What so important about that plant?

**Ages:** Grades 4-7 (adaptable for all ages)  **Time:** 1hour minimum

**No. of participants:** Approximately 10-16 (even #’s works best) **No. of additional adults:** 1

**Required supplies:**

* Oregon Rain Forest’s Plant Life activity sheet
* Plant field guides
* pencils
* crayons, colored pencils, or markers
* collection bags or containers
* clipboards
* hand clippers
* hand lenses
* bell

**Objectives:** To find and identify plants from our local ecosystem. To determine the roles of plants within the forest ecosystem.

# Lesson Plan Procedures

1. *Introduction*
   1. Think about the many parts in your body… What would happen if you took one of those parts away, for example, your toes? (As a group, discuss the affect this and other missing parts would have on your life.)
   2. The forest that we are in is a lot like our bodies in that way; there are many parts in it and if you took one or more of those things away it would have huge negative effects on the forest.
   3. Today we are going to focus specifically on plants. So, we are going to begin by going on a plant hunt. Let’s name some categories of plants that you might find before we get started… (trees, flowers, mosses, ferns, mushrooms, etc.)
   4. As you are searching, limit your search to ferns, trees, flowering and non-flowering plants.
2. *Beginning Instructions*
   1. First, each of you needs a clipboard, activity sheet, and a pencil. After you have these items, choose a partner who will accompany you on your plant hunt.
   2. On your plant hunt you will be looking one of each different type of plants - ferns, trees, flowering and non-flowering plants.
   3. When you find a plant that you’d like to consider as one of your four, stop and both you and your partner should draw a picture of that plant in the first column on your activity sheet. Take note of and include small details in your drawing because it will help you later in identifying.
   4. Then, when you have both finished your drawing, choose one part of the plant to take as a sample. This includes leaves, stems, seeds, needles, flowers, berries, etc. Using your clippers, carefully clip this one part of the plant and place it in your collection bag/container. You will do this with four different plants – it may work well for you to pick two of the plants and your partner to pick the other two.
   5. You will have the next 30 minutes to complete this task.
   6. Reminders before you go: Stay with your partner, do not go near the creek, and be careful and considerate of the areas and plants from which you are collecting.
   7. When you hear this bell (or other signal of the leader’s choosing), please return here for further instructions.
3. *Main Lesson* (At this point you can choose to continue this lesson outdoors with clipboards or move inside to a classroom-like setting with tables.)
   1. Okay, it looks like you have collected a lot of different types of plants! Please lay the items out in front of you so that we can all look around and see everyone’s collections.
   2. Starting with the first plant you drew, try to identify it; use these field guides to help you. It will be easier to do if you first identify what type of plant it is – flower, tree, moss, etc. since the guides are divided that way. Use the part you collected to help you when looking at pictures in the field guides. If you are having difficulty identify the plant, ask an adult for help.
   3. Once you find the plant – write the name of it where you see “Name” written on your activity sheet. Do this with each of the four plants.
   4. Feel free to share your interesting findings with the rest of us. If you have any questions, let me know! Alright scientists – get to work!
   5. Pairs who finish early should help the other students.
   6. Depending on the interest/ability of the group you may choose to get out the microscopes so students can take a closer look at the plants.
   7. When most of the students are done, gather them back together. Ask each pair to share the four plants they found while showing the parts they collected.
      1. Define ecosystem - a localized group of interdependent organisms together with the environment that they inhabit and depend on.
      2. As they share, select one plant from each pair to discuss as a group the role of that particular plant within the forest ecosystem. For example, if one of the students finds a deer fern; talk about how that plant serves as food to animals (specifically deer), nutrients to the ground when it dies, hiding place for small animals and insects, etc.
      3. The students should start to see that many of the plants have similar roles in the ecosystem – food for animals and/or people, shelter for animals and/or people, etc. You may want to touch on how plants are essential in the food chain because they are at the beginning of many animals’ food chains.
   8. After each pair has shared, students should complete the “Roles in the Forest” section of their activity sheet for the remaining three plants.
4. *Conclusion*
   1. Have the students put all of the items they collected and no longer want into a large container to be returned to the forest ecosystem.
   2. Wrap up by reminding the group how all these plant parts they learned about today are extremely important to the entire forest.
   3. “Thanks everyone – hope you learned some new information about plants today and have a deeper understanding and appreciation for nature!” (The students may take their activity sheets with them or they could be collected, looked over, and returned later – up to the discretion of the leader.)

## What’s so important about that plant? Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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| Picture of the plant | **Information about plants** |
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