



Theme: Plants (Grades K-2)

Pre-Visit Activity #2

How Does Your Garden Grow?

Overview:

Students will listen to the story *Mrs. Spitzer's Garden* by Trisha Tusa. Mrs. Spitzer is a wise teacher who knows many things. She knows about gardens. She knows about children and how similar they are, and how they will flourish if tended lovingly.

Objectives:

- Students will understand that plants need soil, air, light and water in order to survive.
- Students will realize that if one of the four elements is removed, the plant will die.

Materials:

- *Mrs. Spitzer's Garden* by Trisha Tusa
- 5 potted plants
- 3 large zip lock bag
- sand
- 1 cardboard box

Activity:

1. Prepare the students by telling them you will be reading a story about plants. Have them listen carefully for the four things needed, in order for a plant to grow.
2. Read the story *Mrs. Spitzer's Garden* to the students.
3. Discuss the four elements needed to grow plants – soil, air, light and water.
4. Inform the students that they will be doing an experiment.
5. Divide the class into five groups, A, B, C, D and E.
6. Give each group a potted plant.
7. Have them observe their plant, making any observations in their journals.
8. You may choose to discuss the process of making observations.
9. Instruct group A to remove the element of water. They will provide light, air and good soil. They will not water their plant.

10. Instruct group B to remove the element of light. They will provide water, air and good soil. They will place their plant in a cardboard box in the closet. They will only open the box to water their plant and to make daily observations.
11. Instruct group C to remove the element of air. They will provide sunlight, water and good soil. They will place their plant in the zip lock bag, sucking the air out of the bag. They will only open the zip lock bag to water their plant.
12. Instruct group D to remove the element of soil. They will provide sunlight, air and water. They will empty their soil into the zip lock bag and pour the zip lock bag of sand into their pot, replanting the plant in sand.
13. Instruct group E to provide all four required elements for plant growth. They will provide their plant with water, soil, light and air.
14. Have the students work within their groups to make daily observations in their journals, noting any changes.
15. At the end of one week, have each group discuss their observations, drawing conclusions.
16. Discuss the importance of providing soil, water, light and air to plants.
17. Instruct each group to begin providing all four elements to their plant.
18. They can continue to make observations in their journals for one week.
19. Discuss the results as a whole group.

Suggested Reading List:

1. ***Counting in the Garden*** by Kim Parker. A colorful way to count to ten with pictures of creatures in the garden.
2. ***Good Morning, Garden*** by Barbara Brenner. A simplistic and tranquil greeting to each new day, celebrating nature with rhymes and beautiful illustrations.
3. ***In the Garden: Who's Been Here?*** by Lindsay Barrett George. Christina and Jeremy find evidence of many different animals as they gather vegetables in their garden.
4. ***Little Green*** by Keith Baker. A young boy watches a hummingbird travel from his window, appreciating the nature that he sees.
5. ***Mrs. Spitzer's Garden*** by Edith Pattou. Readers get an informative look at what plants need to grow as Mrs. Spitzer tends to her garden.
6. ***One Little Seed*** by Elaine Greenstein. A very simple look at the cycle of nature as one seed is planted and grown, and another seed is picked.
7. ***Planting a Rainbow*** by Lois Ehlert. A mother and child plant a garden with many different colors, creating a rainbow before their eyes.