We're off to see the Rainforests...
The wonderful rainforests of the world

Because, because, because, because... BECAUSE
Because of the wonderful things they have.

An Integrated, Interdisciplinary, Thematic Standards Based Unit on the Rainforests of the World
Grade Levels K-2

Maria Agustin-Sotto
Alexandra Armstrong
Brandon Kelly
Gerard Kenny
Mary Kritsas
Veronica Maldonado
Ivellisse Piotti

Dr. Paul Rafaides School
362 Union St., JC, NJ 07304
201-915-6540
Unit Title:
We're off to see the Rainforests….the Rainforests of the World…Because, because, because, because, BECAUSE, Because of the wonderful things they have.

OVERVIEW

I. CONTENT:
Students need to be aware of the diversity of the topography of the world., to appreciate the importance of this diversity, and support the conversation of their natural world so that as adults, they will make enlightened judgments and voting choices, and assume personal responsibility for the world around them (i.e. being “green”: conserving energy, not wasting natural products, recycling). They must understand that the humans and other organism depends on protecting the rainforest (the animals need their natural habitat to survive, all benefit from the production of oxygen).

II. PROCESS:
Students will examine the theme in the content areas of Language Arts (listening, speaking, reading, writing, and viewing skills), Mathematics, Science, and Social Studies. They will participate in kinesthetic, drama/poetry, music, and visual activities.

III. PRODUCT:
Students will be able to explain what a rainforest is, identify the locations of rainforests, and identify the plants, animals, and resources of the rainforest. They will understand the importance of the conservation of the rainforest’s life, resources, and habitat, the ecology of the rainforest (the layers of the rainforest), the diversity of life in the rainforest, the agriculture and the products of the rainforest and the weather in the rainforest.

Unit Overview: Alignment with National / State / District Pupil Performance Standards

Overarching Benchmarks / Standards / Goals for COMPLETE unit of study:

Science
Benchmark 1: NJCCCS 5:10 (Environmental Studies)
All students will develop an understanding of the environment as a system of interdependent components affected by human activity and natural phenomena.
Standard A: Natural systems and Interactions
1. Associate organisms’ basic needs with how they meet those needs within their surroundings.
Standard B: Human Interactions and Impact
1. Identify various needs of humans that are supplied by the natural or constructed environment.

Social Studies
Benchmark 1: NJCCCS 6:6 (Geography)
All students will apply knowledge of spatial relationships and other geographic skills to understand and human behavior in relation to the physical and cultural environment.
Standard B: Places & regions
1. Describe the physical features of places and regions on a simple scale.
Standard D: Human Systems
1. Identify the types of transportation used to move goods and people.
Standard E: Environmental and Society
1. Describe the role of resources such as air, land, water, and plant in everyday life.

Language Arts
Benchmark 1: NJCCCS 3.3 (Speaking)
All students will speak in clear, concise, organized language that varies in content and form for different audiences and purposes.
Standard C: Word Choice
1. Attempt to use new vocabulary learned form shared literature and classroom experiences.
2. Use descriptive words to clarify and extend ideas.
Standard D: Oral Presentation
1. Recite poems, stories, or rhymes orally.
2. Retell a story to check for understanding.

Mathematics
Benchmark 1: NJCCCS 4.4 (Data Analysis, probability, and discrete mathematics)
All students will develop an understanding of the concepts and techniques of data analysis, probability, and discrete mathematics, and will use them to model situations, solve problems, and analyze and draw appropriate inferences from data.

Standard A: Data Analysis
1. Collect, generate, record, and organize data in response to questions, claims or curiosity.
   • Data collected form students’ everyday experiences
2. Read, interpret, construct, and analyze displays of data.
   • Pictures, tally chart, pictograph, bar graph, Venn diagram
   • Smallest to largest, most frequent (mode)

Standard D: Discrete Mathematics-Vertex Edge Graphs and Algorithms
1. Color simple maps with a small number of colors.
2. Act on small scale, personalized environmental issues such as littering and recycling and explain why such actions are important.

<table>
<thead>
<tr>
<th>I-SEARCH INDEPENDENT RESEARCH PROJECTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOR GIFTED AND TALENTED STUDENTS: PROJECT BASED LEARNING FOR MULTIPLE INTELLIGENCES</td>
</tr>
</tbody>
</table>

1. **PARADOXES:**
   Many people believe that the majority of the oxygen comes from the rainforests. Is this true? Create a film strip of your research.

2. **ATTRIBUTES:**
   Most people believe that rainforests are only found in South America, but they are in fact found all around the world. Create a 3-d map that shows where the different locations are. Compare & contrast their attributes. Be ready to present your map to the class & explain.

3. **ANALOGIES:**
   There are many places all around the world that are similar in many different ways. You would never think that a desert is the same as living in Antarctica. Create a Power Point presentation showing the similarities between a rainforest and where you live.

4. **DISCREPANCIES:**
   There are multiple tribes living in the Amazon Rainforest. These tribes are scattered among the rainforest, but why? Create a story explaining why these tribes would have migrated to where they live.

5. **PROVOCATIVE QUESTIONS:**
   Show them a clip from “Sex & the City” where one of the characters is Wearing snake-skinned Manolo Blahnik’s. Role-play how an animal might feel if it saw a human wearing its skin.

6. **EXAMPLES OF CHANGE:**
   The Rainforests in themselves have changed in size throughout the many years. Using a transparency overlay picture, create a picture that would compare 2 sets of dates: for example what did one of the rainforest looked like 50 years ago as opposed to present time.

7. **EXAMPLES OF HABIT:**
   In today’s world recycling is a big part in saving our rainforests, but there are still people not in the habit of recycling. Create a jingle explaining to people why they need to be in the habit of recycling.

8. **ORGANIZED RANDOM SEARCH:**
The Rainforests are being destroyed at a rapid rate. Eventually all the animals that live in the Rainforests will either become extinct or be forced to adapt to a new environment. Research the habitat of a particular Rainforest animal. Create a map showing where in the world this particular animal could adapt to live in.

9. **SKILLS OF SEARCH:**
Chocolate is a “hot” commodity. Everyone loves Chocolate, but who was the first to love chocolate? Research when chocolate was “discovered” and its uses throughout the years. Create a “Chocolate” Timeline.

10. **TOLERANCE FOR AMBIGUITY:**
If you have to move with your family to the rainforest what things do you think you would want to have that are not available there right now. Create a Travel Brochure including the things you would need.

11. **INTUITIVE EXPRESSION:**
Describe how you would feel if you could only use one of your five senses to experience the Rainforest. Create a poem to describe how you would feel.

12. **ADJUSTMENT TO DEVELOPMENT:**
The Rainforest has a humid & hot climate. Create a Comic Strip that would show the comical adaptation of a Polar Bear might have to live comfortably in it.

13. **STUDY CREATIVE PEOPLE AND PROCESS:**
Each tribe has what they call a “Shaman” or what we know as a medicine man. Research what the responsibilities of the Shaman and what his medicinal practices may be. Create a skit, which shows how the Shaman would cure an ill person.

14. **EVALUATE SITUATIONS:**
Global warming is upon us and before we know it, if we don’t stop the deforestation of our Rainforests soon we will die. However, we as consumers do not want to sacrifice the luxuries we have become accustomed to. Should we stop deforestation and give up the luxuries. Create a debate to answer the question.

15. **CREATIVE READING SKILL:**
There are many stories about the Rainforests. Pick 2 stories about a rainforest or set in the rainforest. Create a Venn-Diagram in which you compare & contrast the stories.

16. **CREATIVE LISTENING SKILL:**
Listen to an audio clip of sounds of the Rainforest. Create a Dramatization of the various sounds of rain, thunder, drizzle… by tapping, snapping, and clapping.

17. **CREATIVE WRITING SKILL:**
There are many animals in the Rainforest. Pick an animal from the Rainforest and create a Fairy Tale using an animal and many facts as you know about the animal.

18. **VISUALIZATION SKILL:**
Animals are becoming extinct faster than we can think of. Research various Rainforest animals that are on the verge of extinction. Design a class museum (pictures, puppets…) dedicated to the memory endangered animals to enhance awareness & protection of animal rights.

**ACADEMIC / CRITICAL THINKING SKILLS**

**ANALYZING HUMAN ACTIVITIES! (AHA!)**
©Dr. T. Roger Taylor

STATE STANDARD #.6.5-A.2 STUDENTS WILL BE ABLE TO: explain how the products individuals eat, wear, and use impact their health and safety and the environment.

ESSENTIAL QUESTION: How does the Universal Theme of Producing, Exchanging and Distributing create mastery learning of essential concepts in this unit? State the essential concept(s) that this specific lesson will teach.

ESSENTIAL QUESTION: What resources/products are found in the rainforest?
1. **PRODUCING, EXCHANGING, AND DISTRIBUTING** [ECONOMICS]

**KNOWLEDGE:**
**Anchoring Activity / Anticipatory Set:** Discussing in whole group different products in the rainforest. View the website www.sdmf.k12.wi.us/bf/resources/rainforestweb/products/products.html
Create a list of products that come from the rainforest.
**Students will:** Participate in tasting the different fruits of the rainforest. Participate in smelling different products of the rainforest.
**Formative Assessment:** Respond to riddles.
For Example: I am yellow and you can peel me

**COMPREHENSION:**
Distinguish between the products found and not found in the rainforest.
**Short-term / Cumulative Assessment:** A multiple choice quiz about the products of the rainforest.

**APPLICATION:**
**Anchoring Activity / Anticipatory Set:** Draw a picture of their favorite fruit from the rainforest.
**Students will create a class:** Bar Graph
**Formative Assessment / Rubric for Product:** Question and answer on Bar Graph. Rubric will assess the students’ analysis of the data.
**Multicultural and/or ESL and/or Bilingual Link:** Singing the Spanish song- “Bate Bate Chocolate”
**Mathematics/Science Link and/or Humanities Link:** Graphing the students favorite fruit.
**School-to-Career/Tech Prep Link:** Chefs, confectioners, coffee makers, pharmacists, etc.

**HIGHER ORDER THINKING SKILLS (H.O.T.S.):**
**Anchoring Activity / Anticipatory Set:** View a clip of a chef using a product from the rainforest to create a dish.
**Students will:** Pick a product from the rainforest. Write about a special dish they can make with the product. Draw a picture of the dish.
**Class product:** All students finished pictures and stories will be complied into a class book.
**Summative Assessment:** Blind fold test. Blind folded students will taste and identify the products of the rainforest.

**INDIVIDUAL JOURNAL ASSIGNMENT:**
Journal question- What one new thing did you learn about the rainforest?

**HOMELINK:**
With the help of your family, create a dish using a product from the rainforest.

STATE STANDARD # 6.6-D.1 STUDENTS WILL BE ABLE TO: identify the types of transportation used to move goods and people and animals.

ESSENTIAL QUESTION: How does the Universal Theme of **Transportation** create mastery learning of essential concepts in this unit? State the essential concept(s) that this specific lesson will teach.
**ESSENTIAL QUESTION:** How do animals and people move throughout the rainforest?

2. **TRANSPORTATION**
Textbook or Database: View a clip of the movie “Tarzan” and “Medicine Man”. Read the book “The Great Kapok Tree”

**KNOWLEDGE:**
**Anchoring Activity / Anticipatory Set:** Read the book, “The Great Kapok Tree”. Discuss how the people and animals move throughout the rainforest.
**Students will:** Identify ways people and animals move throughout the rainforest.
**Formative Assessment:** Acting out assessment. For example- How does the Sloth move throughout the rainforest?

**COMPREHENSION:**
Listen to the Diego song-“Slither & slide like an Anaconda…”
After viewing the movies Tarzan and Medicine Man explain how certain animals move across the ground floor.
Short-term / Cumulative Assessment: Pick your favorite being in the rainforest and write two or three sentences explaining how they move through the rainforest.

APPLICATION:
Anchoring Activity / Anticipatory Set: Read first half of “Diego and the Rainforest Race”.
Students will create a (class / team product): Group tally of predicting which group of animals will win the race. This will then be compiled in a class tally chart.
Formative Assessment / Rubric for Product: Read the rest of the story to see which students were correct and Q&A on the tally sheet.
Multicultural and/or ESL and/or Bilingual Link: Learn how to say the different transportation words in Spanish.
Mathematics/Science Link and/or Humanities Link: Tally Chart
School-to-Career/Tech Prep Link: Zoologist, explorer, tourist,

HIGHER ORDER THINKING SKILLS (H.O.T.S.):
Anchoring Activity / Anticipatory Set: Sing the song Wheels on the Bus.
Students will: Assist the teacher in changing the lyrics to apply to rainforest transportation.
Class/team/individual product: The new song-The Rain in the Rainforest. Example-“The rain in the rainforest goes plop, plop, plop”.
Summative Assessment: Quiz on how the animals and people move.

INDIVIDUAL JOURNAL ASSIGNMENT:
Out of all the beings that we studied which would you want to be and why.

HOMELINK:
Sing the rainforest song to your parents.

STATE STANDARD # 6.6-D.2 STUDENTS WILL BE ABLE TO: identify the modes of communication used to transmit ideas within the rainforest.

ESSENTIAL QUESTION: How does the Universal Theme of Communications create mastery learning of essential concepts in this unit? State the essential concept(s) that this specific lesson will teach.

ESSENTIAL QUESTION: How do the beings in the rainforest communicate?

3. COMMUNICATIONS
Textbook or Database: Rainforest Sounds CD

KNOWLEDGE:
Anchoring Activity / Anticipatory Set: Listen to animal sounds on www.christiananswers.net/kids/sounds.html
For example-View the animals and listen to their sounds.
Students will: Listen and discuss the different sounds that are heard on the website.
Formative Assessment: Mimic animal sounds that are heard on the website.

COMPREHENSION:
Distinguish between the sounds that different animals make. For example view two animal pictures listen to a sound and decide which animals make that sound.
Short-term / Cumulative Assessment: Multiple choice test- Listen to sounds and circling the correct animal that makes that sound.

APPLICATION:
Anchoring Activity / Anticipatory Set: Creating their favorite rainforest animal mask.
Students will create a (class / team product): Rainforest play in cooperative groups of four. They must use correct animal sounds during the play.
Formative Assessment / Rubric for Product: Rubric would measure the participation and accuracy of animal sounds during the play.
Multicultural and/or ESL and/or Bilingual Link: Discuss how people of different languages produce the animal sounds.
Mathematics/Science Link and/or Humanities Link: Constructing the animal mask.
 School-to-Career/Tech Prep Link: Reporters, scientists, zoologists.

HIGHER ORDER THINKING SKILLS (H.O.T.S.):
Anchoring Activity / Anticipatory Set: Watch the video clip of “Gorillas in the Mist”
Students will: Compare and contrast the way animals communicate and the way humans communicate.
Class/team/individual product: Create a class Venn diagram showing the differences and similarities of the communication between animals and humans.
Summative Assessment: Participation within the class assignment.

INDIVIDUAL JOURNAL ASSIGNMENT:
Answer journal question- Which animal would you like to communicate with and why?

HOMELINK:
Ask your family what their favorite rainforest animal is and teach them the sounds.

STATE STANDARD #6.6-E.3 STUDENTS WILL BE ABLE TO: act on small scale, personalized environmental issues, such as recycling, and explain why such actions are important.

ESSENTIAL QUESTION: How does the Universal Theme of Protecting and Conserving create mastery learning of essential concepts in this unit? State the essential concept(s) that this specific lesson will teach.
ESSENTIAL QUESTION: Why are the rainforests important?

4. PROTECTING AND CONSERVING
Textbook or Database: “Inside the Amazing Amazon” by Don Lessem

KNOWLEDGE:
Anchoring Activity / Anticipatory Set: Reading the book “Inside the Amazon” For example- Read excerpts on the problems of the endangered environment. Review ways we can help.
Students will: Discuss and list ways we can protect the rainforests.
Formative Assessment: Question and answer on what was read and discussed.

COMPREHENSION:
Watch the video clip from teachertube.com explaining how to help save the rainforest.
Explain various ways they can help to save the rainforest. For example- Recycling, saving trees, etc.
Short-term / Cumulative Assessment: Write a couple of sentences on how they want to save the rainforest.

APPLICATION:
Anchoring Activity / Anticipatory Set: Watching the video about recycling from Eeko-world. Set up the classroom to recycle paper.
Students will create a (class / team product): Poster with a slogan about saving the rainforests.
Formative Assessment / Rubric for Product: Oral presentation about their poster. Rubric will assess the poster and presentation.
Multicultural and/or ESL and/or Bilingual Link: Learn how to write saving the rainforest slogans in home language or other languages.
Mathematics/Science Link and/or Humanities Link: Local Environmentalist will come in to talk about saving the rainforests with the students.
School-to-Career/Tech Prep Link: Environmentalists, Ecologists, Naturalists

HIGHER ORDER THINKING SKILLS (H.O.T.S.):
Anchoring Activity / Anticipatory Set: Invite the media specialist to teach the students how to research the environmental protection agency website.
Students will: Write a letter to the environmental protection agency telling them why it is important to save the rainforest.
Class/team/individual product: The individual letter to save the rainforests.
Summative Assessment: Rubric on assessing the letter.
INDIVIDUAL JOURNAL ASSIGNMENT:
Write did you learn about saving the rainforests.

HOMELINK:
Recycle at home with your family.

STATE STANDARD #.6.5-A.2 STUDENTS WILL BE ABLE TO: explain how the products individuals eat, wear, and use impact their health and safety and the environment.

ESSENTIAL QUESTION: How does the Universal Theme of Providing Education create mastery learning of essential concepts in this unit? State the essential concept(s) that this specific lesson will teach.

ESSENTIAL QUESTION: How can we learn about the rainforest? How can the rainforest teach us?

5. PROVIDING EDUCATION
Textbook or Database: The Jungle Book by Rudyard Kipling

KNOWLEDGE:
Anchoring Activity / Anticipatory Set: Read the Jungle Book. Watch the clip of Ballou singing the song Bare-necessities.
Students will: Identify and list the necessary items we obtain from the rainforest.
Formative Assessment: Describe two necessary items we get from the rainforest.

COMPREHENSION:
Give examples of different ways people use the products from the rainforest. Example - wood for furniture, plants for medicine, etc.
Short-term / Cumulative Assessment: Explain why specific items are necessary & why some are a luxury.

APPLICATION:
Anchoring Activity / Anticipatory Set: Write about the necessities that are found within the Rainforests.
Students will create a (class product): Create a chart differentiating whether the resource is necessary or a luxury.
Formative Assessment / Rubric for Product: Explanation of the difference between a necessity & a luxury
Multicultural and/or ESL and/or Bilingual Link: bring in necessities that are used in your own culture.
Mathematics/Science Link and/or Humanities Link: making a bar graph that describes which products are luxuries & which are necessities.
School-to-Career/Tech Prep Link: Scientist, environmentalist...

HIGHER ORDER THINKING SKILLS (H.O.T.S.):
Anchoring Activity / Anticipatory Set: Listen to the “Bare Necessities
Students will: Review the words of the “Bare Necessities”, have students memorize the words and assign parts for presentation.
Class/team/individual product: Team presentation of the song
Summative Assessment: Assessment on matching the product to luxury & necessity

INDIVIDUAL JOURNAL ASSIGNMENT:
Why should we care about the rainforest?

HOMELINK:
GO home a point out things to your family that are necessary and things that may be considered luxury items.

STATE STANDARD #.8.2-A.3 STUDENTS WILL BE ABLE TO: describe how one technological innovation can be applied to solve another human problem that enhances human life or extends human capabilities

ESSENTIAL QUESTION: How does the Universal Theme of Making and Using Tools and/or Technology create mastery learning of essential concepts in this unit? State the essential concept(s) that this specific lesson will teach.

ESSENTIAL QUESTION: How has the rainforest medical technology affected our lives?
6. MAKING AND USING TOOLS AND/OR TECHNOLOGY
Textbook or Database: Totally Awesome Health

KNOWLEDGE:
Anchoring Activity / Anticipatory Set: View a United Streaming Video Clip on Pharmaceuticals of the rainforest.
Students will: Name the medicines that come from/made from various plants.
Formative Assessment: Matching pictures to words. Example-Plant with the name of the medicine

COMPREHENSION:
Distinguish the different types of medicine and what their used for. For example- aspirin,
Short-term / Cumulative Assessment: Give examples of an illness and the remedy.

APPLICATION:
Anchoring Activity / Anticipatory Set: A discussion with the school nurse.
Students will create a (class / team product): A classroom pharmacy
Formative Assessment / Rubric for Product: Role-play as patient and pharmacist.
Multicultural and/or ESL and/or Bilingual Link: Names of medicine in Spanish.
Mathematics/Science Link and/or Humanities Link: Measurements- teaspoon, tablespoon, drop.
School-to-Career/Tech Prep Link: Pharmacists, doctors, chemists, botanist, researcher

HIGHER ORDER THINKING SKILLS (H.O.T.S.):
Anchoring Activity / Anticipatory Set: Sing the “Itsy Bitsy Spider”
Students will: Create a class song using the melody of the “Itsy, Bitsy Spider”. Change the wording using the plants and medicine.
Class/team/individual product: The class song
Summative Assessment: Matching assessment- Match the correct plant with the correct medicine.

INDIVIDUAL JOURNAL ASSIGNMENT:
Tell about a time you were sick and what medicine did you take?

HOMELINK:
Visit the local pharmacy and look for medicine that is made from products that may be found within the world’s rainforests.

STATE STANDARD # 5.5-B.1 STUDENTS WILL BE ABLE TO: recognize that different types of animals live in different Rainforests of the world.

ESSENTIAL QUESTION: How does the Universal Theme of Providing Recreation create mastery learning of essential concepts in this unit? State the essential concept(s) that this specific lesson will teach.
ESSENTIAL QUESTION: What animals/habitats are found in the rainforest?

7. PROVIDING RECREATION
Textbook or Database: Brochures on the different locations that they will be visiting.

KNOWLEDGE:
Anchoring Activity/ Anticipatory Set: Attend trips to the following places-
1. Atlantic City, NJ (The Rainforest Café)
2. Staten Island, NYC (Staten Island Zoo)
3. Bronx, NYC (The Bronx Zoo)
Students will: Enjoy the creatures of the rainforests and will visually enjoy a set up of a rainforest.
Formative Assessment: Respond to questions about what they saw. For Example: What did the poisonous frogs look like?

COMPREHENSION:
Students will distinguish the animals found in the rainforests, and give examples of the habitats found in the rainforests.
Short term/Cumulative Assessment: A fill in the blank quiz using a words bank.

APPLICATION:
Anchoring Activity/ Anticipatory Set: Draw a picture of a rainforest animal in its habitat.
Students will create a class: Collage
Formative Assessment/ Rubric for Product: Completed correctly. Rubric will assess the students creative set up of the collage.
Multicultural and/or ESL and/or Bilingual Link: Naming the animals and their habitat in Spanish.
Mathematics/Science Link and/or Humanities Link: Graphing the habitats found within the rainforests
School-to-Career/Tech Prep Link: Social studies teacher, zoologist, art teacher, artist, poet, sculptor, etc.

HIGHER ORDER THINKING SKILLS (H.O.T.S.):
Anchoring Activity/ Anticipatory Set: View a video about the animals in their rainforest habitats.
Students will: Choose an animal from the rainforest, write about the animal in its habitat. Draw a picture about the animal in its habitat.
Class product: All the students’ pictures will be compiled into a slideshow.
Summative Assessment: Students will talk about his/her animal.

INDIVIDUAL JOURNAL ASSIGNMENT:
What did you learn about your animal and its habitat?

HOMELINK:
With the help of your family, talk about which habitat is his/her favorite and why.

STATE STANDARD # 5.5-B.1 STUDENTS WILL BE ABLE TO: recognize that different plants and animals live in different parts of the world.

ESSENTIAl QUESTION: How does the Universal Theme of Organizing and Governing create mastery learning of essential concepts in this unit? State the essential concept(s) that this specific lesson will teach.
ESSENTIAL QUESTION: What are the layers of the rainforest and what lives within them?

8. ORGANIZING AND GOVERNING
Textbook or Database: www.enchantedlearning.com; http://pbs.kids.org/bigbigworld/home.html

KNOWLEDGE:
Anchoring Activity / Anticipatory Set: Singing the Layers of the Rainforest song.
Students will: Identify the four different layers of the rainforest and their names.
Formative Assessment: Oral assessment- Naming the four different layers in order.

COMPREHENSION:
Distinguish between the different layers of the rainforest. For example- The emergent layer is on the top, the forest floor is on the bottom.
Short-term / Cumulative Assessment: Cut, paste, and label the layers of the rainforest.

APPLICATION:
Anchoring Activity / Anticipatory Set: Read the book “If I ran the rainforest: All about tropical rainforests.” Introducing and discussing the animals in each layer. Review each of the layer names.
Students will create a class / team product: Rainforest diorama in cooperative groups of four. Diorama must have the correct animals and layer names. Diorama must be completely labeled.
Formative Assessment / Rubric for Product: Rainforest Diorama. Rubric will assess the accuracy of animals and layer names in the correct areas.
Multicultural and/or ESL and/or Bilingual Link: Reading the Great Kapok Tree in Spanish. Label the layers in Spanish.
Mathematics/Science Link and/or Humanities Link: Sequencing the layers in order.
School-to-Career/Tech Prep Link: Environmentalists, Tourists, Hikers, Naturalists, Zoologists, Scientists, Biologists, Pharmacists

HIGHER ORDER THINKING SKILLS (H.O.T.S.):
Anchoring Activity / Anticipatory Set: Reread “If I ran the rainforest: All about tropical rainforests.” Review the layers and animals in each layer.
Students will: Classify and analyze why certain animals live in specific layers of the rainforest.
Class/team/individual product: Individually complete a classification chart. Students will place the correct animal in the correct layer.
Summative Assessment: Assess that the students sorted the animals in the correct layer.

INDIVIDUAL JOURNAL ASSIGNMENT:
Which layer of the rainforest would you like to live in and why?

HOMELINK:
Share with your family the classification chart and explain each layer and the animals that live in them.

STATE STANDARD # 6.2-A.6 STUDENTS WILL BE ABLE TO: Explore basic concepts of diversity, tolerance, fairness, and respect for others.

ESSENTIAL QUESTION: How does the Universal Theme of Moral, Ethical and Spiritual Behavior create mastery learning of essential concepts in this unit? State the essential concept(s) that this specific lesson will teach.

ESSENTIAL QUESTION: What are the moral, ethical and spiritual beliefs of the Native people?

9. MORAL, ETHICAL AND SPIRITUAL BEHAVIOR
   Textbook or Database: www.christiananswers.net

KNOWLEDGE:
Anchoring Activity/ Anticipatory Set: View a video regarding the people of the rainforest.
Students will: List the ways that the Natives practice their rituals.
Formative Assessment: Respond to questions about what they learned. For Example: In what ways do the Natives practice their rituals?

COMPREHENSION:
Students will ‘Think-pair-share’ to give examples regarding how the Natives show morals.
Short term/Cumulative Assessment: Students will partner up and discuss one way of showing morals.

APPLICATION:
Anchoring Activity/ Anticipatory Set: View a video clip of the natives performing a ritual ceremony.
Students will create a class: Create a musical instrument that was used in the ritual ceremony, out of recycled products and play their instruments.
Formative Assessment/ Rubric for Product: Self assessment regarding “How I Felt When I Played My Instrument”. Rubric will assess the students’ interpersonal feelings.
Multicultural and/or ESL and/or Bilingual Link: Naming their instrument in Spanish or one of the native languages.
Mathematics/Science Link and/or Humanities Link: List of materials used in creating their instrument.
School-to-Career/Tech Prep Link: Music teacher, health teacher, spiritual leader, instrument maker, song writer, poet, etc.

HIGHER ORDER THINKING SKILLS (H.O.T.S.): 
Anchoring Activity/ Anticipatory Set: listen to the native music
Students will: Create ideas of what their own tribal rituals would be.
Class product: Present their own ritual scene using the instruments from application.
Summative Assessment: Students will describe how the native rituals are similar to ours.

INDIVIDUAL JOURNAL ASSIGNMENT:
How can you relate to the Native people of the Rainforest?
HOMELINK:
Play your created instrument for your family.

STATE STANDARD # 1.1-B.1 STUDENTS WILL BE ABLE TO: communicate observational and emotional responses to works of art from a variety of social and historical context.

ESSENTIAL QUESTION: How does the Universal Theme of Aesthetic Needs create mastery learning of essential concepts in this unit? State the essential concept(s) that this specific lesson will teach.

ESSENTIAL QUESTION: What are the beautiful colors and sounds of the rainforest?

10. AESTHETIC NEEDS
Textbook or Database: Rainforest colors by Susan Canizares and Betsey Chessen

KNOWLEDGE:
Anchoring Activity / Anticipatory Set: Listen to the song “True Colors” by Cindy Lauper while viewing pictures of colorful animals, creatures, plants and people of the rainforest. They will also listen to the sounds of the Rainforest CD.
Students will: Identify & name all of the different colors shown in the pictures; identify all of the sounds that are made in the CD.
Formative Assessment: Answering questions about what they saw and what they heard.

COMPREHENSION:
Explain the colors and the sounds that they have seen or heard within the photos and the CD.
Short-term / Cumulative Assessment: Give at least 3 examples of an animal and/or vegetation and tell what color they are and if they make a distinct sound.

APPLICATION:
Anchoring Activity / Anticipatory Set: Take out their box of crayons and view the various colors
Students will create a (class / team product): create an abstract mural including the colors and animal shapes while listening to the rainforest sounds.
Formative Assessment / Rubric for Product: a small presentation on their own mural
Multicultural and/or ESL and/or Bilingual Link: Learn the color words in Spanish.
Mathematics/Science Link and/or Humanities Link: Describe the shapes & patterns within the abstract art
School-to-Career/Tech Prep Link: Artist, Crayon Manufacturers, paint manufacturers…

HIGHER ORDER THINKING SKILLS (H.O.T.S.):
Anchoring Activity / Anticipatory Set: A Color of his Own by Leo Lionni
Students will: Compare how the chameleon is like the rainforest “ever-changing”
Class/team/individual product: Compare themselves to the rainforest and how they are like the rainforest
Summative Assessment: use Kid-Pix or other computer based program to accurately color a rainforest picture.

INDIVIDUAL JOURNAL ASSIGNMENT:
Draw & color their favorite Rain Forest creature, plant or flower.

HOMELINK:
Ask their family to join them in a trip to a zoo to see some of the many colorful animals at the zoo.

STATE STANDARD #6.6-A.3 STUDENTS WILL BE ABLE TO demonstrate basic globe & map skills.

ESSENTIAL QUESTION: How does the discipline/sub-discipline of Social Studies relate to mastery learning of the Rainforest unit? State the essential concept(s) that this specific lesson will teach.

ESSENTIAL QUESTION: Where are rainforests found around the world?

11. Social Studies
KNOWLEDGE:

Anchoring Activity / Anticipatory Set: Listen to the song “I’m the Map” from Dora the Explorer. View the rainforest websites above.

Students will: Use a world map and locate the main regions where rainforests are found – around the equator between the Tropic of Capricorn and Tropic of Cancer. Play an interactive internet game where they drag and drop the rainforests onto a world map.

Formative Assessment: Students will use the classroom world map to point & locate the various locations of the rainforests, the equator, the tropic of Cancer & the tropic of Capricorn.

COMPREHENSION:

Explain why the rainforests are found around the equator.

Short-term / Cumulative Assessment: Participation in explaining why the rainforests are found around the equator.

APPLICATION:

Anchoring Activity / Anticipatory Set: Read “Dora Goes to School” by Leslie Valdes

Students will create a (class / team product): a map of their neighborhood in teams of 4.

Formative Assessment / Rubric for Product: Team neighborhood map and a rubric assessing the content of their team maps.

Multicultural and/or ESL and/or Bilingual Link: Learn how to say “hello” in the different languages where the rainforests are found.

Mathematics/Science Link and/or Humanities Link: Create a legend for their neighborhood map.

School-to-Career/Tech Prep Link: Geographers, Artisans, explorers

HIGHER ORDER THINKING SKILLS (H.O.T.S.):

Anchoring Activity / Anticipatory Set: Listen to the song “We’re off to see the wizard” as they watch that scene from the movie “The Wizard of Oz. Blow up the world map of the rainforests of the world and lay it on the classroom floor to simulate “the Yellow Brick Road”.

Students will: Change the lyrics of the song so that it reflects the rainforest theme. For example, “We’re off to see the rainforests, the wonderful rainforest of the world. Sing their new song as they recreate that scene from the “Wizard of Oz”.

Class/team/individual product: Class song and video of scene

Summative Assessment: Color the rainforests on individual world maps.

INDIVIDUAL JOURNAL ASSIGNMENT:

Which rainforest of the world would you like to explore and why?

HOMELINK:

Teach their families how to say “hello” in different languages and sing the song.

STATE STANDARD # 5.8 B.3 STUDENTS WILL BE ABLE TO: describe current weather conditions and recognize how those conditions affect our daily lives.

ESSENTIAL QUESTION:

How does the discipline/sub-discipline of Science relate to mastery learning of the rainforest? State the essential concept(s) that this specific lesson will teach.

ESSENTIAL QUESTION: What is the weather in the rainforest?

12. SCIENCE

Textbook or Database: Weatherchannel.com

KNOWLEDGE:
Anchoring Activity / Anticipatory Set: Listening to the song “Raindrops Keep Falling on my Head” by B.J. Thomas. Read the book “Oh can you say, what’s the weather today” by Tish Rabe.

Students will: Describe the difference between weather and temperature. List different types of weather conditions throughout the world.

Formative Assessment: Discussing their favorite weather condition.

COMPREHENSION:
Read the book “The Umbrella”.
Distinguish and Explain between weather conditions that are in the rainforest and weather conditions that are not.

Short-term / Cumulative Assessment: Complete a classification chart. Sorting the weather found in the rainforest and the weather not found in the rainforest.

APPLICATION:
Anchoring Activity / Anticipatory Set: View the website weatherchannel.com to show the students the weather in rainforest and the weather in their hometown.

Students will create a (class / team product): two class charts. One chart will show the weather for the Amazon Rainforest and the other will show the weather for their hometown. The students will chart both weathers for each location for a week.

Formative Assessment / Rubric for Product: Write a couple of sentences comparing and contrasting the weather in the Amazon and the weather in their home town.

Multicultural and/or ESL and/or Bilingual Link: Learn how to say temperatures and weather conditions in Spanish.
Mathematics/Science Link and/or Humanities Link: Chart for the weather.
School-to-Career/Tech Prep Link: Climatologists, Meteorologist, Scientist,

HIGHER ORDER THINKING SKILLS (H.O.T.S.):
Anchoring Activity / Anticipatory Set: Read a Cinquain poem about weather.

Students will: Write a Cinquain poem about the weather in the rainforest.

Class/team/individual product: Individual Poem

Summative Assessment: Assess if the poem reflects the weather in the rainforest and that the poem follows the Cinquain format.

INDIVIDUAL JOURNAL ASSIGNMENT:
Do you think the animals like the weather in the rainforest? Why or why not?

HOMELINK:
Talk to your family about why the weather changes?

STATE STANDARD # 4.2-B1&2 STUDENTS WILL BE ABLE TO use simple shapes to make designs, patterns & picture; combine & subdivide simple shapes to make other shapes.

ESSENTIAL QUESTION:
How does the discipline/sub-discipline of Mathematics relate to mastery learning of the Rainforest? State the essential concept(s) that this specific lesson will teach.

ESSENTIAL QUESTION: Do shapes exist in the Rainforest?

13. Mathematics ______
Textbook or Database:
www.songsforteaching.com; www.casarioblanco.com; www.srl.caltech.edu/.../animals/animals.gif

KNOWLEDGE:
Anchoring Activity / Anticipatory Set: look at pictures of the rainforest & 2-d shapes while listening to “Shapes all around us” by David Burba.

Students will: Label a picture reproducible of the Rainforest with the different possible 2-d shapes that they can find.

Formative Assessment: Sing the song “Shapes all around us” & be able to do the movements that go along with the song; identify the shapes they see within the reproducible.
COMPREHENSION:
Defend & explain their labeled picture of the Rainforest. For example: “This tree is long like a rectangle & the top is round like a circle”.
Short-term / Cumulative Assessment: Label different picture of the rainforest using 2-D shapes.

APPLICATION:
Anchoring Activity / Anticipatory Set: View a picture of animals of the rainforest as well as various pictures of 3-D shapes while listening to the song “Everything has a Shape” by Hap Palmer.
Students will create a (class / team product): their own animal using various Crayola Model magic.
Formative Assessment / Rubric for Product: Show their animal to the class.
Multicultural and/or ESL and/or Bilingual Link: Shape words in Spanish; compare the Spanish words with the English words to find similarities.
Mathematics/Science Link and/or Humanities Link: Identify 3-D shapes
School-to-Career/ Tech Prep Link: Mathematician, Artist, Architect, Teacher…

HIGHER ORDER THINKING SKILLS (H.O.T.S.):
Anchoring Activity / Anticipatory Set: Listening to “Crazy Polygon Shapes” by Zach Burba
Students will: use their individual shape template to create their own 3-D shape Rainforest.
Class/team/individual product: Individual 3-D Rainforest
Summative Assessment: Quiz- identifying 2-D & 3-D shapes with in a Rainforest picture.

INDIVIDUAL JOURNAL ASSIGNMENT:
Write on the following question: Did you really think that shapes existed in the Rainforest? Why or why not?

HOMELINK:
Find 2-D & 3-D shapes around your house with the help of your family.

STATE STANDARD #3.1-3.5 STUDENTS WILL BE ABLE TO relate the importance of literature in the building of knowledge/understanding of rainforest concepts.

ESSENTIAL QUESTION:
How does the discipline/sub-discipline of Literature relate to mastery learning of the Rainforest? State the essential concept(s) that this specific lesson will teach.

ESSENTIAL QUESTION: Why is literature important in building understanding of the rainforest?

14. Literature

KNOWLEDGE:
Anchoring Activity / Anticipatory Set: 1) Teacher will read “In the Rainforest” 2) Teacher will read “The Great Kapok Tree” by Lynne Cherry, placing labels on the various important terms (animal/people/plant life, rainforest layers, etc...)
Students will: label a picture with rainforest vocabulary terms (students will glue words onto to picture) based on the reading
Formative Assessment: Teacher will ask students to describe two ideas/terms they learned from the text.

COMPREHENSION:
Students will write a short poem of an animal/plant of their choice. The poem should incorporate 1-2 facts about their topic. Can be in song form and include visuals. MS Paint or KidPix can be used.
Short-term / Cumulative Assessment: Teacher will display two different pictures (on an overhead/LCD projector) from “In the Rainforest.” Students will, in their own words, distinguish between the two.

APPLICATION:
Anchoring Activity / Anticipatory Set: Teacher will play J.P. Taylor’s “The Rain Forest Song.” Teacher will have lyrics on a poster. After listening, the teacher will go line by line and ask students what they think each line means or is trying to say.

Students will create a (class / team product): new rainforest version of “London Bridge.” Teacher will play original, and students will change the lyrics to reflect new information learned in “In the Rainforest.” Students will work in teams of four.

Formative Assessment / Rubric for Product: Students will sing their new version. Rubric will be utilized assessing content/accuracy, creativity, and organization.

Multicultural and/or ESL and/or Bilingual Link: World language teacher can read Spanish/bilingual version of story.

Mathematics/Science Link and/or Humanities Link: Students will be presented with pictures of the scenes from “In the Rainforest. They must number scenes in terms of ordinal numbers (i.e. first, second, third)

School-to-Career/Tech Prep Link: Discussing authors (and authoring/writing books), scientific researchers of the rainforest. Guest speaker: author of rainforest book, person who studies rainforest or issues

HIGHER ORDER THINKING SKILLS (H.O.T.S.):

Anchoring Activity / Anticipatory Set: Teacher will read “Rainforest Race” and “Under Nature’s Umbrella.”

Students will: write a response to the following: “We have read three different books about the rainforest. Think about all of them and what things were the same in each. Write down your answers in sentences, or in a list of vocabulary words.

Class/team/individual product: Venn Diagram, created as a class, of student responses to prompt.

Summative Assessment: Quiz on issues discussed in “In the Rainforest”

INDIVIDUAL JOURNAL ASSIGNMENT:
“Of all the rainforest books we have read, which one is your favorite? Why?”

HOMELINK:
Family and student must borrow one book from the local library about the rainforest (fiction or nonfiction).

STATE STANDARD #1.1 (Aesthetics) Students will use their aesthetic knowledge in the creation of and in response to dance, music, theater & visual art.

STATE STANDARD #1.2 (Creation & Performance) Students will utilize those skills, media, method & technology appropriate to each art form in the creation, performance & presentation of dance, music, theater & visual art.

STATE STANDARD #1.3 (Elements & Principles) Students will demonstrate an understanding of the elements & principles of dance, music, theater & visual art.

ESSENTIAL QUESTION: How can children use fine arts to show an understanding of the rainforests?

15. FINE ARTS (music, art)
Textbook or Database: rainforests posters; rainforest pictures; “Rainforest Music” by Robert Lyn Nelson (artwork)

KNOWLEDGE:
Anchoring Activity/ Anticipatory Set: View rainforest pictures, rainforests posters and “Rainforest Music”.

Students will: Describe what they see in the painting of the Rainforest

Formative Assessment: Children will discuss what they saw within the painting.

COMPREHENSION:
Infer what the artist was conveying in the picture.

Short term/Cumulative Assessment: Write a couple of sentences about what they inferred from the paintings

APPLICATION:
Anchoring Activity/ Anticipatory Set: View several kids paintings of the Rainforests, from KidzArt.org

Students will create a (class/team product): their own watercolor interpretation of 1 of the paintings.

Formative Assessment/ Rubric for Product: Demonstrate what they have done in their own painting.

Multicultural and/or ESL and/or Bilingual Link: name different colors in Spanish.

Mathematics/Science Link and/or Humanities Link: mixing of the watercolors to create different colors.

School-to-Career/Tech Prep Link: Music teacher, composer, poet, artist, painter, sculptor, painter, etc.
HIGHER ORDER THINKING SKILLS (H.O.T.S.):
Anchoring Activity/ Anticipatory Set: View the painting and a rubric that assesses the elements within the picture with the Rainforest Theme.
Students will: Critique the painting with the rubric
Class/team/individual product: Write a “newspaper” article critiquing the painting
Summative Assessment: The “newspaper” article

INDIVIDUAL JOURNAL ASSIGNMENT:
Write about how they felt about creating their painting.

HOMELINK:
Show their family their creation.

STATE STANDARD # 2.6.C.1 STUDENTS WILL BE ABLE TO engage in moderate to vigorous physical activity that develops all components of fitness.

ESSENTIAL QUESTION:
How does the discipline/sub-discipline of Physical Education relate to mastery learning of the Rainforest? State the essential concept(s) that this specific lesson will teach.

ESSENTIAL QUESTION: Do all rainforest animals move in the same way?

16. Physical Education

Textbook or Database:
Ready to use P.E. Activities for Grades K-2 by Joanne M. Landy & Maxwell J. Landy
www.christiananswers.net/kids/vidclips.html

KNOWLEDGE:
Anchoring Activity / Anticipatory Set: View the video clip from website
Students will: Identify the various ways animals move.
Formative Assessment: Name an animal that flies. Name an animal that crawls.

COMPREHENSION:
Explain how some animals are able to fly.
Short-term / Cumulative Assessment: Give examples of flying animals.

APPLICATION:
Anchoring Activity / Anticipatory Set: Listen to “Changes” by David Bowie or “A Change Will Do You Good” by Sheryl Crow
Students will create a (class / team product): Create a video where the children are the life cycle of a butterfly by using movement.
Formative Assessment / Rubric for Product: Create a butterfly cycle wheel. Utilize a rubric to assess if the stages are in the correct order.
Multicultural and/or ESL and/or Bilingual Link: Write the words for change, butterfly, metamorphosis, butterfly, and caterpillar.
Mathematics/Science Link and/or Humanities Link: Elapsed time of change
School-to-Career/Tech Prep Link: Physical Education Teacher, Behaviorist, Researchers

HIGHER ORDER THINKING SKILLS (H.O.T.S.):
Anchoring Activity/ Anticipatory Set: Listen to “Walking, Walking” song from Super Simple Songs One
Students will: Visualize students creating movements and actions playing the game “Simon Says”
Class/team/individual product: Class will act out a typical forest in action – birds flying, snakes crawling.
Summative Assessment: Participation in the forest play-acting.

INDIVIDUAL JOURNAL ASSIGNMENT:
Student will describe how they move around.
STATE STANDARD # 9.1 STUDENTS WILL BE ABLE TO: develop career awareness and planning, employability skills, and foundational knowledge necessary for success in the work place.
State Standard # 9.2 STUDENTS WILL BE ABLE TO: demonstrate critical life skills in order to be functional members of society.

ESSENTIAL QUESTION:
How does the discipline/sub-discipline of Vocational/Technical Art relate to mastery learning of the rainforest? State the essential concept(s) that this specific lesson will teach.

ESSENTIAL QUESTION: How do people who of the rainforest live?

17. Vocational/Technical Arts
Textbook or Database: Books, videos, websites related generally to rainforest tribes and specifically to their basket weaving.

KNOWLEDGE:
Anchoring Activity / Anticipatory Set: Book containing many large pictures showing tribes working in rainforest and/or video.
Students will: Discuss and create a class list on what kinds of jobs the people do. Identify what jobs tribal children can do.
Formative Assessment: Role-play rainforest jobs of tribal people.

COMPREHENSION:
Give examples of what items are needed to basket weave.
Short-term / Cumulative Assessment: Listen to statements about basket weaving and checks statements that are true.

APPLICATION:
Anchoring Activity / Anticipatory Set: Students will view a video or website showing tribal people weaving baskets.
Students will create a team product: Create a woven basket in cooperative groups of two.
Formative Assessment / Rubric for Product: Present their baskets to the class.
Multicultural and/or ESL and/or Bilingual Link: Students will relate or produce a visual showing of how the lives of people in the rainforest are similar and/or different from their own lives and that of their family members living in the U.S. and/or the country of their ethnic origin.
Mathematics/Science Link and/or Humanities Link: Measure the length of the strips that they will use to make their baskets.
School-to-Career/Tech Prep Link: Anthropologists, scientists, naturalists, ecologists, environmentalists, psychologists, doctors, pharmacists, importers/exporters of hand-made items.

HIGHER ORDER THINKING SKILLS (H.O.T.S.):
Anchoring Activity / Anticipatory Set: Students will view the tools needed to weave baskets.
Students will: Dictate the items and procedural steps with weaving a basket.
Class/team/individual product: The students will show another class how to make their own baskets.
Summative Assessment: How well the students demonstrate how to weave a basket to another student. Create a visual showing how rainforest tribes live and work.

INDIVIDUAL JOURNAL ASSIGNMENT:
If you were in a rainforest tribe what job would you choose to do? Why?

HOMELINK:
What special craft is done in the U.S. and/or in the country that you, your parents, or your grandparents came from?

MORAL / ETHICAL / SPIRITUAL REASONING AND DILEMMAS
TEN ETHICAL DILEMMAS

(Must be set in context of unit, but must also relate to the lives of today’s students)

STATE STANDARD # ______

ESSENTIAL QUESTION: How does the content of this unit reflect character education through Moral and Ethical dilemmas?

1. Producing, Exchanging, and Distributing [Economics]
ESSENTIAL QUESTION: How does the Human Activity of Producing, Exchanging and Distributing create moral/ethical dilemmas?
DILEMMA: The Hershey Company needs chocolate for their chocolate making. They need to harvest the cacao beans from the Rainforest to make their product. Would it be okay for this company to use up all of the cacao resources? Why or why not?

2. Transportation
ESSENTIAL QUESTION: How does the Human Activity of Transportation create moral/ethical dilemmas?
DILEMMA: You’re with the American Red Cross and you need a quick way to move through the Rainforest in order to bring supplies that Natives may need for aid. Is it okay for you to create a paved road and remove any vegetation and/or trees to facilitate the need? Why would it be okay? Why not?

3. Communications
ESSENTIAL QUESTION: How does the Human Activity of Communications create moral/ethical dilemmas?
DILEMMA: You’re a member of a scientific research team. You need to communicate with a specific tribe to try to explain to them that you mean no harm; you’re simply there to research for possible cures. How can you communicate with the people? Do you attempt to communicate with them? Why or why not?

4. Protecting and Conserving
ESSENTIAL QUESTION: How does the Human Activity of Protecting and Conserving create moral/ethical dilemmas?
DILEMMA: Pretend you are in the future. In this day in age cars run on alternate fuel. The alternate fuel in only produced with products found in the Rainforest. You are the head of Fuel-Co and you need to acquire the resources. Would it be okay to go into the Rainforest and consume the resources for the purpose of alternate fuel? Why or why not?

5. Providing Education
ESSENTIAL QUESTION: How does the Human Activity of Providing Education create moral/ethical dilemmas?
DILEMMA: You’re a teacher and you would like to teach your children the importance of the Rainforest and valuable information about the Rainforest itself. Your Superintendent thinks that it is a waste of time. Children should just be taught the 3 R’s. The Rainforest is not included. Should you as the teacher go against what you are told to do? Why or why not?

6. Making and Using Tools and/or Technology
ESSENTIAL QUESTION: How does the Human Activity of Making and Using Tools and/or Technology create moral/ethical dilemmas?
DILEMMA: You’re the head of a large Pharmaceutical Company who needs to obtain some resources to find a cure for Cancer. Should you be able to go into the Rainforest and take any resources that are needed? Should you be allowed to displace any “people” that may need the same resources to survive? Why or why not?

7. Providing Recreation
ESSENTIAL QUESTION: How does the Human Activity of Providing Recreation create moral/ethical dilemmas?
DILEMMA: You win a zip-lining trip through the Costa Rican Rainforest, but you’ve recently read an article on the most popular form of entertainment: Zip-lining. The article states that in order for Zip-lining to be successful they must destroy some of the animals’ habitat in order to facilitate the enjoyment. Do you still go on this free trip? Why or why not?

8. Organizing and Governing
ESSENTIAL QUESTION: How does the **Human Activity** of **Organizing and Governing** create moral/ethical dilemmas?

**DILEMMA:** You are infected with a life-threatening disease. You know that scientists are very close to finding the cure to save your life. The cure for this disease is assumed to be found within the vegetation that is found in the canopy of the Rainforest trees. Is it reasonable to use the vegetation found in the canopy to find this cure which could “possibly” save your life at the expense of destroying the Rainforests’ eco-system?

9. **Moral, Ethical and Spiritual Behavior**

ESSENTIAL QUESTION: How does the **Human Activity** of **Moral, Ethical and Spiritual Behavior** create moral/ethical dilemmas?

**DILEMMA:** You’re a part of a Rainforest Conservation group. Your best friend is head of the finance department of the conservation group. You notice that he is not using the donations wisely and completely, “although” technically it appears to be used. Would you report his wrong-doings to the head of the organization? Why or why not?

10. **Aesthetic Needs**

ESSENTIAL QUESTION: How does the **Human Activity** of **Aesthetic Needs** create moral/ethical dilemmas?

**DILEMMA:** You’re the president of Brazil. You are offered the opportunity for a very reputable hotel chain to create a resort within the Rainforest. This construction could be very beneficial to the economy of your country. Would you allow them to create a resort within the Rainforest and destroy the beauty of the Rainforest? Why or why not?

---

**PRODUCTIVE THINKING SKILLS**

**DIVERGENT / CREATIVE THINKING**

1. **BRAINSTORM MODEL**
   A. BRAINSTORM ALL OF THE__________________.
      AHA #1: Favorite food to eat
      AHA #2: ways that animals can travel
      AHA #3: animal sounds/noises
      AHA #4: ideas on how we can protect the rainforests
      AHA #5: ways you can learn about the rainforests
      AHA #6: all medicines you could think of
      AHA #7: places to go to view rainforest animals

   B. BRAINSTORM AS MANY______________AS YOU CAN THINK OF.
      AHA #8: things that have layers.
      AHA #9: that you believe in.
      AHA #10: colors
      AHA #11: countries that have rainforests
      AHA #12: weather words
      AHA #13: shapes
      AHA #14: rainforest words

   C. HOW MANY WAYS CAN YOU COME UP WITH TO __________________?  
      AHA #15: create a piece of art
      AHA #16: move like animals
      AHA #17: work

2. **VIEWPOINT MODEL (Human or Animat)**
   USE CULTURAL LITERACY TERMS
   A. HOW WOULD ________________LOOK TO A(N) ________________?
      AHA #1: French-fry/native
      AHA #2: helicopter/macaw
      AHA #3: sign language/gorilla
      AHA #4: bulldozer/tree
      AHA #5: curing plant/doctor
      AHA #6: aspirin/leaf cutter ant

20
AHA #7: encaged human/monkey
AHA #8: skyscraper/native

B. WHAT WOULD A _______ MEAN FROM THE VIEWPOINT OF A(N) _______?
AHA #9: doctor/ shaman
AHA #10: rainforest/ a color blind
AHA #11: map/ to a native
AHA #12: raindrop/ ant
AHA #13: rectangle/tree
AHA #14: “The Great Kapok Tree”/tribesperson
AHA #15: painting/panther
AHA #16: trampoline/red-eyed tree frog
AHA #17: computer/tribesperson

C. HOW WOULD _______________ VIEW THIS?
(Use one person from history here)
1: 
2: 
3: 
4: 
5: 
6: 

3. INVOLVEMENT MODEL (Personification / Inanimate object brought to life)
A. HOW WOULD YOU FEEL IF YOU WERE ____________?
AHA #1: a banana being picked off of the tree.
AHA #2: snake slithering on the forest floor
AHA #3: a branch that a frog was sitting on
AHA #4: a tree being saved
AHA #5: tree being made into paper
AHA #6: a medicinal plant
AHA #7: the branch that holds a sloth

B. IF YOU WERE A_______, WHAT WOULD YOU (SEE, TASTE, SMELL, FEEL, etc.)?
AHA #8: emergent layer/ see
AHA #9: the ground/feel & hear
AHA #10: waterfall/feel
AHA #11: the equator/feel
AHA #12: humidity/smell
AHA #13: circle/see
AHA #14: poem/say

C. YOU ARE A _______________. DESCRIBE HOW IT FEELS.
AHA #15: painting of the rainforest
AHA #16: wind
AHA #17: basket
Random Involvement / Personification:
Random Involvement / Personification:
Random Involvement / Personification:
Random Involvement / Personification:

4. CONSCIOUS SELF–DECEIT MODEL
A. SUPPOSE ________________. WHAT _______________________
AHA #1: the rainforest grew no fruits/would people eat
AHA #2: a jaguar could fly/would change in the rainforest
AHA #3: animals could talk/would they say
AHA #4: there were no rainforests/would happen to the air we breathe
AHA #5: there were no illnesses/would happen to medicinal plants
AHA #6: there no medicinal plants/would happen to the human/animal population
AHA #7: the animals could not camouflage/ happen to the animals
AHA #8: there was no canopy/ would happen to the rainforests’ eco-system.
AHA #9: the tribe lived in your hometown/would change in their lives

B. YOU CAN________________. WHAT ____________________________?
AHA #10: all of the colors of the world/colors of the Rainforests’ would you change
AHA #11: move any Rainforest/ would happen to it
AHA #12: change the weather in the Rainforests/would it be & what would happen
AHA #13: shapes in the Rainforests/would happen
AHA #14: make your book come alive/would happen
AHA #15: paint any object in the Rainforest/ would it be & why
AHA #16: climb like a monkey/would you do
AHA #17: use any materials to make a basket/would you use

5. FORCED ASSOCIATION MODEL [USE CULTURAL LITERACY TERMS HERE]
A. HOW IS __________________ LIKE __________________?
AHA #1: banana/a chameleon
AHA #2: armadillo/drill
AHA #3: howler monkey/bullhorn
AHA #4: littering/destroying the rainforests
AHA #5: gun/pollution
AHA #6: rainforest/pharmacy
AHA #7: tree/house

B. GET IDEAS FROM __________ TO IMPROVE ____________________________.
AHA #8: butterflies/camouflage
AHA #9: tribe/spirituality
AHA #10: the colors of the Rainforests’/the colors of a crayon box
AHA #11: village layout/ the layout of your neighborhood
AHA #12: canopy/an umbrella
AHA #13: an animal/project
AHA #14: macaw/song

C. I ONLY KNOW ABOUT __________. EXPLAIN __________ TO ME.
AHA #15: viewing art/creating art
AHA #16: walking/flying
AHA #17: sewing/weaving

6. REORGANIZATION / SYNECTICS MODEL
A. WHAT WOULD HAPPEN IF ________________________?
AHA #1: the cacao plant never existed
AHA #2: there no vines in the rainforest
AHA #3: if animals could speak & humans only made “sounds”.
AHA #4: there were no environmental protection agencies
AHA #5: animals understand our class song
AHA #6: there was one plant to cure all diseases
AHA #7: there were no living beings living in the rainforests

B. SUPPOSE _______________(HAPPENED) WHAT WOULD BE THE CONSEQUENCES?
AHA #8: the understory & the canopy were reversed
AHA #9: the Shaman died
AHA #10: everything was black & white
AHA #11: there were no maps
AHA #12: snows in the Rainforests
AHA #13: everything in the Rainforests was the same shape.
AHA #14: there were no Rainforests books

C. WHAT WOULD HAPPEN IF THERE WERE NO ________________?

AHA #15: artists
AHA #16: animal movements
AHA #17: tools

---

CULTURAL LITERACY

1. Dates: N/A

2. Names:
   - ants
   - butterfly
   - cocoa
   - canopy
   - cloudy
   - birds
   - caterpillar
   - ferns
   - emergent layer
   - rainy
   - flying fox
   - chrysalis
   - Kapok Tree
   - Equator
   - sunny
   - gorilla
   - spider
   - lily
   - food chain
   - humid
   - iguana
   - walking stick
   - orchid
   - forest floor
   - foggy
   - jaguar
   - flower
   - life cycles
   - macaw
   - rubber tree
   - rain forest
   - monkeys
   - vines
   - reptile
   - parrots
   - gum
   - under story
   - sloth
   - lily
   - water cycle
   - tamarin
   - tree frog

3. Proper Names:
   - Yagua
   - Shaman
   - Goodall

4. Ideas:
   - conservation
   - extinction
   - preservation
   - protection
   - survival

5. Phrases: N/A

---

RESOURCES

I. BIBLIOGRAPHY
   - Ready-to-Use P.E. Activities for grades k-2 by Joanne Landy and Maxwell Landy
   - www.enchantedlearning.com
   - www.christiananswers.net
   - www.go.grolier.com
   - NJCCCS Teacher Handbook
   - www.google.com

II. BIBLIOGRAPHY
    FICTION TITLES
    - “The Great Kapok Tree” by Lynne Cherry
• “The Jungle Book” by Rudyard Kipling
• “The Lorax” by Dr. Seuss
• “Amazon River Rescue” by Amanda Lumry
• “The Creeping Vine” by Felicia Law
• “Canopy Crossing” by Ann Nagda
• “Curious George feeds the animals” by Margaret & H.A. Rey
• “Good Morning Gorillas” by Mary Pope Osborne
• “If I ran the rain forest” by Bonnie Worth
• “Only Tadpoles Have Tails” by Jane Clarke
• “Parrot Tico Tango” by Anna Witte
• “Rainforest Race” by Lara Bergen
• “Regina’s Big Mistake” by Marissa Moss
• “Afternoon on the Amazon” by Mary Pope Osbourne
• “In The Rainforest” by Eva Moore
• “The Vanishing Rainforest” by Richard Platt
• Beyond ‘Ohi’a Valley” by Lisa Matsumoto
• “Shaman’s Apprentice” by Lynne Cherry
• “One Day in the Tropical Forest” by Jean George
• “The Umbrella” by Jan Brett
• “Dora goes to school” by Leslie Valdes
• “Oh Say Can You Say: What’s The Weather” by Tish Rabe

NONFICTION
• “Rainforests: Gardens of Green” Picture Window
• “Living in a Rainforest” Rourke
• Rain Forests” by A. Richardson
• “Explore The Tropical Rainforest” by L. Tagliaferro
• “Rain Forests” by S. Gray
• “Rainforest Habitat” by M. Aloian
• “Rain Forest Plants” by P. Dell
• “Life In A Rainforest” Pebble Plus Books
• “Tropical Rain Forest: A Web Of Life” Enslow
• “Discovering Rain Forests” Power Kids Press
• “Boa Constrictors” by H. Frost
• “Chimpanzees” Pebble Books
• “Gorillas” Pebble Books
• “Jaguars” Pebble Books
• “Leaf-Cutting Ants” Pebble Books
• “Lemurs” Pebble Books
• “Parrots” Pebble Books
• “Tarantulas” Pebble Books
• “Tigers” Pebble Books
• “Tree Frogs”
• “Nature’s Green Umbrella”

III. Educational Films / Videos
Jeff Corwin Series:
• Australia
• Brazil
• Costa Rica
• Guyana
• Madagascar
• Panama
• South America

24
• “Life In The Rainforest Video Quiz” Discovery Education
• Travelers: South America
• Spirits of the Rainforest (all videos from Discovery Education)

IV. Commercial Films / Videos
• Ferngully
• Medicine Man
• Tarzan
• Jungle Book
• Ace Ventura: When Nature Calls
• Anaconda
• Jungle Book 2
• Romancing The Stone
• Magic School Bus: In The Rainforest
• King Of The Jungle
• Crocodile Dundee
• Into The Mist
• Wizard Of Oz
• Jungle Boy
• Jungle Heat
• Jungle 2 Jungle
• Jungle Bride
• Jungle Inferno
• Jungle Patrol
• George of the Jungle
• Jane and the Lost City
• King Kong
• Amazon ‘90
• Raiders of the Lost Ark
• Jumanji
• Ferngully 2
• East of Borneo
• Tarzan 2
• Madagascar
• Tarzan the Apeman

V. Literature / Language Arts (on reserve in Media Center for interest reading)

Fiction
(See above-bibliographic)

Non–Fiction
(See above-bibliographic)

VI. Poetry
• “Rainforest Animals” by Paul Hess
• “The Rainforest Grew All Around” by Susan Mitchell
• “Frogs Eats Butterflies, Snakes Eat Frogs…” poem by Wallace Stevens
• “Over In The Jungle” by Marianne Becks
• “Looking For Jaguar: And Other Rainforest Poems” by Susan Katz
• (web links, see below):
  http://divergentlearner.typepad.com/photos/rainforest_poems/rainforest.html
  http://www.belmont.k12.ma.us/class_pages/laroche/rainforest/poems/activities.htm
  http://www.swlauriersb.qc.ca/schools/crestview/ls/Rainforest%20PDF/Rainforest%20Poetry.PDF
VII. Drama (Stage Productions)
- “Tarzan the Musical on Broadway”
- “Jungle Book: I Wanna Be Like You”
- “I Am A Sloth”
- “Elissa Rumpus: In The Rainforest”
* All videos available at www.youtube.com

VIII. Art Works
- “A Walk in the Rainforest” by Kristin Jay Pratt
- “Rainforest Music” by Robert Nelson
- “Spirits of the Rainforest” by Magough
- “The Spirits of the Rainforest” by Azra
- “Lake Moeraki Rainforest, New Zealand” by Ron Sypher
- “Shadow of the Rainforest” by Robert Bateman
- “Lamington Rainforest” by Joanna Terpstra
- “Rainforest of Costa Rica” by P.R. Gulley
- “Rainforest Sunray” by Orvaratli----
* All paintings above are related to the rainforest
• www.kidzart.org rainforest paintings by children

IX. Music
- “Changes” by David Bowie
- “Bate, Bate Chocolate” Dora the Explorer
- “Wheels on the Bus”
- “Raindrops Keep Falling On My Head” by B.J. Thomas
- “Shapes All Around Us” by David Burba
- “Everything Has A Shape” by Hap Palmer
- “Crazy Polygon Shapes” by Zach Burba
- Rainforest sounds: plants, animals, music, environment at www.christiananswers.net (7-20)

X. Resource People / Mentors
Zookeeper, representative of local museum, guests/teachers who have visited a rainforest

XI. Field Trips
Rainforest Cafe
Bronx (or other local) zoos

XII. Other Material (CD–ROM, Laser Disc, Internet sites, etc.)
www.youtube.com/watch?v=VyKsAer4qgQ
http://www.christiananswers.net/kids/sounds.html
http://www.everythingpreschool.com/themes/rainforest/songs.htm
http://www.kiddyhhouse.com/Rainforest/
www.unitedstreaming.com
http://www.nationalgeographic.com/features/00/earthpulse/rainforest/index_flash.html
http://www.enchantedlearning.com/subjects/rainforest/
http://www.eduweb.com/amazon.html
http://www.digitalfrog.com/resources/raingallery.html
http://edtech.kennesaw.edu/traci/animals/explore.htm
http://curriculum.calstatela.edu/courses/builders/lessons/less/biomes/rainforest/tropi_rain/rainweb.html
http://www.pbs.org/journeyintoamazonia/
http://www.christiananswers.net/kids/vidclips.html
http://archive.greenpeace.org/kidsforforests/map.html
http://www.kidssavingtherainforest.org/
http://library.thinkquest.org/J004282/
http://www.christiananswers.net/kids/rainforest/
http://www.tooter4kids.com/Rainforest/index.htm
http://www.srl.caltech.edu/personnel/krubal/rainforest/Edit560s6/www/animals.html
http://www.rainforestanimals.net/
http://www.pbs.org/wnet/africa/explore/rainforest/rainforest_overview_lo.html
http://www.abcteach.com/directory/basics/science/habitats_biomes/rain_forest/
Habitats of the world CD-ROM Discovery Education
www.go.grolier.com (online encyclopedia)