Ecology at Edgehill Drive: Activities to use with hiking trail

Option 1: Discovery Project

Materials to be prepared ahead of time: Ten numbered bags, each containing an object from nature. (For example: Bag 1 – a feather)

Teacher Directions: Each student will feel what is in the numbered bags without looking inside. They then will write their responses below and complete the two questions that follow.

Student Direction: After you have felt what is in the bag and decided what is inside, write your answer below by the number that matches the number on the bag.

1. __________________________________________________________
2. __________________________________________________________
3. __________________________________________________________
4. __________________________________________________________
5. __________________________________________________________
6. __________________________________________________________
7. __________________________________________________________
8. __________________________________________________________
9. __________________________________________________________
10.  _________________________________________________________

Which numbered bags were you unsure of? __________________________
What confused you the most about them? __________________________

______________________________________________________________
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Option 2: Envirolopes for the Woodlands

The envirolepe activity can bring about an awareness of the variety found in nature and can enhance the aesthetic appreciation and value of the environment being experienced through the use of the senses and discovery. Envirolopes work well in almost any outdoor setting.

Teams of two receive a challenge such as: “Find at least five different shades of green.” The participants collect samples small enough to fit in envelopes, and then display and discuss their discoveries with the rest of the group.

This activity encourages the participants to develop the abilities of making observations and sharing those observations with others. In addition, the activity emphasizes the variety of colors, forms, textures and organisms present in any outdoor setting.

*Preparation:* Prepare envelopes with a challenge written on the outside of each. Divide students into pairs, giving each pair an envelope. Students will have the opportunity to collect their samples as they hike the path along the Inclined Plane.

*Possible Challenges*
Find the ten most unusual shaped leaves.
Find at least five different textures (rough, smooth, etc.).
Find examples of five different smells or odors.
Find at least five different kinds of seeds.
Find at least five objects, each one a different color.
Find at least five different kinds of rocks.
Find at least five different kinds of evidence that animals or insects are around (such as a leaf with bites taken out of it).
Find at least five different kinds of evidence that people are around.
Find at least five objects with different shades of brown.
Find at least five objects with different shades of green.

*Conclude:* Gather the teams together after hiking the trail and do the following:
Ask each team to display their collections and give students a chance to look at all the collections.
Ask what objects appear in more than one collection.
Ask which challenge was the most difficult to meet and why.
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Option 3: Woodland Walk

Complete the following over the course of the hike.

Draw and identify 2 or more insects you discover on your walk. Where did you find them?

Draw and identify 3 types of plants or trees along the path.

Describe the color, smell, and texture of the soils.

Describe and identify any animal tracks you discover on your walk. Draw a picture of one set of tracks.

Describe one non-living thing you found on your walk.
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Option 4: The Age Old Question

Count the age of a tree and determine what sort of growth season the tree had each year.

1. Look at the stump of a tree. Or find a place on a live tree where a branch has fallen or been cut off. Describe the tree.

2. Count the rings in the wood. Now you know the age of the tree or the age of the branch. (The branch is probably a lot younger than the tree.) How many rings does your tree/branch have?

3. Notice how wide each ring is. A wide ring means that the tree had a good growing season, with enough sunshine and plenty of rain. A narrow ring shows a hard year. Describe the life of your tree.

4. What was happening in the world when the tree (or branch) began its life? Can you think of any events in history that took place as the tree grew?

** Did you know that trees can live longer than most any other kind of life? A few of the giant sequoia trees in California are more than 2,000 years old. The oldest tree in the world is a bristlecone pine in California, believed to be nearly 5,000 years old. It would have been pushing up its first sprouts back when the ancient Egyptians were building the pyramids!
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Option 5: Nosing Around for Nests

Shelter is a necessary condition for survival of many animals, insects, and other living things. Explore the area along the trail and observe the homes of animals in the area.

While you are exploring, be careful not to disturb any animals that may still be living in the homes that you find!

Describe the different animal homes and describe the animal that lives there. Why is it a good home for this animal?

<table>
<thead>
<tr>
<th>Animal Home #1</th>
<th>Animal Home #2</th>
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<tbody>
<tr>
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</table>

<table>
<thead>
<tr>
<th>Animal Home #3</th>
<th>Animal Home #4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</table>
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**Option 6: Rub It Out**

Students create interesting design compositions by rubbing textures from nature objects onto paper.

**Materials:** blank white paper, crayons, pencils, objects collected during walk

Have students place leaves wrong side up on a flat surface. Then have them place a sheet of paper over the leaves and rub on the paper with a pencil or crayon (using the side of the pencil or crayon for the best result).

For interesting results, vary the crayon rubbings by having students rub all one direction with a light color and then rub in the opposite direction over the same area with a darker color. Try any number of different color combinations. These are very striking when mounted and can easily be done by even the youngest children.

Stump rubbings are also interesting. Have students tape a large piece of paper over a tree stump and rub with the side of a crayon. These rubbings can be especially good for a discussion of a tree’s age and growth (see option 4).

**Possible extensions:** Students might want to write a history of a tree, including change in the tree’s environment, possible reasons for the tree growing where it is, uses of the tree through the years, and reasons for the tree falling or being cut down.