
Environmental Scientist

Overview:

This lesson and activity are designed to give students hands-on experience understanding the concept of a forest and how each part of the forest works together.

Grade: 1

TEKS

Scientific processes

1.2 (A, B, C, D, E)

1.4 (A, B)

Science Concept

1.6 (A, B)

1.7 (A)

1.9 (B)

Literature

Only One

Shelterwood

Important Book

Vocabulary

Community

Forest

Living Organisms

Non-living Objects

Materials

Discovery Book

Compass

Thermometer

Field Guides

Ziploc Baggies

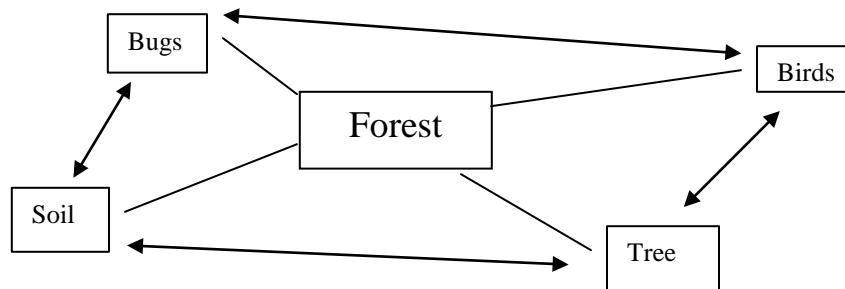
Hand Lens

One Forest Many Parts

Classroom Activity

1. Begin this activity by reading *Only One* by Marc Harshman. Ask your students to think of other examples of the concept "Only One."
2. On the overhead write, "There may be 1000 trees, but there is only one forest." Ask your students to think of other examples of "only one" as it relates to the forest. Write their ideas on the overhead and save this information for future evaluation of your students' achievement.
3. Define a forest as: A plant community dominated by trees and woody plants. Discuss with your students the concept of community. Use the analogy of a community as it relates to the city in which your students live. Besides trees, what other organisms and objects make up a forest community.
4. Explain to your students there are many organisms and objects people miss everyday because they are in a hurry. Take your students on a hike to "Discover 100" living organisms or non-living objects.
5. Use the Discover 100 data sheet as you walk around your school's neighborhood or park. Each time you see a different animal or plant place a mark near the picture on the data sheet. The goal for this activity is to get your students to closely observe their surroundings.

- Back in the classroom, help your students to compile and understand the data they collected on the "Discovery 100 Hike." Did your class find more than 100 organisms or non-living objects? Using your class' data, help your students create bar graphs which represent each theme on the "Discovery 100" data sheet. What was the most interesting object or living organism discovered?
- Create a web based on each of the organisms and objects your students discovered. On the overhead, write the word "Forest." Ask your students to name an organism or non-living object they observed on the "Discovery 100" hike. Help your students make the connection between each component and the forest community.



- Close the lesson by reading Margaret Brown's *The Important Book*. Discuss with your students the important things about a forest. Once they understand the concept, divide the class into several groups and ask each group to create an "Important Book" about the forest. Have your students draw or write their "important" ideas about the forest.

In the Field

One Forest Many Parts

1. Prior to leaving your school make sure you have the following items.
 - Discovery Books
 - Ziploc Baggies (1 gallon size)
 - Pencils (inexpensive mechanical pencils are excellent)
 - Compass
 - Thermometer
 - Water
 - First Aid Kit
 - Sack Lunch or light snack
 - Camera
 - Backpack
 - Hand Lens
2. Before getting on the trail, remind students their observations and data collected will be used back in the classroom to create charts and graphs of their observations.
3. Set your behavior expectations before leaving the parking lot. Explain how students are to behave along the trail and in small groups. State specifically what behaviors you want to see along the trail. Remind students the higher their voices are the less likely they will see wildlife along the trail.
4. Distribute Discovery Books to students and record weather data observations. Teachers a gallon size ziploc baggie make an excellent container for pencils and Discovery Books during lunch or at the end of the day.
5. Walk through the gate and follow the trail. Remember to go slow and listen to your student's observations along the trail.
6. If you have enough adult supervision, divide your class into two groups. Have each group go in opposite directions along the trail. This will help reduce the noise level and also give your students an opportunity to share their observations when the class comes together at the halfway point. This is a good opportunity reinforce the idea that scientists share data too.

Post Eastman Activities

One Forest Many Parts

- Create a "big book" about your class' experiences at Eastman's Nature and Wildlife Habitat Center.
- Take a field trip to the Texas Forest Service's Indian Mound tree nursery.
- Have your students create charts and graphs of the data they collected in their "Discovery Books." Compare the "Discovery Books" data with the data collected at your school. Have your students draw conclusions about their observations.
- Invite a Forest Manager to visit your classroom and discuss the importance of forests.
- Students create an "Environmental Poster" about the forest.
- Write a Haiku about the forest and the animals that live in the forest.
- Collect aluminum cans and use the money to purchase a tree for your school.
- Where's Waldo is an excellent and fun activity to reinforce observation skills. A recent study found that people that can easily find Waldo make good Biologists.
- Create a "forest" in your classroom and have your students act as tour guides.
- Maintain an Environmental Journal for 1 school year.
- Have each student select and observe one tree for one year. Keep a journal (draw or write) about the tree and record your observations each week.
- Make a list of all the objects in your classroom and their connection to the forest.

Discovery 100 Hike

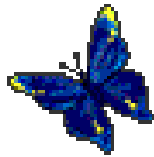
Date: _____ Time: _____

Present Weather: _____
(Clear, Cloudy, Overcast or Raining)

On my hike I found:



Trees



Insects



Birds



Animals



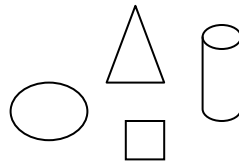
Bones



Seeds



Flowers



Shapes



Colors

Resources

Publications

The Important Book by Margart Wise Brown

Only One by Marc Harshman

The Ghost-Eye Tree by Bill Martin

Stellaluna by Janell Cannon

Sky Tree by Thomas Locker

Shelterwood: Discovering the Forest by Judy Markowsky

Peach and Blue by Sarah Kilborne

Field Guide for the Eastman Nature Trail by Eric L. Taylor, Ph.D.

Web Pages

Common East Texas Trees, Shrubs and Vines

<http://www.eastman.com/EastmanOutdoors/trail.htm>

Fantastic Forest

<http://magma.nationalgeographic.com/ngexplorer/teachers/>

Forest Management

<http://www.oms.edu/exhibits/forestpuzzles/>

Educational in Nature

<http://www.gp.com/EducationalinNature/>

Idaho Forests

<http://www.idahoforests.org/kids1.htm>

Project Learning Tree

<http://www.plttexas.org/>

American Forest and Paper Association

<http://www.afandpa.org/>

Texas Forestry Museum

<http://www.treetexas.com/>