

Leaf Creatures

ALABAMA OUTDOOR CLASSROOM ACTIVITY

Grade Levels K-4

Overview

This activity has the students learning about different types of trees as they collect a variety of fall leaves in different colors and shapes. Once they have collected the leaves, they use their imagination to create a variety of animal shapes from the leaves.

Subject Areas

Biology, Visual Arts, and Environmental Sciences

Duration

2 period of 45 minutes

Learning Objectives

Students will 1) learn the parts of a leaf as they examine different leaves; 2) classify and sort leaves based on observable characteristics; and 3) learn why leaves change color and fall from the trees.

Materials

- Leaf collecting bag
- Leaf press or heavy books
- A variety of construction paper in different colors
- glue sticks

Alabama Course of Study Objectives (on page 2)

Vocabulary

Leaf, deciduous, conifer, lobed, serrate, pinnate, palmate, compound, simple, stem, chlorophyll

Background Info

In the fall of the year, the leaves on many deciduous trees change color before they fall to the ground. This happens because plants make their own food through a process called photosynthesis, using water and nutrients from the ground, carbon dioxide from the air, and sunlight. In each leaf, there is something called chlorophyll. Chlorophyll is green which gives leaves their green color. As the number of daylight hours decreases, the chlorophyll in the leaves goes away and they stop making food for the plant. The plant also stops transporting water and nutrients to the leaves. As the green color disappears from the leaves, the other colors in the leaves are revealed, allowing us to see the vivid fall colors that we enjoy. Since the leaves are not needed by the tree as it is going into a dormant state, the leaves are shed, falling to the ground where they can be recycled back into the soil for next year's green-up.

Preparation

It is important that as you prepare to do this activity with the students, you gather several heavy books (textbooks will work) or have several leaf presses on hand for pressing the leaves. You will also want to have some newsprint paper (unprinted) or other paper available to place between the pages of the textbook and the leaves so that the leaves do not stain the pages of the books.

When drying the leaves, it is best to keep them in the leaf press or book for at least a couple of days. A full week will be better so that the leaves are completely dry and flat. If you remove the leaves too soon, they will curl-up as they finish drying. You may want to test a leaf by removing it from the press and leaving it out overnight to see if it keeps its flat appearance. Once the leaves are dry, you are ready to complete the activity.



Leaf Turkey—Made with dogwood, mulberry, sourwood, red maple, and blackjack oak leaves



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Outdoor Classroom Connections

Students will learn to identify various species of trees as they take a walk in the outdoor classroom and collect a variety of leaves in various colors and shapes.

Alabama Course of Study **Objectives**

Science:

Kindergarten: 2, 6, 7 & 9 First: 2, 4, & 10 Second: 5 Third: 2, 3, 7, 8 & 13 Fourth: 5

Mathematics:

Kindergarten: 1, 2, 5, 7, & 8 First: 1, 2, 3, 5, 10, Second: 1, 5, & 10 Third: 1, 7, & 10 Fourth: 11 & 14

Literature Connections:

Ehlert, Lois. LEAF MAN. ISBN-10-0152053042

Other Related Conservation **Education Activities**

Project Learning Tree

- \Rightarrow The Shape of Things
- \Rightarrow Signs of Fall
- \Rightarrow Looking at Leaves
- \Rightarrow Name that Tree

Access Nature

- \Rightarrow Tree Detectives
- ⇒ Nature Scavenger Hunt

Discovering Alabama Videos

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- Alabama Trees \Rightarrow
- Alabama Forests \Rightarrow
- \Rightarrow A Walk in the Woods

Procedure

- 1. Introduce this activity by talking about leaves before giving each student a leaf collecting bag that they will use as they collect leaves from around the campus.
- 2. Have the students collect a large variety of leaves. Once you bring the leaves back into the class, allow the students to examine the leaves. Discuss with the students the parts of a leaf and its characteristics such as simple or compound, pinnate or palmate, and lobed or not lobed. You can also talk about why leaves change color in the fall of the year. and classify them using some of the characteristics.
- 3. Place the leaves in a leaf press or between the pages of a heavy book. If you use a book, place a piece of clean paper on either side of the leaves so that the pages of the book are protected from any discoloration caused by the leaves.
- 4. After a couple of days, the leaves should be dry and flat. Remove them from the press and spread the leaves out on the table so that the students can sort through them.
- 5. Have the students arrange the leaves into a creature by selecting one or more leaves to serve as the main body. Have them select other leaves to represent other body parts such as legs and a head.
- 6. Give the students time to play constructively as they use their imaginations to create a variety of creatures reusing the leaves.
- 7. Now that the students have had a chance to construct a variety of creatures, have them create one more that they will mount on construction paper.
- 8. Once they get the leaves arranged to make their final creature, have them apply a little bit of glue using a glue stick to each leaf before they press it onto the paper.
- Display their "Leaf Creatures," which can be laminated, for others to enjoy. 9.

Extensions

Language Arts:

- Have the students write a story about their leaf creature including where it lives, what it eats, etc.
- Use the students' leaf creatures to make a classroom book based on the book, Leaf Man by Lois Ehlert.

Mathematics:

• Have the students count the leaves and sort them based on observable characteristics such as shape, color, edges, etc. and show information using a bar graph.

Social Studies:

• Have students research various trees for historical uses (medicinal, food, construction material, basket making, etc.).

The Alabama Outdoor Classroom Program is a partnership between:



Alabama Cooperative **Extension System**





Alabama Wildlife Federation www.alabamawildlife.org/classrooms/

Alabama Department of **Conservation & Natural Resources**

