Fifth Grade
El Imposible National Park, El Salvador

National Standards for Grade Five Lessons

English
Standard 3: Evaluation Strategies
Students apply a wide range of strategies to comprehend, interpret, evaluate and appreciate texts.

Standard 1: Reading for Perspective
Students read a wide range of print and non-print texts to build an understanding of texts, of themselves and of the cultures of the US and the world.

Standard 4: Communication Skills
Students adjust their use of spoken, written and visual language to communicate effectively with a variety of audiences and for different purposes.

Standard 7: Evaluating Data
Students conduct research on issues and interests by generating ideas and questions, and by posing problems.

Life Science
Standard 3
Students develop an understanding of the structure and function in living systems, populations and ecosystems, and diversity and adaptations of organisms.

Math
Standard 1: Grades 3-5
Students understand the need for measuring with standard units and that measurements are approximations and how differences in units affect precision.

Technology
Standard 5: Technology Research Tools
Students use technology to locate, evaluate and collect information from a variety of sources.

Standard 4: Technology Communication Tools
Students use a variety of media and formats to communicate information and ideas effectively to multiple audiences.

Social Studies
Standard 5: Environment and Society
Students should understand how human actions modify the physical environment.

Science
Standard 6: Personal and Social Perspectives
Students develop an understanding of populations, resources and environments.

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Lesson 1: Biodiversity

Concept
The more diverse an ecosystem is, the more interdependence of species exists within that system. The complex relationships among diverse species are difficult to identify. As species disappear or become extinct we begin to see the vital links that exist among species. Essential levels of biodiversity vary among biomes and bioregions.

Essential Question
Could an ocelot live where you live?

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 El Salvador 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 Stories-** The Rainforest Alliance has developed two original stories for use with these units, available in English, Spanish and Portuguese. The stories are available to download and print or can be viewed on-screen.

  Alex Goes Exploring in El Imposible
  Life In San Miguelito

- **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.

  - Ocelot
  - Great Curassow
  - King Vulture
  - Blue-Crowned Motmot

- **Rainforests: Supermarkets to the World -** A great two-page introduction to the many fruits, vegetables, medicines and other products that we use everyday, which are harvested from tropical rainforests.

- **Park Profile -** Visit http://www.rainforest-alliance.org/programs/aar/el-salvador.html for a basic introduction to El Imposible National Park.

- **Rainforest Poster -** Check our this colorful two-page poster depicting the layers of the rainforest, rainforest products, and the threats faced today by many of the world's rainforests is available for your use.

  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 that we use in our everyday lives that originate in rainforests. Both teachers and students will find information on the products found in their homes and supermarkets that either originated in tropical forests or are currently produced there.

- **Profiles in Sustainability** – Click here 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.

- **Conservation Coffee Summary –** Visit http://www.rainforest-alliance.org/programs/education/teachers/curriculum/pdfs/conservation-coffee.pdf to access an eight-page introduction to the issue, including a glossary of terms. These are appropriate for students to read independently.

- **Venn Diagram Template -** Download a photocopy-ready Venn diagram designed to complement 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 will observe the biodiversity in their backyard by connecting the adaptations of the animals in their neighborhood to the climate and habitats in which they live in.

Materials
- Access to schoolyard or nearby park
- Paper, pencils

Procedure
1. Take students out into the school grounds and look for signs of life.

2. Search for insects, birds, animal tracks, scat, feathers, nests, different types of trees, grasses, soil types, etc.

3. Make a class list that shows all findings in the schoolyard and post it as a visual in the classroom.

4. Make headings to organize groupings: insects, plants, mammals, birds, etc.

5. Discuss the Web of Life concept. Draw lines that connect one thing to another. For example: A nest is connected to a bird which is connected to the worms which is connected to the soil which is connected to the trees, and on and on.

Step 2 - LITERATURE/DISCUSS (Give Expert Information Book; Ask Questions)

Challenge
Students will learn about the biodiversity of the rainforest and compare and contrast with that of their own schoolyard findings.

Materials
- Book: **The Great Kapok Tree**, by Lynn Cherry
- Biodiversity list from Step 1
- 1 piece of long string or rope

Procedure
1. Read **The Great Kapok Tree,** by Lynn Cherry. Discuss the different perspectives voiced throughout the book.

2. Activity: *The Web of Life*
   - Have students stand in a large circle.
   - Each student should choose one of the items from the classroom biodiversity list, making sure everyone represents a different living thing.
   - Use a string or a rope to represent the links between each person.
   - One person starts by saying the name they chose and, as a class, decide how they are connected to another organism in the circle.
   - The rope is then passed to that organism.
   - The goal is to finish with a web that is connected to everyone.
   - This game demonstrates the intricate web of life.

3. Debrief in order for students to see how everything in their backyard, as in the rainforest, is ultimately connected in some way or another to their specific environment.

Step 3A- PRACTICE

Challenge
Students will come up with their own web of life example.

Materials
- Access to natural area (i.e. yard, park, etc.)

Procedure
1. Each student will look for an animal or insect in their own backyard or the schoolyard.

2. Students will make observations based on the behavior of that animal or insect.

3. Students will come up with their own web of life example based on the observations made and research on the behavior, food and habitat of that organism.

4. Students will make observations that support the theory that all organisms are connected: behavior, food, habitat, etc.

Step 3B- CREATE (Performance Tasks Related to Standard Indicators)

Challenge
Students will demonstrate through writing how all living things interact with their environment in order to survive.

Materials
- Paper, pencils

Procedure
1. Students will synthesize their observations of an organism and create a story that parallels **The Great Kapok Tree**. Using their observations as a framework, they will write their own stories to explain who depends on what for survival and why these interactions are unique to their environment.

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

Challenge
Students will practice their oral reading skills.

Materials
- Story from Step 3B

Procedure
Each student will read their story to the class.

LESSON 1 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's story shows the connection between organisms and their environment.			
2. All spelling, punctuation and grammar are accurate.			
3. Student's illustrations follow the story line.			
4. Story provides multiple links between organisms and their environment.			
5. The story and illustrations represent student's full potential.			