



## Extinction Is Forever

**Summary:** Students will use models of forests with low and high biodiversity and observe the effect of habitat destruction and extinction rates.

### Background Information:

Biological diversity is one of the key issues concerning rain forests. Recent human impact on rain forests and other areas has raised the rate of extinction to a catastrophic level, faster than the rate of extinction that marked the end of the age of dinosaurs.

### Materials:

- 1 per group of two students
- Activity sheet-diversity representation in deciduous forest  
Rain forest.  
Pencil

### Procedure:

#### Activity 1.

Hand out the activity sheet to each group. Explain that tropical rain forests have a large number of different plants and animals, or species, especially compared to forests in temperate areas. Explain that the top grid, with the letters A, B, C and D, represents a forest in a temperate area with a few different species. The bottom grid, with a complete alphabet, represents a tropical rain forest with many different species

#### Activity 2.

Tell students to count how many different letters, or species, there are in each grid. *There are four different species represented by the letters in the top grid and 26 different species represented by the letters in the bottom grid*

**Activity 3.** Tell students to fold the sheet in half, lengthwise, and then tear the sheet along the fold, from top to bottom. Tell them to discard one half of the sheet. Ask them to determine how many letters, or species, were lost in each grid, or forest. Tell students that in a temperate forest, the remaining species could repopulate the original area, if given the chance. In a tropical rain

**Grade Level:** What age group is this lesson suitable for? K-8 with variations

**Goal:** Observe the importance of preserving the rainforest.

### Key Concepts:

Habitat destruction and rates of extinction.

**Objectives:** Upon completion of this lesson, students will:

- 1)note the difference of biological diversity in a temperate forest and a rain forest.
- 2)Describe the effect of habitat destruction in each forest
- 3)explain why it is important to preserve the rain forest

### Teaching Location:

In the classroom

### Lesson Time:

One class period.

### Subject Areas for Infusion:

Environmental education  
Spanish

### Standards:

Environmental Education  
A.8.3  
B.8.5  
Foreign Language  
Beginning(Receptive-  
Imitative)  
B.1-listening  
D.2-cultural activities  
E.1- object and symbols

forest, there is no possibility whatsoever for extinct species to come back. Extinction is forever.

**Optional Activity:**

Challenge students to write a short sentence or poem about rain forests with just the letters they have remaining on half of the bottom grid to see how the loss of diversity limits possibilities.

**Conclusion.**

Answer any questions the students may have.

**Assessment.**

Students will be able to describe the differences in biological diversity orally and when we take the unit test a question pertaining to a general understanding will be on the test.

**Vocabulary**

**Key term:**

Extinction:

**Key term:**

biological diversity:

**References:**

MayaQuest: Mysteries of the Rainforest, 1992 Science Museum of Minnesota

**Tropical Rain Forest**

<b>U</b>	<b>C</b>	<b>F</b>	<b>X</b>	<b>H</b>	<b>D</b>
<b>S</b>	<b>G</b>	<b>V</b>	<b>O</b>	<b>R</b>	<b>E</b>
<b>K</b>	<b>W</b>	<b>Z</b>	<b>B</b>	<b>V</b>	<b>A</b>

<b>E</b>	<b>N</b>	<b>J</b>	<b>M</b>	<b>T</b>	<b>Z</b>
<b>Q</b>	<b>I</b>	<b>Y</b>	<b>B</b>	<b>F</b>	<b>C</b>
<b>M</b>	<b>A</b>	<b>L</b>	<b>Q</b>	<b>J</b>	<b>P</b>

### Temperate Forest

<b>D</b>	<b>C</b>	<b>A</b>	<b>B</b>	<b>A</b>	<b>D</b>
<b>A</b>	<b>D</b>	<b>B</b>	<b>C</b>	<b>B</b>	<b>B</b>
<b>B</b>	<b>A</b>	<b>C</b>	<b>B</b>	<b>D</b>	<b>A</b>

<b>C</b>	<b>B</b>	<b>D</b>	<b>A</b>	<b>C</b>	<b>C</b>
<b>C</b>	<b>D</b>	<b>A</b>	<b>B</b>	<b>A</b>	<b>D</b>
<b>D</b>	<b>A</b>	<b>B</b>	<b>D</b>	<b>C</b>	<b>C</b>