



Kinder in the Garden

Pre-Visit Activities

Seed Discovery

Objective

Students will learn about the life cycle of a plant and the similarities and differences between seeds, seedlings and adult plants. (Georgia Standards of Excellence: SKL2.b)

Materials

- A Reason for a Flower by Ruth Heller
- Various seeds or dried beans
- Lima beans (soaked and not soaked)

Activity

- Read through A Reason for a Flower by Ruth Heller or any other book that shows various pictures of fruits, flowers and/or seeds. Review concepts learned in the book with the students. What is a seed, fruit and flower? What grows from a seed? What happens after a flower is pollinated? How do the seeds, fruits and flowers in the book look different? How do they look similar?
- Pass out various seeds and/or dried beans. Ask the students to group the different seeds into piles that look similar. What do the seeds have in common? How are they different?
- Give each student a lima bean that has not been soaked and have them look at it very carefully. What do they see? Are there any cracks or bumps in the seed? Are there any small spots that look like a hole? What do you think that hole might be?
- Give each student a lima bean that has been soaked overnight. Have the students examine the differences between the soaked and non-soaked lima bean. Assist them with removing the skin or seed coat and gently pry the seed in half and draw what is inside. Can they see a small baby plant? Is it near the hole in the seed?
- Optional: have them draw pictures of their observations.
- During their visit to the Garden they will each receive a seed necklace with a sprouting seed. At this time they will see what happens to a seed when it starts to grow.

Leaf Similarities and Differences

Objective

Students will learn that leaves can look similar and different. (Georgia Standards of Excellence: SKL2.b)

Materials

- Pencil
- Scissors
- Green paper
- Optional: brown paper for tree trunk

Activity

- Ask the students to describe a plant. Encourage them to say answers like the following: green, leaves, stems, flowers, roots. Many of those characteristics are called similarities. Ask the students ways that plants can be different. Discuss some of their answers.
- Walk through the school grounds and ask the students to collect 2 or more leaves that look different and to make observations about the differences between the plants they encounter.
- Return to the classroom and discuss what they saw. How did the plants look different? What were some differences they observed in their leaves?
- Optional (depending on the skill level of your students): Give each student a sheet of green paper, pencil and scissors. Ask the students to draw and then cut out their own leaf sample that is different from the leaves they collected.
 - Give students the opportunity to show the class two of their collected leaf samples and the leaf they cut out. They should talk about the similarities and differences between the three leaves.
 - From a large piece of brown paper, cut out a tree shape and decorate the tree with all their different leaf samples. How are their cut-outs similar or different?
 - Reflect on all the ways leaves can be different and what they think most leaves have in common.

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Post-Visit Activities

Watch Your Seed Necklace Grow

Objective

Observe seeds sprouting in the seed necklaces made at the Atlanta Botanical Garden. (Georgia Standards of Excellence: SKL2.c)

Materials

- Seed Necklaces
- Paper/Journal
- Pencils

Activity

- Label or store seed necklaces in a way that students can keep up with their own necklace.
- Make observations about the seed the day after your visit to the Garden. Is anything happening? Has the seed already changed overnight? Does everyone's seed look the same? Optional: Have students draw a picture of their seed and label it "day two".
- Every other day continue to check in with their seed necklaces and note how they are changing. Optional: Draw pictures of the seed and label each drawing with how many days since your visit to the Garden. Continue to discuss how the seed is changing and growing. What do seeds need to grow? Is everyone's seed growing at the same rate? Does everyone's seed look the same? How does the seed change as it starts to grow into a plant?
- As the seed starts to send out leaves and a stem, you may want to place the plant in soil and give it sunlight. When a seed is first sprouting, it doesn't usually need sunlight to grow, but when it starts forming leaves, sunlight is necessary for the continued growth of the plant. You can continue to observe and document the growth of the plant with your students. As it starts to mature ask them how their adult plant is different from the seed.

Garden Memories

Objective

Reflect on their trip to the Atlanta Botanical Garden.

Materials

- Construction paper
- Crayons and/or markers

Activity

- Gather students in a circle and invite them to share their experience from the garden visit. What did they see? What was their favorite part of the garden? What did they learn that they didn't know before?
- Ask students to create and draw a picture about their visit to the garden. Once the students have completed their work, place the pages in a binder that can be placed in the reading area or library to be shared with parents. Be sure to include any photographs that were taken during the visit.