



National Park Service Rock Creek Park Environmental Education

MAGICAL SEEDS

Imagining how an acorn transforms into a mighty oak tree, watching airborne seeds fly in the wind, or counting the seeds inside a tomato plant are just some of the experiences that students may encounter as they learn about the magic of seeds.

TOPICS: Seeds dispersal and growth.

BACKGROUND INFORMATION: Seeds are the most important part of a plant, without them there wouldn't be any new plant growth in the forest. (We eat seeds all the time— sunflowers, peanuts...animals like to eat seeds – acorns, thistleseed... and some people have even planted seeds – to grow vegetables, flowers, or trees). The dispersal of seeds in the fall helps distribute them far away from the parent plant, reducing competition. Seeds also come in all sizes and shapes. They need sunlight, water, and food to become new plants. During the winter, they protect the baby plant from the cold.

Where: Rock Creek Park Nature Center

Length: 1 hour

Who: 1st- 3rd grade classes

Students per group: maximum of 30

Chaperones per group: 5- 7

CURRICULUM BASE:

- 1- 3- Students will observe and describe how the structures of living things are adapted to the functions they perform.
- 2- Describe the varied needs of living things (food, water, light, space).
- 3- Study the life cycle of plants and their interdependence of living organisms.
- 1- 3- Observe and describe variation among individuals of the same kind.
- 2- Describe changes in animals and plants as they mature. Describe the value of diversity.
- 3- Describe adaptations that help living things meet their needs.
- 1- 3- Students will develop the ability to create mental images from what has been read or heard.

OBJECTIVES: By the end of the program, students will be able to;

1. Act out the life cycle of a plant.
2. Name at least two needs of plants for survival.
3. Identify a seed and describe how it travels.
4. Name the most important part of a plant.
5. Identify the parts of a seed.



MAGICAL SEEDS

PRE- AND POST- TRIP ACTIVITIES

Prior to your visit to Rock Creek Park, please take a moment to read this pre- site. The pre- trip activities will test the students' knowledge of seeds and the life cycles of plants. The students may not know all the answers. However, we hope this will inspire their curiosity during our program. Please let the students know that they will find out all of these answers and more during their field trip. The post- trip activity is designed to reinforce the concepts of the program and enable the students to use their imagination.

1. Pre- Trip Activity- MATCHING

Make copies of the matching sheets- enough for each student. Ask the students to draw a line from each seed to the tree it develops into. Allow the students to compare answers and discuss how they made their matches.

2. Pre- Trip Activity- PLANT GROWTH

Make copies of the plant growth sheets- enough for each student. Ask the students to draw the life of a plant at each of the stages. When they come to the park they will be able to compare them to real plants growing at different stages.

3. Post- Trip Activity- STORY

Have the students write and illustrate an adventure story about their seeds and how they travel from parent plant to an eventual home.

4. Post- Trip Activity - PLANT A SEED

Have the each student plant a seed (a fingernail's length down in the soil) in an empty yogurt container of soil. Have them water it, set it in the sun, and make observations of its growth.



Can You Draw the Different Stages of a Plant's Growth?

1. A Seed

2. A Sprout

3. A Seedling

4. A Plant!