



Lesson Plan:
Something New, Something Used, Something Borrowed, Something Reused

Grades: 4 – 6

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(Lesson edited and formatted
by Real Curriculum, Inc.)

Summary	Students learn about ecosystems through literature, a game, and observation of a decaying log using the ProScope.
Topic(s)	<ul style="list-style-type: none">• Skills of a Scientist: Observation and collection and presentation of information about specimens• Life Science: Ecosystems
Concepts	<ul style="list-style-type: none">• Decompose• Ecosystem• Producer• Consumer• Decomposer
Knowledge and Skills	<ul style="list-style-type: none">• All life is connected in delicate balances called ecosystems.• Living things perform jobs to maintain ecosystems: producers, consumers, and decomposers.• Decomposers, such as fungi and bacteria, break down plant and animal matter from a complex to a simpler form
Equipment and Materials	<ul style="list-style-type: none">• <u>The Gift of the Tree</u> by Alvin Tresselt• ProScope HR• Computer with ProScope software installed• Lab notebook• Decomposing log• About 16 balls



OBJECTIVES

Students will

- Use literature, The Gift of the Tree, to make connections to the world around you.
- Play the Ecosystem Game.
- Use the ProScope to analyze a decaying log.
- Make observations about animal habitats.
- Understand that living things do specific kinds of “jobs”.

PROCEDURE

1. Read The Gift of the Tree
2. Play the Ecosystem Game
 - Students are grouped, with nametags, as decomposers, consumers, and producers (class of 28 example: 8 consumers, 4 decomposers, and 16 producers).
 - Use as many balls (recycled log) as producers.
 - The balls should be placed in two or more piles in a confined playing area.
 - The game involves a basic chain. The producer is eaten by a consumer. The consumer is broken down by a decomposer (returning to a ball). Producer can take from the piles.
 - The goal of the producer is to get the balls out of the piles.
 - Consumers can get a ball by a two-handed tag on the producer.
 - The decomposer can only get the ball by a two-handed tag on the consumer holding a ball.
 - Producer begin the game. Consumers then join the game. Finally, decomposers join the game.
 - Players may only hold one object at a time. If they are tagged, they can pass the ball to another member of their team.
3. Take students to a log that is in the process of decomposing (or purchase a log).
4. Look at the condition of the log. Take a snapshot using the Proscope. If life is present, use the video also. Record observations in your lab notebook.



5. Look for evidence of new life on the log: mosses, algae, fungi, etc. Take a snapshot using the Proscope. Record observations in your lab notebook.
6. Observe the inside of the log. Is there proof that other animals have been inside the log? Take a snapshot using the ProScope. Record observations in your lab notebook.
7. Look at the condition of the trees / plant life near the tree. Take a snapshot using the Proscope. Record observations in your lab notebook.

Students should keep a record of their observations and pictures from the microscope, in a format such as this:

Picture	Observation	Connection to <u>The Gift of the Tree</u>

Assessment Prompts:

How would your observations change the way you look at your surroundings? Was there a purpose for the decomposing log?

Explain the game, Ecosystem Game, in relation to what you observed with the ProScope. Was the “game” a realistic simulation? How might you change the game to create a more realistic “picture?”