James & Anne Robinson Nature Center

Howard County Recreation & Parks
Robinson Nature Center
6692 Cedar Lane, Columbia, MD 21044
www.howardcountymd.gov/RobinsonNatureCenter.htm
410-313-0400

Have Seed, Will Travel – Teacher Pre-visit information

Concepts

This program introduces students to the function and parts of plant seeds. Methods of seed dispersal are emphasized in this program.

Program Activities

The indoor introduction introduces the parts and function of a seed and reviews basic plant parts. Students explore several methods of seed dispersal through demonstrations, and discuss ways humans have affected seed dispersal across the globe.

The outdoor hike continues to explore methods of seed dispersal and focuses on finding examples of different seeds. Students are encouraged to determine the dispersal methods of seeds found.

Previsit Suggestions

Read *The Tiny Seed* by Eric Carle
Or read *Seeds* by Vijaya Khisty Bodach
Or read *A Seed Is Sleepy* by Dianna Hutts Aston

Ask students to pretend they are a tiny seed, and make up some adventures. Or write about the day in the life of a seed.

Make seed art. Using glue and different seeds such as poppy, sunflower and sesame seeds, have students create a piece of artwork on tagboard or posterboard cut to 8x10 inch size.

Vocabulary

Dispersal– to spread or distribute in a wide area

Transport– to carry from one place to another

Seed– the small part of a flowering plant that grows into a new plant

Endosperm – the part of the seed that provides food for the plant to start growing

Cotyledon – the first leaf/leaves when the plant emerges from the seed

Plant Embryo – a young developing plant

Primary Root –the first root of the seed when it germinates

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Have Seed, Will Travel – Teacher Post-visit information

Dear Teacher,

We hope you enjoyed your recent field trip to the Robinson Nature Center. To help with follow-up in the classroom, we have developed the following post-visit materials:

1) Follow-up discussion
2) Follow-up activities

Follow-up Discussion

1) Review the parts of a seed.
    a. Seed coat
    b. Cotyledon
    c. Endosperm
    d. Embryo

2) Review the and the parts of a plant
    a. Stems
    b. Roots
    c. Leaves
    d. Flowers

3) Mechanisms of seed dispersal
    a. Wind
    b. Water
    c. Animals
    d. Humans
    e. Throwing

4) Review the seeds that were found on the trail hike. See if the students remember the mechanism for dispersal for each. Some seeds they might have encountered were:
    a. Dandelion – wind
    b. Chickweed – humans, animals, dropping to ground on own
    c. Garlic mustard - throwing
    d. Tulip poplar - samaras dispersed by the wind
    e. Maples - samaras dispersed by the wind
    f. Skunk cabbage - dispersed by birds and small mammals or by floods.
    g. Spring beauties – throwing, ants
    h. Pine cones – animals, forest fire
    i. Partridge berry – birds
    j. Holly - dispersed by birds
    k. Mountain mints – wind
    l. Grass – wind
    m. Cleavers - hitchhikers

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Follow-up Activities

Students can draw posters of the plant cycle based on the information they learned through the field trip.

Discuss with students what it takes for seeds to grow and why various seeds do not grow sometimes. Make a chart or poster with students about the needs of plants and seeds to hang in the classroom.

Edible Seeds/Inedible seeds Chart – Make a chart that compares edible seeds (sunflower, sesame, poppy, and also seeds inside of fruits such as banana, kiwi, strawberry) with inedible seeds such as peach, apple, flower seeds. See how many different seeds students can list!

Read *Flip, Float, Fly: seeds on the move* by JoAnn Early Macken to review the ways that seeds travel.