



Matschie's Tree Kangaroo: Importance of Trees Virtual Classroom Extension

Objective

This activity is designed to help your at-home student(s) recognize themselves as scientists and think critically about problem-solving. The goal is to help students understand how animals and humans use trees. As with all lessons provided, please feel free to adapt them according to your students' abilities. Take these ideas, make them your own and your at-home students will have a greater chance at success.

Materials

Paper or attached worksheets, writing utensils, crayons.

Procedures

1. Start by asking your at-home students what they think of when they think about kangaroos. After students have a chance to share ideas, ask if they ever think about kangaroos in trees. If they have seen the video about Matschie's tree kangaroos (<https://resourcelibrary.clemetzoo.com/Area/21>), discuss what they observed about the animal in that video.
2. Discuss with the students the ways tree kangaroos use trees. Why are trees important for these animals? What adaptations or characteristics do these animals have that help them live in trees? For more information on Matschie's tree kangaroos, visit Cleveland Metroparks Zoo's Online Resource Library. (<https://resourcelibrary.clemetzoo.com/Animal/1245>).
3. Print out the "How Trees Are Used" worksheet at the end of this lesson plan (if you do not have access to a printer, you can use a blank piece of paper folded in half). On one half of the paper, have your students draw a picture of a how a tree kangaroo uses a tree. Discuss with the students what they are putting in the picture. What is the tree kangaroo doing in the picture?
4. After the picture is complete and you have talked about it, ask them what people use trees for. Do we use trees the same way tree kangaroos use trees? What are some similarities and differences in how we use trees?
5. Ask your students to go around the house and see if they can find 10 objects that come from trees. They can write or draw the objects that they find on the "Tree Item Scavenger Hunt" worksheet at the end of this lesson plan or on a separate sheet of

paper. Tell them that each item needs to be a different. For instance, if you have four wooden chairs, they count as one item, not four separate items. You can increase or decrease the number of items your students need to find based on their ability.

- a. If you have multiple students at home, you can make it a race. The first student to find 10 objects made from trees is the winner.
6. Once all items have been found. Go through their list and talk about why they think that item came from a tree.
7. You can also discuss other items they may not have thought about. Some household items that originate from trees include:
 - a. Maple Syrup – maple trees.
 - b. Root beer – traditionally made from sassafras trees.
 - c. Aspirin – originally developed from willow trees.
 - d. Chocolate – cacao tree.
 - e. Cinnamon – comes from the bark of the cinnamon tree.
 - f. Rubber – comes from sap of rubber trees.
8. On the other half of the “How Trees Are Used” worksheet (or your own sheet of paper with tree kangaroo drawing), ask your students to draw a picture that shows the ways people use trees. Once the drawing is finished, discuss what they included and why.
9. Have the students compare the picture they drew of the tree kangaroo with the picture they drew of the people. What are some similarities and differences?

Outdoor Extension:

1. For the outdoor extension, you will need access to a yard or park with at least one tree. It works best if it is over 50° F outside. The students will be looking for animals and signs of animals using the tree. This will include insects and other invertebrates. If it is colder than 50° F, there is a smaller chance of finding these types of animals.
2. Explain to your students that they will now explore how animals in Ohio use trees. Tell them they will conduct a scientific observational study to explore the question:

How do animals in Ohio use trees?

3. Ask your students what they predict the answer to this question would be. What animals do they expect to see in and around trees? What do the students predict the animals will be doing?
4. Take your students outside. Bring the “How do animals in Ohio use trees?” worksheet and a writing utensil.
5. Have your students pick a tree. If you are with more than one child, they can observe the same tree, or you can have them pick two different trees. If you are in a park or wooded area, ensure that there is no poison ivy growing near or on the tree.
6. Ask your students to make observations of signs of animals in or around the tree. Have them record any signs of animals that they see. They should look closely among the branches, at the base of the tree, and on the trunk. Signs of animals may include the

animal itself, tracks, nests, spider webs, and chewed nut shells. Tell them to look very closely, because some animals may be very small. Observations may be written or drawn:

- a. Record each animal that is seen.
 - b. Record how each animal is using the tree.
 - c. If a track or other animal sign was observed, record what it was. Record your inference about what that sign tells you about how the animal used the tree.
7. Discuss with your students the observations they made.
 8. Based on those observations, how would each student answer the original question, “how do animals in Ohio use trees?”
 9. If the observed tree did not have any animals or animal signs nearby, discuss what that means for the question. Does it mean that animals do not use trees? Does it mean that animals never use this particular tree? What are some ways you could get more information about how animals in Ohio use trees? If you repeated this on a different day or a different time, do you think you would make the same observations?
 10. Students should wash their hands after they complete the outdoor activity.

Ohio's Learning Standards

Science Content Standards
Grade 1 Life Science Topic: Basic Needs of Living Things 1.LS.2: Living things survive only in environments that meet their needs.
Grade 2 Life Science Topic: Interactions within habitats 2.LS.1: Living things cause changes on Earth.
Grade 3 Life Science Topic: Behavior, Growth and Changes 3.LS.2: Individuals of the same kind of organism differ in their inherited traits. These differences give some individuals an advantage in surviving and/or reproducing.
Grade 5 Life Science Topic: Interactions within ecosystems 5.LS.1: Organisms perform a variety of roles in an ecosystem.

Supplemental Videos

<https://resourcelibrary.clemetzoo.com/Video/3323>

<https://resourcelibrary.clemetzoo.com/Video/3325>

<https://resourcelibrary.clemetzoo.com/Video/3324>

How Trees Are Used



How Matschie's Tree Kangaroos Use Trees

How People Use Trees

Tree Item Scavenger Hunt



Find at least 10 items in your house that are made from trees. Write or draw a picture of them in the boxes provided. You may only include one of each type of item.

How do animals in Ohio Use Trees?



<p>My observations of animals or animal signs.</p>	<p>What this observation tells me about how an animal uses this tree.</p>
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My answer to the question, "How do animals in Ohio use trees?"

How did my observations help me uncover this answer?