space?
- How much area will each student have?
- What will be the perimeter of their space?
- Once the students have determined how to divide the bed, allow them time to grid off the bed.

Grade Level: 3

Subject Area: ELA / Math / Science /
Social Studies

Materials:

First Peas to the Table by Susan Grigsby
One packet of pea seeds per student or
group (or buy in bulk and put in zip top
bags)

Standards:

ELA: RL.3.1, RL.3.2, RL.3.3, RL.3.4, RL.3.7,
RI.3.1, RI.3.2, RI.3.3, RI.3.4, RI.3.5, RI.3.7,
RI.3.9, RI.3.10
Math: 3.OA.1, 3.OA.2, 3.OA.3, 3.MD.2,
3.MD.5, 3.MD.7, 3.MD.8
Science: 3.L.2.1, 3.L.2.2, 3.L.2.3, 3.L.2.4
Social Studies: 3.H.1.2

Step 4 **Select peas**

Purchase enough peas for each student. Peas can be purchased in individual packets or in bulk and put in zip top bags. Limit the varieties to 4 - 5. Give each student their own package of peas. Announce a day they can trade seeds if they want.

Step 5 **Research**

ELA Lessons (RI.3.1, RI.3.2, RI.3.3, RI.3.4, RI.3.5, RI.3.7, RI.3.9, RI.3.10)

What do we need to know before we plant? Allow students time to research and take notes on planting and growing peas. Search Thomas Jefferson's Journal for entries on peas.

- Thomas Jefferson's Journal: <https://www.masshist.org/thomasjeffersonpapers/garden/>
- Farmer's Almanac: <https://www.almanac.com/plant/peas>
 - <https://www.almanac.com/video/how-build-trellis-and-supports-climbing-vegetables>
- Johnny's Seeds: <http://www.johnnyseeds.com/>

Step 6 **Plan and build a trellis**

Ideally a trellis should be installed the same time the peas are planted. Have students bring in supplies to build their own trellis or have some supplies on hand to build. This is a great makerspace activity or cross curricular connection, bringing in the engineering design process.

Step 7 **Plan and Plant**

Math Lesson (3.MD.2)

Give students a planning sheet such as 1-inch graph paper cut to the size of their space and laminated or blank paper that students measure and grid. Allow them to plan their space before they plant. Remind them to include the trellis in their plan.

Step 8

Grow, Maintain and Observe

Science Lessons (3.L.2.1, 3.L.2.2, 3.L.2.3, 3.L.2.4)

It is critical that the soil stay moist during the germination process, allow students time to water and observe.

Suggest they keep a journal like Thomas Jefferson did. Discuss why a journal might be useful.

Predict the number of peas it will take to fill the container. If we think it will take x number of peas, how many pods do you think that will be? (Mini lessons on multiplication and division)

Step 9

Harvest and celebrate

Be sure to have a plan to celebrate the successes and learn from the challenges. And don't forget to eat the peas!

Your Notes & Ideas