

RAINFORESTS

THIRD-FIFTH

Life Science TEKS

Third Grade: 3.9A, 3.9B, 3.9C, 3.10A, 5.10A, 5.10B, 5.10C

Fourth Grade: 4.9A, 4.9B, 4.10A, 4.10B, 4.10C

Fifth Grade: 5.9A, 5.9B, 5.9C, 5.9D, 5.10A, 5.10B

Vocabulary

adaptations, carbon-dioxide/oxygen cycle, climate, community, decomposer, ecosystem, environment, food chain, habitat, inherited, interdependence, learned, leaves, life cycle, limbs, living, man-made, natural, needs, nonliving, offspring, organisms, patterns, population, produce, producer, roots, stem, survival, weather,

Pre-Show Activity

Pre-Show Lesson: Rummaging through Rainforests

Materials: various rainforest items such as: coffee, corn, rice, ginger, chocolate, vanilla, chewing gum, lemons, sugar, bananas, beans, mangos, lemons, tapioca, avocados, coconut, cinnamon, tea, pineapples, oranges, cashew, rubber bands, raffia, rattan, jute, bamboo and any other rainforest products (see chart in Appendix A-2).

The teacher will need to provide a list of appropriate websites for students to use as resources. These should be easily accessible to students so they can just click and connect. If students do not have online access the teacher will need to find other resources or print material ahead of time. See Appendix A-1 for suggested websites.

Procedure:

1. Distribute various rainforest items to each group of students. Be conscientious of any food allergies students may have. Make sure that each group has at least one item that is not a food product.
2. Ask students, "What do these items have in common?" Give them a couple minutes to discuss the answer in small groups. As students are discussing, ask facilitating questions:

Where did these items come from? Are they living or nonliving? Are they natural or man-made? Did they come from living or non-living things?

3. Have students share their ideas as a whole group. Tell students that we get all of these items from rainforests. Use the items to discuss living and non-living and natural versus manmade.
4. Assign groups of students a different continent with tropical rainforests to study; South America (Amazon), Africa or Australia. Groups will use web sites and library books to complete the information on the chart (Appendix A-2) and put a presentation together to share their rainforest area. The presentation can be done using Web 2.0 tools such as Voki, Blabberize, Animoto, Prezi, Glogster, etc. or it could be a skit, song, poster, etc. As students are working, you may want to play rainforest music or show a live rainforest webcam such as <http://www.worldlandtrust.org/webcams>. Facilitate by asking questions that bring in some of the TEKS vocabulary. Possible questions include:
 - What is a predator in this rainforest? Prey? Can an animal be both?
 - How is the rainforest able to support so many animals?
 - What are some environmental changes that could affect this ecosystem? Explain.
 - How do humans affect this ecosystem?
 - What do the plants in this ecosystem need in order to survive? How are their needs met?
 - What adaptations does this organism have that helps it survive here?
 - How are the needs of producers at the different levels of the rainforest met? (forest floor, understory, canopy, emergent)
 - Can you describe how energy flows through this ecosystem?
 - How is the carbon-dioxide/oxygen cycle affected by the rainforest? How would it be affected by the destruction of the rainforest?
 - How do the living and non-living parts of this ecosystem interact?
 - What behaviors do you think this animal exhibits are learned? What traits or behaviors are inherited?
5. Invite parents or other classes in to hear your students present. As groups share, the listening students will take notes on the notes page (Appendix A-3).
6. Each student will use their notes to write a paragraph explaining how all three rainforests are alike.

Post-Show Enrichment Activities

Activity One: Rainforest Venn Diagram

Students will work in their group to compare and contrast the three different rainforests using what they learned from their presentations and the Museum presentation. For younger students, have each group compare two rainforests or a rainforest ecosystem with the ecosystem that they live in.

Activity Two: Rainforest Foldable

Students will fold a piece of paper in half. The top half will be cut into four sections from the edge of the paper to the fold. The bottom half will not be cut. Students will label the layers: emergent, canopy, understory and forest floor. They can draw a picture on the front. Under each flap students will write something about each layer. You may want to have them show a possible food chain for each layer or describe a plant or animal and the adaptations which help it, or you may want to have students choose an animal at each layer and list some inherited traits and learned behaviors. See Appendix A-4 for example of how to cut and fold.

Activity Three: Animal Adaptations

Students will work with a partner to create an animal that is adapted to live in the rainforest. They can do this by either drawing it or using materials like cotton, clay, googly eyes, string, pipe cleaners, etc. They should be able to explain what layer it lives in and how its body parts and behaviors help it survive in that layer.

Activity Four: Rainforest Scavenger Hunt

Students will work with a partner to answer the questions on the Rainforest Scavenger Hunt record sheet (see Appendix A-5). They will give evidence to support each answer. Students can use books or websites as resources. A possible website is <http://kids.mongabay.com/>. The team with the most answers complete and correct after a given time is the winner.

Appendix

A-1

Possible Web sites

Africa:

http://www.pbs.org/wnet/africa/explore/rainforest/rainforest_eco_lo.html

<http://kids.mongabay.com/elementary/africa.html>

<http://interesting-africa-facts.com/Africa-Landforms/African-Rainforest-Facts.html>

Australia:

<http://kids.mongabay.com/elementary/australia.html>

<http://www.rainforest-australia.com/>

South America:

<http://www.kidsdiscover.com/spotlight/the-amazon-for-kids/>

<http://rainforests.mongabay.com/amazon/>

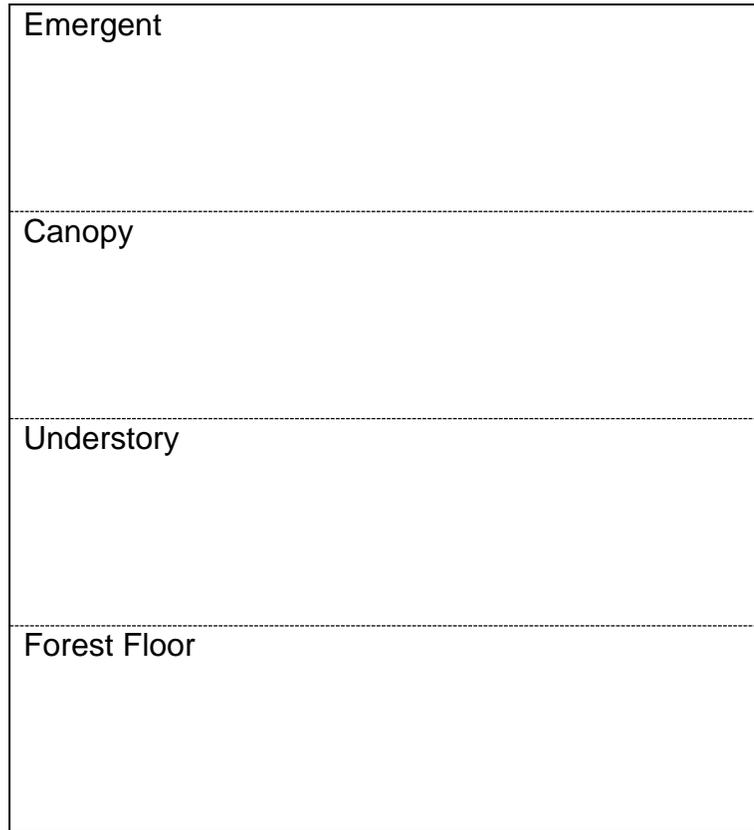
Our Rainforest _____

Location	
Climate/Weather	
Living Parts	
Non-living Parts	
Possible Rainforest Food Chain	
Why is this rainforest important?	
Current problems this rainforest is facing	
Possible Solutions	

A-3

	Africa	South America	Australia
Location			
Climate/Weather			
Living Parts			
Non-living Parts			
Rainforest Food Chain			
Why is this rainforest important?			
Current problems this rainforest is facing			
Possible Solutions			

A-4



Rainforest Scavenger Hunt

	Claim	Evidence/Reasoning
What is a plant that doesn't need much light to grow?		
Name a rainforest decomposer.		
Find a plant that lives in the canopy layer and is not a tree.		
Name something non-living that all rainforest organisms depend on.		
How are seeds spread in the rainforest?		
How do we depend on the rainforest for food?		
How do we depend on the rainforest for medicine?		
How do we depend on the rainforest for things we use?		