

Sprouting Seeds

Activity: Children will plant beans and observe them as they grow.



Objective

Children will be able to make observations about the changes in plant growth over time.

Targeted Standards

VI. Scientific Inquiry

VI.B.1. Demonstrates knowledge related to living things and their environments

Benchmark a. Identifies characteristics of a variety of plants and animals including physical attributes and behaviors

Benchmark c. Understands that all living things grow, change and go through life cycles

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Scaffolding

- Some children may benefit from rereading the book discussing the comparisons between the plant in the book and their own bean plants.
- Children may enjoy collecting data on a “Growth Chart.” Invite them to take pictures of their beans, each day, and create a chart labeling the day and dictating a simple observation. The chart may be posted in the classroom where families may observe and comment on it.

Extensions

- Place seed related books in the reading center, some suggestions include:
 - *Plant the Tiny Seed*, by Christie Matheson
 - *A Fruit Is a Suitcase for Seeds*, by Jean Richards
 - *Seeds Go, Seeds Grow*, by Mark Andrew Weakland
 - *How a Seed Grows*, by Helene J. Jordan
 - *The Tiny Seed*, by Eric Carle
- Provide a variety of seeds and invite the children to compare and contrast them.

Materials Needed

- Bag of dried beans or several seed packets of beans
- Cotton balls or white paper towels
- Clear plastic cups
- Spray bottle with water
- Paper and markers (for recording growth)
- Permanent marker (for printing initials on cups)
- Camera and printer (for creating a photographic display)
- Magnifiers (for up close exploration)
- One Bean*, by Anne Rockwell

Checking for Understanding

Children will demonstrate their understanding of the lesson by, planting beans and recording and discussing their growth over time.

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Procedures

1. Discuss seeds with the children. What do they already know about them? What do they wonder?
2. Read the book, *One Bean*, by Anne Rockwell and discuss the changes that took place as the seed sprouted into a plant.
3. Invite the children to grow their own bean plant.
4. Provide a clear plastic cup for each child and ask them to write their initials on the bottom in permanent marker. Ask them to fill the container with cotton balls and place a few beans around the edges of the cup.
5. Provide a spray bottle of water and invite the children to moisten the cotton balls. The children will need to keep the cotton balls moistened throughout this project (do not overwater).
6. Place the cups near a window where they will get some sunlight.
7. Invite the children to carefully observe their bean seed each day and record any changes they notice by drawing pictures. Take pictures of the seeds progress each day and print them out to display in the classroom.
8. In a few days, the children should notice some changes taking place. Take this opportunity to introduce content related words such as: *root*, *sprout*, *stem*, and *leaves*.
9. After 7-10 days, a good amount of growth should be evident. The children may choose to take their bean plants home or carefully remove them from the cup and plant them in soil outside.
10. Encourage the children to review their pictures of the seeds progress and discuss what they notice. What have they learned?