

## Peas in a Pod

**Grade Level:** 1<sup>st</sup> Grade

**School(s):** All Charlottesville elementary schools

**Objective(s):**

- Practice using the scientific method to conduct a simple experiment and make repeated observations.
- Identify and observe the development of different parts of plants, including: seeds, roots, stems, leaves, flowers, and fruits.
- Use their senses and simple tools, including magnifying glasses, rulers, and scales, to make observations.

**STANDARDS OF LEARNING:**

- Math 1.10, 1.12
- Science 1.1, 1.4

**Description:** The “Peas in a Pod” lesson is designed as a stand-alone or precursor lesson to the 2<sup>nd</sup> Grade First Peas to the Table experiment. In “Peas in a Pod” students will germinate pea seeds in a bag in different classroom locations to conduct a simple experiment. Students will use their observation data to decide which location in the classroom was the best for germinating pea seeds. After the seeds germinate, students will plant the sprouted seeds in small cups inside or out in the garden to continue their observations as the plants grow.

**Materials:**

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| <input type="checkbox"/> Pea seeds   | <input type="checkbox"/> Paper cups  |
| <input type="checkbox"/> Plastic bags  | <input type="checkbox"/> Soil  |
| <input type="checkbox"/> Paper towels  | <input type="checkbox"/> Watering can or cups  |
| <input type="checkbox"/> Water   | <input type="checkbox"/> Bulletin board or poster in the hallway of each first grade class to track progress |
| <input type="checkbox"/> Labeled locations in the classroom where students can germinate their seeds |  |

**Action:**

1. Students will watch the video of a pea plant sprouting and growing:  
<https://www.youtube.com/watch?v=punobtoePIQ>  
As the video plays, pause it to ask students to identify the different plant parts as they appear, including: seed, roots, stem, and leaves.
2. Explain that they will be growing their own pea plants and observing each of these stages of growth for their plant.
3. Divide the class into groups and give each group two seeds to weigh and draw. Give students magnifying glasses and small scales for them to take observations of their seeds.
4. Next have each group place their pea seeds in a plastic bag with a moist paper towel to germinate. Students can choose where in the classroom to germinate their seeds, including: attached to a string hung across the windows, in a dark closet, or on a shelf in the room.
5. Have students check on their seed each day to see when it germinates (a small root will become visible). When their seed germinates, students should return to their data sheet, record new observations, and then plant their germinated seed. Before planting, discuss with students the needs of the pea seed, including: nutrients, air, water, light, and a place to grow. Have the students



plant their germinated pea seeds into a small paper cup, and continue to observe and draw their plant as it grows. Also discuss with students which germination location seemed to be fastest and best for the pea seeds.

6. Once the pea plants are large enough, students will plant them outside, continuing to observe as their peas flower and produce pods.
7. Take a picture of each class with their pea plants before the end of the school year.