



**Second Grade**  
**Amazon Rainforest Conservation, Brazil**

**National Standards for Second Grade Lessons**

**Writing**

Standard 3 Level 1: K-2

1. Generates questions about topics of personal interest.
2. Uses a variety of sources to gather information.

**Reading**

Standard 7 Level 1 Grade K-2

1. Uses reading skills and strategies to understand a variety of informational texts.
4. Relates new information to prior knowledge and experiences.

**Listening and Speaking**

Standard 8 Level 1 Grade k-2

8. Listens and responds to a variety of media.

**Thinking and Reasoning**

Standard 1 Level 1 Grade K-2

Understands and applies the basic principles of presenting an argument.

Standard 5 Level 1 Grade K-2

Identifies simple problems and possible solutions

Standard 3 Level 1 Grade K-2

1. Identifies the similarities and differences between persons, places, things and events using concrete criteria.

**Mathematics**

Standard 1 Uses a variety of strategies in the problem-solving

Level 1 Grade K-2

1. Draws pictures to represent problems.
2. 4. Makes organized lists or tables of information necessary for solving a problem.

Standard 3 Level 1 Grade K-2

3. Understand basic estimation strategies

Standard 4 Level 1 Grade K-2

2. Understand the basic Measures of length, width, height, weight, and temperature.

**Life Sciences**

Standard 6 Level 1 Grade K-2

1. Knows that plants and animals need certain resources for energy and growth
3. Know that living things are found almost everywhere in the world and that distinct environmental support the life of different types of plants and animals.

Standard 13 Level 1 Grade K-2

Understands that in science it is helpful to work with a team and share the findings with others.

Standard 12 Level 1 Grade K-2

1. Knows that learning can come from careful observations and simple experiments.

Standard 5 Level 1 Grade K-2

1. Knows the basic needs of plants and animals (air, water, nutrients, light or food, shelter).

2. Knows that plants and animals have features that help them live in different environments.

Standard 4 Level 1 Grade K-2

3. Knows that differences exist among individuals of the same kind of plant or animal.

Standard 7 Level 1 Grade K-2

2. Knows that there are similarities and differences in the appearance and behavior of plants and animals.



**Second Grade  
Amazon Rainforest Conservation, Brazil**

**Lesson 3: Products from the Rainforest**

**Concept**

Bananas, cocoa, coffee, wood and many more products originate in the rainforests of Latin America. As demand for products from the rainforest increases, more pressure is exerted on these precious ecosystems. With 90% of the world's forests outside of protected areas, the Rainforest Alliance works to protect ecosystems and the people and wildlife that depend on them by transforming land-use practices, business practices and consumer behavior. For instance, companies and communities in Brazil work with the Rainforest Alliance and their partners to harvest wood while ensuring the forest will remain healthy and productive for generations to come.

**Essential Question**

Is this table someone's old climbing tree?

**Informational Introduction for the Teacher**

In nature, diversity is the total amount of different living things in a place, and is a result of environmental conditions in that place. Rainforests are complex, and host an extraordinary level of diversity.

Rainforests are home to a fantastic variety of plant life. A typical 10 km square area contains 1,500 kinds of flowering plants and 750 tree species. These plants form a system of layers in the rainforest called the forest floor, understory, canopy and emergent layer.

The rainforest is an ideal place for many types of animals to live. There is plenty of water, shelter and food, and it is warm all year. These conditions mostly benefit the insects that can grow and reproduce the year round, unlike the annual cycle in colder climates. Some insects grow very large. "Walking sticks" reach lengths of over 12 inches. Beetles can be as large as your hand and some moths are the size of small birds. But the really amazing thing about them is their variety. One tree in the Amazon can house 200 different types of insects; not 200 insects but 200 different types! Scientists believe many insect types have yet to be named and catalogued. It is important to understand that rainforest animals play a vital role in maintaining their habitat. Because there is no wind in the lower layers to carry pollen from one flower to another, many plants depend on insects for pollination. The 900 varieties of fig trees require 900 different kinds of wasps to pollinate them. In order for plants, like the fig tree, to survive they need fruit-eating birds, mammals and even fish to help spread their seeds.

**Informational Introduction for the Students**

Tall, mighty trees, millions of insects, constant sounds, monkeys climbing overhead and more birds than you've ever seen in one place -- tropical rainforests are places of tremendous amounts of life. How can so many things share such little space? Rainforests are complex systems. Our exploration of how they work will involve

understanding the weather, the structure of the forest, the way that each plant and animal depends on one another... basically how complex and fragile a rainforest is.

#### **Additional Resources:**

- **Resource Index** - Check out this page at <http://www.rainforest-alliance.org/programs/education/teachers/curriculum/resources/index.html> for additional supplemental materials that complement these dynamic units and to access many of the resources listed below.
- **Slideshow** – The Learning Site provides a slideshow and script about Brazil that includes background information about the animals, people and landscape of this region. The slideshow can be downloaded for viewing in the classroom, printed out and read as a story, or viewed online with the students.
- **Unit-Specific Story** - The Rainforest Alliance has developed an original story for use with this unit, available in English, Spanish and Portuguese. The story is available to download and print or can be viewed on-screen.

#### **Brothers of the Rainforest**

- **Species Profiles** – The species profiles, available to view on screen or download from the beginning of the unit or the Resource Index, include photos, habitat, foraging behavior, group relationships, threats and many more facts.

- Heliconia
- Amazonian Tapir
- Kapok Tree
- Leafcutter Ant
- Amazon River Dolphin

- **Rainforest Poster:** Download and print out this colorful two-page poster, which is available for you to use in explaining the layers of the rainforest, its products and the environmental threats facing many rainforests around the world.

**Inside the Canopy** – Structure and species of the rainforest  
**Status Report** – What is happening to the rainforest

- **Rainforest Products** – Visit <http://www.rainforest-alliance.org/resources/forest-facts/lives.html> for a summary of products found in our homes and supermarkets that either originated in tropical forests or are currently produced there.
- **IMAFLORA** - Check out this online resource for more information about the Rainforest Alliance’s partner group in Brazil:  
<http://www.rainforest-alliance.org/programs/aar/brazil.html>
- **Profiles in Sustainability** – Visit <http://www.rainforest-alliance.org/programs/profiles/index.html> for case studies on companies who work closely with the Rainforest Alliance to ensure that their practices protect wildlife, workers and communities.
- **Venn Diagram Template** – Print out a photocopy-ready Venn diagram for

use in this unit.

- **Certificate of Accomplishment** – Print out colorful rainforest certificates for your students to commemorate their completion of these units.

### **Step 1 CONNECT – (The concept to Prior Knowledge)**

#### **Challenge**

Students identify the countries of origin for many products they currently use everyday.

#### **Materials**

- Rainforest items/foods—See <http://www.rainforestalliance.org/resources/forest-facts/lives.html> for examples (12 items per small group)
- Internet or encyclopedia access
- Paper/pencils

#### **Procedure**

1. Students are divided into small groups.
2. Each group has 12 items that are common to everyday life including but not limited to: balsa, bamboo, raffia, coconut, plantains, tangerine, sesame seeds, vanilla, chocolate, chewing gum and rubber balls. These items are mixed with locally (United States) grown foods and products.
3. Students sort the items into 'local' or 'exotic' foods.
4. Students search the Internet for the countries that produce these items. Visit <http://www.rainforestalliance.org/resources/forest-facts/lives.html>.
5. Once the country of origin is found, a chart of where the items originate is made.

### **Step 2 - LITERATURE/DISCUSSION (Give Expert Information Book: Ask Questions)**

#### **Challenge**

Students begin to understand how many items they use individually come from the rainforest and how the amount of resources may impact the integrity of a landscape.

#### **Materials**

- Book: **Rain Forest Plants**, by Pamela Dell
- Internet or encyclopedia access
- Paper/pencils

#### **Procedure**

1. Read **Rain Forest Plants**, by Pamela Dell. There is a section in this book that describes products we commonly use that come from rainforests. This book demonstrates our reliance on rainforests. Use this book to introduce how indigenous people live in the rainforest and how they depend on its healthy existence. This text will open the opportunity to discuss the importance of

conservation of these resources and how we still may be able to harvest products while keeping the rainforest safe.

2. Students take two items from their 'exotic' column that are from the rainforest. Using the Internet, students find out where their items are from and how they are harvested or farmed.
3. Students write a story of the journey one item must make to get to their home and some of the experiences they might have along the way. This should be role-modeled by the teacher so that each different type of transportation and their possible routes is talked about with children.

← - - - - **Formatted:** Bullets and Numbering

### **Step 3A - PRACTICE (Math and Learning Arts)**

#### **Challenge**

Students take the product from their story and follow its journey on a map from point of origin to their home.

#### **Materials**

- Maps of North and South America with roads and rivers
- Colored stickers or markers (to chart distances on the map)

#### **Procedure**

1. Using maps of South America and North America that show major riverways, oceans and some major roads, help students trace the route that their product might take to get to their home.
2. Have students research the distances 'as the crow flies' in a straight line from Brazil to their home.
3. Challenge the students to chart how it might have moved across land or over waterways to get to their home in the US. These might be marked in different colors on the maps. Does this journey take more time? Is it a longer distance to go over water or land routes?

### **Step 3B – CREATE (Performance Tasks Related to Standard Indicators)**

#### **Challenge**

Students recognize that the product they have in their home comes from a place where another person their age may live.

#### **Materials**

- Story: **Brothers of the Rainforest**, from the Rainforest Alliance
- Paper, pencils

#### **Procedure**

1. Read **Brothers of the Rainforest**, an original Rainforest Alliance story, to students.
2. Discuss how the resources from their products may have come from the home of an Amazon villager.
3. Discuss how the Rainforest Alliance and their partners are working to protect the forest while harvesting the products we all use daily. In addition to protecting the endangered ecosystems, these sustainable enterprises also help the local people earn money to support their livelihoods.
4. Have the students write a letter to the Rainforest Alliance thanking them for giving us the opportunity to protect the rainforest and boost the income of local people by buying Rainforest Alliance certified products.

5. Additional References:

**Adventures of Riley: Amazon River Rescue** by Amanda Lumry and Laura Hurwitz

**Step 4 – PRESENT (Edit Work/Students Orally Present Projects)**

Students either read their story of the journey that the item took from the rainforest to their home or read the letter to the Rainforest Alliance.

**LESSON 3 ASSESSMENT RESULTS:**

Teacher observations of tasks with rubrics as listed below, as well as collected work samples.

Assessment Guidelines	3 = P (Proficient)	2 = S (Satisfactory)	1 = NW (Needs Work)
1. Student sorts and identifies 12 items of common usage by their country of origins on a chart.			
2. Student creates a guide to the origin and harvesting, processing and transportation/distribution of 2 common items found in their homes.			
3. Student writes a story (through narrative with pictures) of the journey their consumer item might take from Brazil to their home.			
4. Student charts the movement of a consumer item from Brazil to the consumer sale location in North America on a map to calculate the distance it traveled.			
5. Student writes a letter to the Rainforest Alliance describing how they will act as a consumer to conserve the rainforest.			