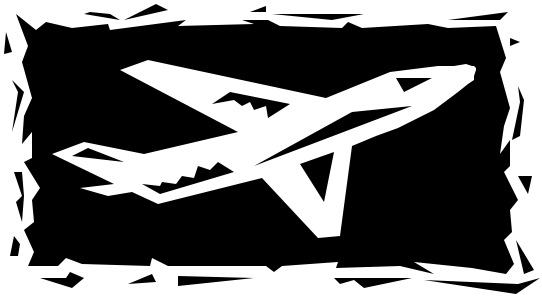
My Journey through Biomes



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My Journey through Biomes

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Program Outline and Overview

Major Goals: The goals of this program are to enrich students with knowledge; achieve language and academic proficiency; and meet ESL, National, and Science Standards while researching the Earth's ecosystem and five biomes.

Target Students: I implemented this program with twenty third-grade English language learners. They ranged from grade and language level to below grade and language level. I used science, social studies, and math periods to implement this program. This meant that we met almost every day for one period a day. This program can be adapted from second to sixth grade classes with modifications. Teachers should be aware of the student's needs to adapt each lesson according to all language and academic levels. Use real materials as well as visual aids to convey the information to all students and promote learning acquisition at all levels. Learning can take place by using Total Physical Respond (TPR); Cooperative learning (CL); Language Experience Approach (LEA); Natural Approach (NA); and the Whole Language Approach (WLA).

Timeline: This program can take a whole school year, depending on the information given as well as how many biomes you would like to introduce. I introduced five and the time spent on each on varied. The beginning of the topic takes longer because of the vocabulary and the new information given.

Assessment: This program has an ongoing classroom assessment. For example, students take notes, use and complete graphic organizers, and have oral summaries and visual analysis. They write letters, create poems, and finish with a big project --a research paper.

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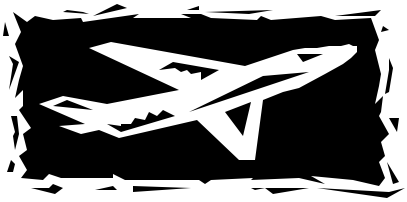


Lessons

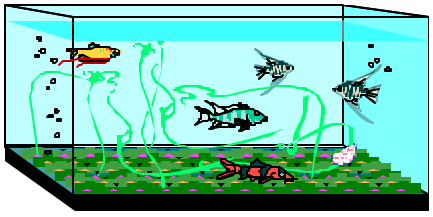
This topic takes one week. Students take notes and write a summary of their observations.

What is an ecosystem?

***** First, introduce the topic by showing pictures of the ecosystem. Discuss the living and non-living things presented on the pictures. Next, give them objects such as toys, flowers, rocks, water, plants, etc. to sort into living things and non-living things. Then supply students with dictionaries to look for the word "ecosystem." Discuss the definition and the pictures on the board. Finally, give students magazines to make a collage that represents an ecosystem.
***** Have a fish tank with a turtle or a fish ready to illustrate the discussion of the ecosystem surrounding the fish or turtle. Before the discussion, give students power points on the subject. For example, what are some living and non-living things in the fish tank? (Let them make a list, see p. 22.) Why does the fish or the turtle need the non-living things to survive? Let students observe the object and take notes about it. The students then go back to their seats and discuss their notes with a partner or in groups. Elicit an open discussion with the whole class. Students will use their notes to write a paragraph about the ecosystem of a turtle or a fish.

Materials

-Pictures with living and non-living things (Teacher-made materials or from magazines)
-Dictionaries
-Oak tag
-Scissor
-Fish tank
-Magazines
-Glue
-Plants, flowers, toys, rocks
-Fish or a turtle



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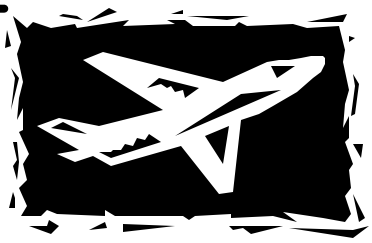

Lessons

This topic will take from one to two weeks. The students take notes for this activity as well.

What is a food chain?

***** First, students will be exposed to a food chain by introducing pictures of living things beginning with the primary producer. Show pictures and explain to students that the sun gives energy to the primary producers (plants and trees) that makes them grow. Give students power points by asking open questions such as: What do plants need? Or what makes plants grow? What is the major source of energy for the vegetation? Explain to the students that the sun is the major source of energy to the plants (vegetation). Ask questions and point to the pictures every time you give information to make sure that students understand the subject. For example, why do we say that the sun gives energy to the primary producers (the plants)? Keep using the vocabulary every time you ask a question.

***** Read *What Are Food Chains and Webs?* by Bobbie Kalman and Jacqueline Langille. Display some pictures of primary consumers and explain to the students that primary consumers are animals that eat plants. Next, show pictures of secondary consumers and explain to the students that secondary consumers are animals that eat meat. Students need to see pictures to grasp the concept of a food chain. Finally, go over the decomposers (living things that break down the dead plants and animal remains). Explain to students that when an animal dies, living things such as, worms, mushrooms, and other organisms break down this dead meat and the minerals go back to the primary producer. This cycle cleans our ecosystem.

- Go over the process again, as well as the vocabulary. To assess the students, remove the pictures from the board and ask for volunteers to place them in order of the food chain.

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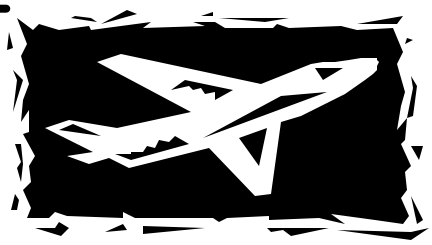

Students will be assessed according to language levels. Students at the intermediate stage will place the pictures and explain the process. Students at the pre-production stage (the silent period) will place only the pictures in order of the food chain.

***** The objective of this activity is to write an informational paragraph.
Students take turns with this activity. Some students will be primary producers (trees and plants). Others will be primary consumers (zebras) and some will be secondary consumers (lions). Finally other group of students will be poachers and farmers. While students demonstrate this activity, the rest of the class will take notes of their observation.
First problem: the poachers kill the lions for their teeth and claws to sell them to tourists as souvenirs. Having no lions to hunt zebras, the zebras will reproduce (add more students for zebras) and will need more food for their herds. Pause and ask the students to think about this problem. Will the primary producers be enough to feed a big herd? Second problem: the farmers will cut down the trees for housing and farming. What is going to happen to the zebras if their habitat is used for farming and housing? (Make the zebra-students "die" one by one.) Create a play using this situation. All students should be able to participate in this activity. After the students take their notes, have an open discussion and some solution for these problems. Finally, students write their solutions as well as an informational paragraph about a picture of a lion eating a zebra (see p. 23).

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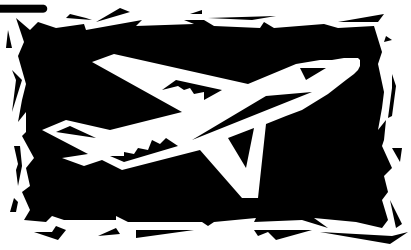

The objective of this activity is to give an oral summary of the topic

***** Finish this unit by going to the American Museum of Natural History and visiting Biology of Birds on the first floor and see the Dodo-- a bird that became extinct in the late 17th century when it was over-hunted by sailors. Discuss how a species of trees, `Calvaria major`, was dependent on the dodo for seed germination. Although the trees were producing fertile seeds, none were germinating. The dodo was the missing factor. To germinate, the seeds needed to be partially digested in the dodo's gizzard. The tree itself became extinct. This is one example of the interdependence of species within an ecosystem. Discuss how human activities impact every day on our environment and how to prevent this from happening again with other animals. Tell students to write their thoughts about this situation, and discuss them in the classroom.

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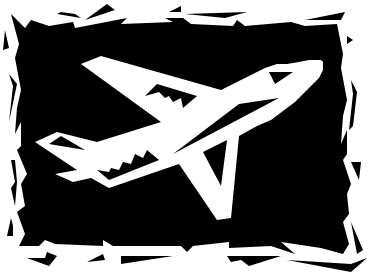

Lessons
This topic takes one to two weeks.

What is a web chain?

***** Introduce this topic by reviewing the food chain. Then have pictures of herbivores, carnivores, omnivores, and scavenger animals ready. Go over this classification and explain why these animals are classified as such. Before placing these animals on the board together with the food chain, ask questions to make sure that students understand the classifications. For example, why is a zebra called a herbivore? Why is a lion called a carnivore? Why is a bear called an omnivore? What do you call an animal that eats dead animals? Now use the pictures and place them together with the animals from the food chain. Explain the difference between the food and the web chain. Go over the pictures to review vocabulary and the food and web chains. Give students flash cards with the vocabulary. Students at the intermediate level will tell the definition of the word and or say a meaningful sentence. Students at the pre-production level will place the flash card on the picture and another student will say a sentence or the definition.

***** The objective of this activity is to have an observation analysis.
Use the fish tank with a turtle in it. Drop guppies in it. Students take notes or draw their observations, depending on their language proficiency. Introduce the words “prey” and “predator.” Explain that a predator kills and hunts other animals for food and the prey is the animal eaten by the predator. Ask students which is the predator and which is the prey in the fish tank.

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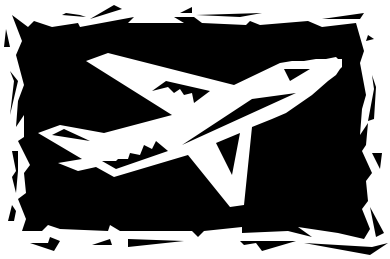
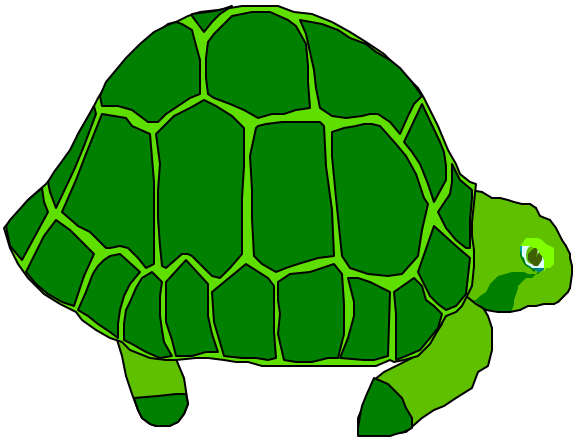
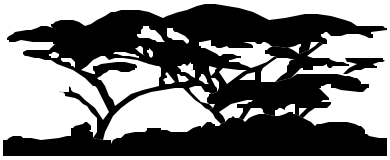


Lessons

The students will write a sequential paragraph

***** Students write a sequential paragraph about the food and web chain (see p. 24). You may show pictures of other predators and preys, such as the zebra and the lion. You may use the same worksheet `Predators and Preys` (see p. 23) to write about it.





First stop: the savannah

Lesson

This topic is done step by step. There is a lot of information contained in it. You may need to break it down into parts or subtopics so the students will be able to internalize and understand the concepts. This topic takes from one to two months. The students will be able to gather information.

What is a savannah?

***** Have books and pictures of a savannah ready. Show pictures of the savannah and ask: What do you think the climate is like there? What kinds of animals do you think live in this area? Make a word web with their responses. Introduce temperature and rainfall by showing students a big chart of the savannah's weather (see p. 25) and discussing the chart. Ask students for ways to put this information in a clear form. Review inches with the students because the objective is to graph the rainfall in inches. Give them rulers and review 1", 1/2", 1/4", and 1/8". (Use math periods to do these lessons). Discuss the bar graph and the important details that make a bar graph correct and clear to read. Explain that they will be working only with the rainfall and will put that information on a bar graph sheet. Students may work in pairs or groups. Have questions ready to assess each student on the savannah rainfall bar graph.

***** Make a tally about what month they would like to visit the savannah according to the rainfall of each month. Students will take this tally and transfer this information onto a bar graph.

***** Now discuss the line graph and the details that make a line graph clear to read. Discuss the differences between a bar graph and the line graph. Students need to have some knowledge on line graph before introducing this concept. Show the students the big chart of the savannah's weather. Point to the temperature. Go over the temperature of each month. Let them work in groups or in pair and remember to pair students heterogeneously. Graph the first month and explain to the class how to graph it. The second month will the done with the whole class. The other months will be done in-groups or in pairs.

Students will create questions for the other groups related with their line graph.

Finally students use their graph to write a paragraph related to the savannah's weather.

The Savannah

Lessons

How do we gather information?

This activity will take about a month. The objective is to introduce the research paper.

***** Have websites, books, encyclopedias, and magazines ready for each group.
Divide the class in groups no more than four. Each group will work on one source. Monitor each group so they will be able to gather information from all the sources. Give students a guideline to write their information (see pp. 26- 27). Students gather information about the savannah's weather and vegetation. Elicit a discussion on their findings. Each group will present their findings while the rest of the class takes notes. (Remember, this is a process and you ought to go back and review concepts already taught.) After the information is gathered, the students write an informational paragraph about this biome. By this time, students have gathered a lot of information about the savannah's climate and the vegetation. This information will serve to write the beginning of their final product--a research paper about one biome.

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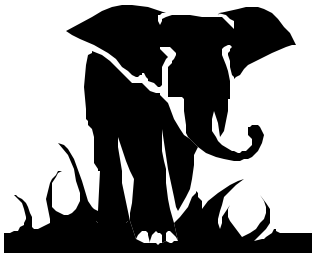

Lessons

This topic will take from three to four weeks.

What do we know about the elephant?

***** The students will be able to take notes about the topic and write a paper about the elephant. Students write from an elephant's point of view: "My Life as an Elephant."
Introduce this topic by using the KWL graphic organizer (see p. 28). Ask students what they know about the elephant – write their responses under the K . Then ask students what they want to know about the elephant – write their responses under the W. Have websites, books, and magazines for students to do research. (Remember to break this data into subtopics, such as body parts or characteristic, habitat, and poachers.) First, read the book *What I am?* by Moira Butterfield and Wayne Ford. Let the students guess the mysterious animal. After the reading, elicit discussion about the body parts or characteristic of an elephant (head, feet, trunk, molars, teeth, skin, and size). Using the materials available in the classroom and on the Internet, have them gather information on the body parts or/and characteristic. Make sure they find out size, weight, special features, and advantages, as well as the way in which the body part is used (see p. 29).

***** Have the students do library and online research about the elephants' habitat. Let the students take notes. Each day, the students write a paragraph about each subtopic discussed in class. Send students to do research on the computer, encyclopedias, magazines, and books – monitor the time each group spent on each center. Discuss their notes with the whole class. Have an open discussion. Discuss what kind of animal an elephant is. Have an open discussion about the poachers and why these people kill elephants, and what can we do to protect these animals. Discuss why the elephant is called the largest animal on land.

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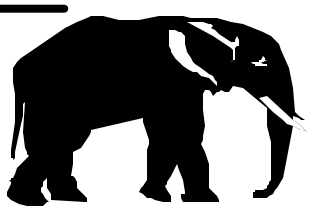

Lessons

Let the students complete the KWL graphic organizer by adding (under the L) what they learned about the elephant.

***** The students will be able to write a letter

Read Endangered Savannah Animals, by Dave Taylor. Discuss why the elephant's tusks have been prized for their functional and decorative qualities.

Discuss how poachers kill these animals for their tusks. Point out that every product made of elephant ivory means at least one additional dead elephant.

Have an open discussion about ways to protect these animals from being killed. Write students responses on a chart for reference. Explain that there are organizations that protect endangered animals. Tell the students that they will be writing letters to one organization to let them know that they want to help the elephants. Go over the parts of a letter – heading, inside address, greeting, opinion, reasons, final thought, closing, and signature (see p. 30). Using a guideline, the students write letters to the African Wildlife Foundation.

***** Introduce the cinquain poem (see p. 31)

Ask students for words (adjectives) that describe or tell about an elephant. Write their responses on a word web. Next, ask students to suggest words that give action to an elephant (verbs); remember the students have gathered a lot of data and will be able to this activity without any difficulties. Again, write their responses on another word web. Then ask students to look at their notes and say a phrase that tells an important detail about the elephant. Finally, go over the poem; model the poem first. Students will do the final product at the writing center on the computers.

End this topic by taking the students to the Museum of Natural History to visit the Akeley Hall of African Mammals.

- Students will finish their research paper about one biome –the savannah.

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Second stop: the tundra

Lessons

This topic takes less time (at least one month) because the students already have a solid background about a biome. The students will be able to gather information about the topic.

What is a tundra?

***** Teachers need to research books, magazines, and websites. Students need to be exposed to a variety of sources in any topic covered in the classroom.
Introduce this topic by showing students pictures of the tundra. Discuss what it would be like in that region. Point out the plants and the animals. Explain that the frozen ground is called permafrost. Ask students what kind of plants or flowers will grow on a frozen ground. Read books about this biome and have the students take notes. Elicit discussion about their notes.

***** Take students to the Central Park Zoo in Manhattan to see the polar bears. Students will take notes about the bears' habitat. Guide the students to see and feel the coldness of the habitat. They see that bears need to be in cold places and the workers at the zoo drop a lot of ice on the ground to create the bears' habitat.
Back in the classroom, have an open discussion about their findings.
Give students a guideline (see p. 32- 33), and send them to the centers. Each group will gather more information about the tundra and the bears.
Go over the introductory paragraph. The students then write a three-paragraph essay from their notes on the climate, the vegetation, and the animal from the tundra.

***** The students will be able to write a poem
Show a variety of poems to students. Expose the students to many forms of poetry.
Explain that poems do not need to rhyme. Tell students that they can use repetition in each verse or use free verse--a kind of poetry that does not have a regular rhythm.
Let students use their notes to write their unique poem about the tundra.

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Lessons

The students will be able to create a diorama

***** Students will create a sensational bear's habitat.
Students will use a shoebox, construction paper, cotton, scissors, and glue. After they finish their project, they write an informational paragraph about the bears' habitat.

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Third stop: the desert

Lessons
This topic takes less time because of the strong background the students have developed about biomes.
Students will be able to take notes and write a paper about the topic.

What do we know about the desert?

***** Use the KWL graphic organizer (see p. 34) Ask the students what they know about the desert. Write their responses under the K. Then ask students what they want to learn about the desert. Write responses under the letter W. Leave the letter L to culminate the topic.
Show pictures of the desert and have sources ready for the students to gather information.
Use a big map and small world maps to work in either groups or pairs. On the big map, show the location of the deserts of the world. Then have students locate and find out the names of some deserts and continents.
Read *Deserts* by Anna O'Mara and have students take notes. Elicit discussion and show pictures. Pictures have to be clear for the students at the pre- production level. Give students one subtopic at a time. Follow a pattern for each biome: first the climate, then the vegetation, and finally the animals from the desert.
The students have acquired knowledge on how to create paragraphs with their notes and they write their informational essay about the desert.

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Lessons

Introduce the desert camel.

The students write an imaginary interview with a camel.

***** Ask the students if they would like to be reporters. Let them know that they will have an opportunity to interview a camel. Tell them that to interview the camel they need to have some information in order to ask the right questions. Go over the interrogatives, those key words used to create questions (use the Language Art periods to do this activity). Also, show how to change a question to produce the beginning of a sentence.
Have a picture of a camel and a microphone for students to role-play their interview.
Students will complete their interview and role-play their work. Give students books, magazines, encyclopedias, and the website www.arab.net/camel/ and/or http:planetpets.simplenet.com/plntcaml.htm to gather information. Give students a guideline (see p. 35). They gather data and write their interview. Finally, two students will role-play their interview.
Have students complete the L on the graphic organizer. With the information gathered about the camel, they also finish their essay paper about the desert.
End this topic by taking students to the Bronx Zoo.

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Fourth stop: the ocean

Lessons

This topic takse from one to two months because of the sea animals' research.
The students will be able to use their map skills.
Introduce this topic by giving students small maps to locate the major oceans.
***** Have a big map and point to the oceans. Ask students which ocean seems bigger. Show a globe and ask students what they see most: water or land. Elicit discussion and tell students that the world is two-thirds water and one-third land. Continue the discussion and tell students that from the two-thirds of water, the Pacific Ocean covers one third of our planet. Tell them that the Pacific Ocean is the largest ocean in our world. Do some math problem with this information (fractions).

***** The students will be able to write, edit, and illustrate an informative picture book.
Show and read books made in alphabetical order to the students. Show pictures of sea animals. Tell students that they will make an alphabet book about sea creatures. Have books, magazines, encyclopedias, and websites ready to gather data. Go over the alphabet letters.
Ask students if they know any animals from the sea. Give them one minute to write down on a piece of paper as many animals as they know. Tell them to put the paper away for a minute. Now group them in pairs or groups of four and ask them to list as many animals as they can remember. Let them compare their lists. Ask students if they were able to list more sea animals in groups or individually. This exercise lets students know that by working in pairs or groups, they will accomplish more and finish the alphabet book in less time.
***** Ask students for the names of the sea animals and write them in alphabetical order.
Next, have the sources ready and send students to each source to gather information. Tell students that if they cannot find an animal for one letter, to write two or three sentences related with the ocean. For example, "H" is for " Humans who are polluting our ocean by leaving garbage on our beaches."

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The Ocean

Lessons
The students will be able to write a "How To" seafood recipe.

Show recipes' books to students.
***** Go over the format of a recipe. Tell students that they are going to write a recipe. Explain that the recipe has to include an animal from the sea or the ocean. For example, shrimp, cod fish, octopus, etc.
Do one example in classroom, i.e., how to make a tuna fish sandwich.
Elicit discussion about the ingredients, the procedure, and a paragraph about the taste, sound, look, and smell of it.
Then give to students a guideline of what they are going to do (see p. 36). Let them finish their final product on the computer.
You may want to create a book of recipes with the whole class.

Finish this topic by taking students to the American Museum of Natural History to see the Ocean Life and Biology of Fish exhibit.

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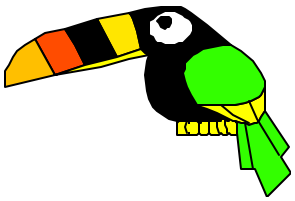

Last stop: the rain forest

Lessons

This topic takes about a month or less.

***** The students will be able to use their map skills to locate the rain forests of the world. Introduce this topic by displaying a mural of a rain forest. Elicit discussion about the topic. Locate a rain forest on the map, and discuss some facts about it (the climate, the plants' and animals' life in the layers, the people, the rivers, and the predators). Read `Inside a Rain Forest` by Gare Thompson and play `A Journey through Our Environment: Tropical Paradise` by KRB music companies while reading to the students. Read the book again and have the students take notes. Have an open discussion about their notes. Students will do work sheet `A Trip to Different Places` (see p. 37).

***** Have students make a list from products used at home that come from the rain forest. Discuss the list in classroom.
Ask students for the name of some rain forest animals. Write their list on a web map. Read `Predators in the Rain Forest` by Saviur Pirotta. Students take notes and discuss facts.

***** The students will be able to use math skills to do this activity.
Make a tally about their favorite rain forest animal. Students will graph the tally and write from four to five questions to be discussed in classroom.
Students do research on their favorite rain forest animal and write facts about it.

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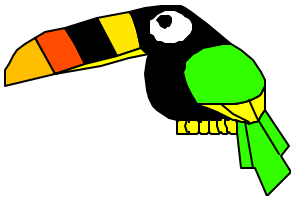

The Rain Forest

Lessons

Students will be able to write, edit, and illustrate narrative picture books.

***** Take students to the Central Park Zoo in Manhattan and visit the Rain Forest area. Tell students that they will be writing a sequential story about a trip to the rain forest. Students take their journals and pencils. They also take cameras to photograph the animals and plants. Have a discussion of the animals and plants while walking through the rain forest. Students take their notes and write a sequential story, My Trip to the Rain Forest.

***** Students read different types of non-fiction books and present their research in an interesting way.

Students pretend that they are entomologist (someone who studies insects). They read books about insects and describe these insects and their habitat (see p. 38).

***** Students will be able to write a creative paper about "My Ridiculous Animal from the Rain Forest" by applying prior knowledge.

To conclude this topic, students produce a creative writing essay about a ridiculous animal from the rain forest, using all the information gathered to write about this animal. This animal has to be a unique animal that only exists in their imaginary world. Students use the vocabulary learned in class. Also, they write specific details about this ridiculous animal from the rain forest (see p. 39).

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SAMPLE WORKSHEETS

Name _____

Worksheet # 1

Make a list of living and non-living things you observed in the fish tank. Then write a summary of your observation.

Living things	Non- living things

Write a paragraph (use your notes).

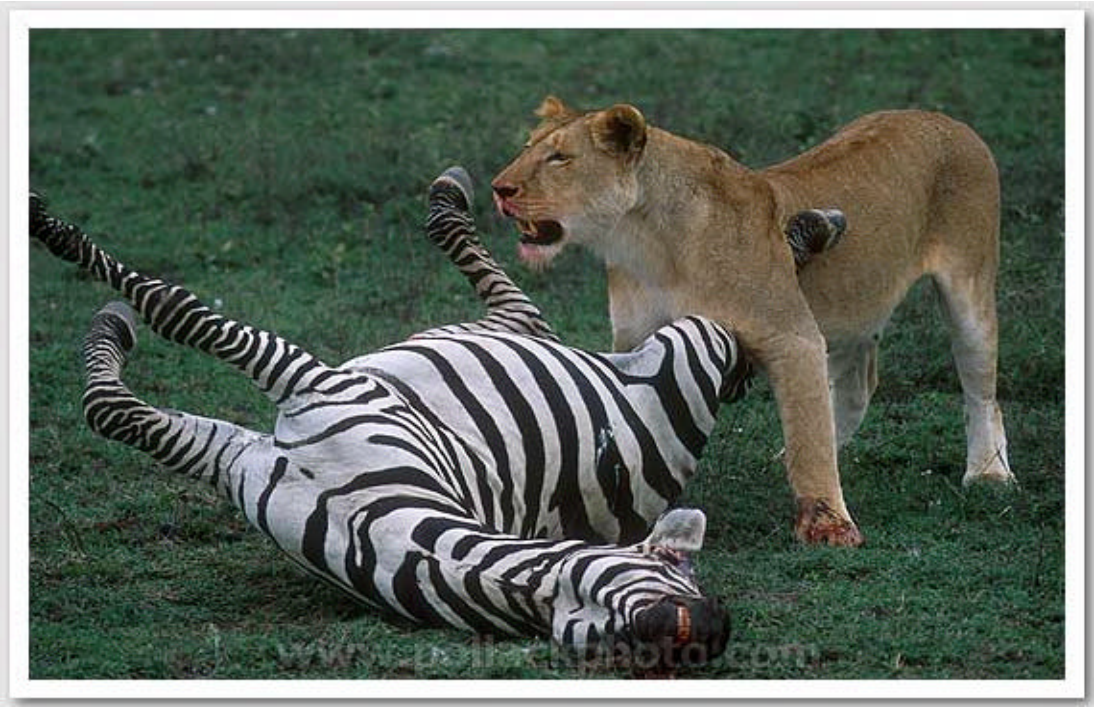
Read through your list and cross out details that are not important.

Name _____

Worksheet # 2

Predators and Preys

Look at the picture and explain in a paragraph what is happening. Remember to use the vocabulary learned in class.



_____

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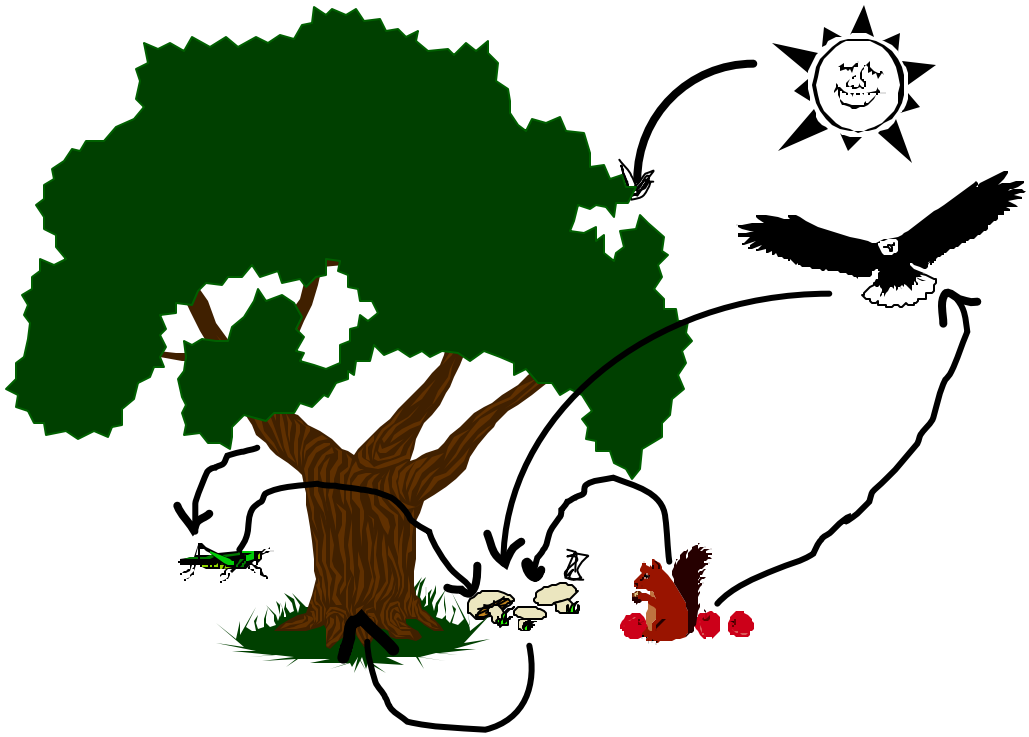
Name_____

Web Chain

Worksheet # 3

Write a sequential paragraph about the picture shown a web chain.



Title _____

_____

_____

_____

_____

_____

_____

_____

Name _____

Savannah Weather

Worksheet # 4

Month	Rainfall	Temperature
January	4 inches	70º F
February	4 inches	70º F
March	4 inches	70º F
April	1 inch	65º F
May	1/2 inch	60º F
June	1/4 inch	55º F
July	1/8 inch	58º F
August	1/4 inch	60º F
September	1/2 inch	65º F
October	2 inches	70º F
November	3 1/2 inches	70º F
December	4 inches	70º F

Name _____

Savannah Vegetation

Worksheet # 5

1. What do the savannah's plants look like?

_____

_____

2. Are the plants dry or moist? Why?

_____

_____

3. What kinds of plants are in the savannah?

_____

_____

_____

4. What are the damages caused by the climate on plants and the land of the savannah?

_____

_____

_____

5. How do plants survive in the weather condition of the savannah?

_____

_____

6. Write other interesting facts about the vegetation of the savannah

_____

_____

_____

_____

Name _____

Biome: The Savannah

Worksheet # 6

What continents have savannahs?

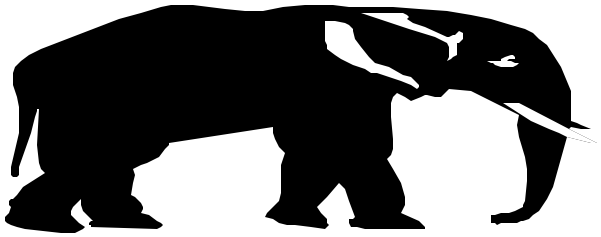
How is the weather in the savannah?

How much rain falls in the savannah every year?

What is the highest temperature? What is the lowest?

What are some problems cause by the weather in the savannah?

Name _____
Worksheet # 7



The Theme Is the Elephant

What I Know	What I Want to Know	What I Learned

Name _____
Worksheet # 8

Our Notes about the Elephants

1. Where do elephants live?

_____

2. How big is an elephant?

_____

3. What is its weight?

_____

4. What is the color of its skin?

_____

5. How does it skin look like? It is smooth like yours? Explain.

_____

6. What do elephants like to eat?

_____

7. How much does it eat?

_____

8. What do elephants use their trunk for?

_____

9. Where do elephants bathe every day?

_____

_____

10. What do elephants do with their ears to keep themselves cool?

_____

_____

11. How do elephants communicate?

_____

12. How do elephants raise their young?

_____

_____

13. How are their young called?

_____

14. Who are their predators?

_____

_____

15. Why are the ivory tusks so important to their predators?

_____

_____

Name _____
Worksheet # 9

What should I do when I write a letter?

DATE	_____ _____
GREETING (Addressing the person you are writing to)	_____ _____ _____
BODY (What you want to say)	_____ _____ _____
REASONS	_____ _____ _____
FINAL THOUGHT	_____ _____ _____
CLOSING (Saying goodbye)	_____ _____ _____
SIGNATURE (Who is the letter from?)	_____ _____

Name _____ Date _____

Cinquain

Worksheet # 10

Use the following to write a cinquain poem about elephants

Adjectives	Elephant Actions	Places Elephants Find Food	What Elephants Like to Eat

Line 1 – One noun

Line 2 – Two describing words for elephants

Line 3 – Three words that give action to elephants

Line 4 – A phrase that express feeling about elephants

Line 5 – One word that refers to the title (a different word)

Name _____
Worksheet # 11

Biome: The Tundra

What continents have tundras?

How is the weather in the tundra?

How is the precipitation in the tundra?

What is the highest temperature? What is the lowest?

Write other important facts about the tundra and its weather.

How do plants look at the tundra?

What kinds of plants grow in the tundra?

How do plants grow in the weather condition of the tundra?

Write other facts about the plants of the tundra.

Name _____
Worksheet # 12

Animal Information:
The Bear

Animal name	
Length	
Weight	
Habitat	
How does it move?	
Classification	
What are its prey?	
What are its predators?	
Life span?	
How does it reproduce?	
How it raises its young?	
How it protects itself?	
Why it is endangered?	
	

Name _____
Worksheet # 13

The Desert

What I Know	What I Want to Learn	What I Learned

Name _____
Worksheet #14

An Interview with an Animal

An interview with a (n) _____
(your animal)
by reporter _____
(your name)
I am here in _____
(biome)
with an endangered species. Could you please describe yourself for our readers?

_____
_____
_____

Tell us about your habitat.

_____
_____

What are your favorite foods?

_____
_____

How do you protect yourself from the weather condition?

_____
_____
_____
_____
_____
_____

As a reporter, write other questions you would like to ask your animal. Remember to use: where, how, what, why, and when.

_____
_____
_____
_____
_____
_____
_____
_____

Name _____
Worksheet # 15

"How To"

The name of the recipe_____
By _____
(Remember--it has to be a seafood recipe)

Ingredients:

_____
_____
_____
_____
_____
_____
_____
_____
_____

Steps

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

Describe your recipe by telling how it looks, smells, and tastes.

_____
_____
_____

Name _____
Worksheet # 16

A Trip to Different Places

You won a contest, and the prize is a trip to the two places shown on the map. But before you can have your tickets, you have to answer the questions bellow.

1. What kind of clothing should you take to Place 1?

_____

2. If you go to Place 1 in February, what will it look like?

_____

_____

3. What kind of animals might you see at place 1?

_____

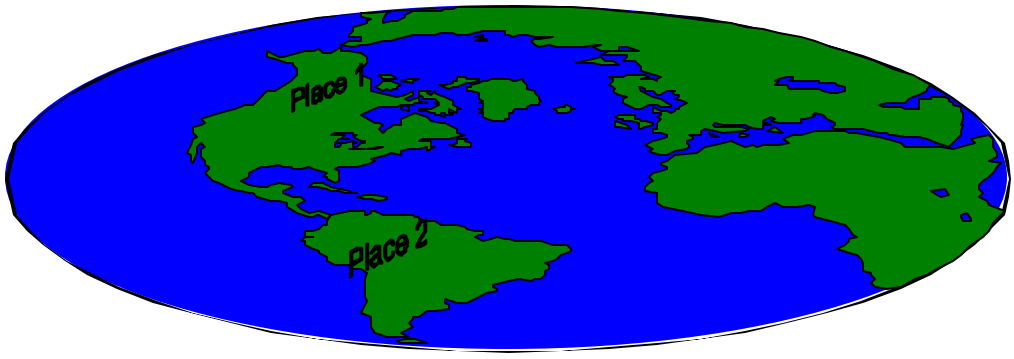
_____

4. How is Place 2 different from Place 1?

_____

_____

Imagine that you are walking around Place 2. On a separate sheet of paper, write a story about the animals and plants you see. Tell what kind of weather Place 2 is having. Tell what you are wearing and how it feels to be there.



Name _____
Worksheet # 17

Entomologist in Action

Pretend you are an entomologist (someone who studies insects). You are exploring the rainforest and discover a new insect. Your job is to describe this insect and its habitat and to give it a name.

Fill in this fact chart on your newly discovered insect.

New Discovery

Name of insect: _____

Habitat; _____

Where it was found: _____

Food it eats: _____

Color: _____

Size: _____

Moves by: _____

Its predator: _____

Its prey: _____

Create diorama in a box to display your discovery.

1. Make a model of your insect

2. Create a diorama in a box to show your insect's habitat.

   Paint the inside of the box. Add flowers, plants, and water made from construction paper. Add real dirt or sand if needed.

3. Display your diorama with the fact sheet provided above on your new insect discovery.

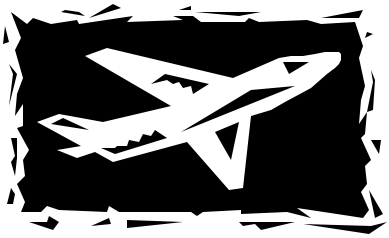
Name _____
Worksheet # 18

My Ridiculous Animal from the Rain Forest

The name of my animal is _____
How big is it? _____
What color is it? _____
How many feet does it have? _____
How does it move? _____
Is it most active during the day or at night? _____
What does it eat? _____
Where does it make its home? _____
Where does it find water? _____
What other things do you like to tell about your animal? _____
_____
_____
_____

Draw a picture of your animal

Nydia Bernacet
P.S. 145



Resources

American Museum of Natural History
- Biology of Birds; Dodo
- Ocean Life and Biology of Fish

Central Park Zoo
- The Polar Bears
- The Rain Forest

Bronx Zoo
- The Camels

The local pet shop is a good supplier for turtles and guppies.

Nydia Bernacet
P.S. 145

Bibliography

What are Food Chain and Web? by Bobbie Kalman and Jacqueline Langille

Biomes by Bobbie Kalman and Jacqueline Langille

What I Am? by Moira Butterfield and Wayne Ford

Endangered Savannah Animals by Dave Taylor

Deserts by Anna O'Mara

Oceans by Anna O'Mara

Inside the Rain Forest by Gare Thompson

Predators in the Rain Forest by Sariur Pirotta

Internet Sites:

www.arab.net/camel/

http:planetpets.simplenet.com/plntcaml.htm