

BIOMES

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Grade: 6

Time: 3 weeks

Geographic Theme

The world can be divided into units, or parts, that have similar plants, animals, and climates. These units are known as biomes. Learning about the varied habitats will help us understand why and how civilization prospered in particular areas of the world.

Overview

Provide an introduction into global thinking. Visualize the world as a whole. Recognize how environments can impact the development of civilization.

Materials

- Ecology: A Thematic Unit, by Mary Ellen Sterling (1991). Teacher Created Materials. ISBN: 1557342865
- Biomes and Natural Cycles CD-ROM, Micro-Intel Publishers (or any multimedia resource with information on biomes).
- Resource books on Biomes
- paper plates
- construction paper
- scissors
- crayons
- old magazines
- rulers
- 15 pictures of animals from various Biomes
- silhouettes of animals for art work

Objectives

- Recognize vocabulary related to Biomes
- Identify six Biomes
- Describe climate, plants, and animals of each specific biome.
- Locate the relative location of each of the Biomes

Goals

Practice research skills.

Teach using as many of the intelligences as possible in order to facilitate learning for each individual student in the classroom.

Integrate the Language Arts curriculum into World History.

Meet the SUNSHINE STATE STANDARDS under the appropriate BENCHMARKS.

- **Perspective:**

understands the impact of geographical factors on the historical development of civilizations.

uses mental maps to organize information about people, places, and environments.

- **Change:**

knows the human and physical characteristics of different places in the world and how these characteristics change over time.

knows how various human systems throughout the world have developed in response to conditions in the physical environment.

- **Interdependence:**

knows how physical and human geographic factors have influenced major historical events and movements.

Procedures

A. Initiating Activity

Prior to the introduction of Biomes, I began the school year with the 5 Themes of Geography. We reviewed longitude and latitude. We positioned Florida using both exact and relative location. We brought in pictures featuring the cultural, ethnic, and physical characteristics of Florida. We made a collage showing how goods,

people, and ideas move across lands. All that brought us to the point of introducing the regions of the world.

B. Strategies

Day 1: Begin with the introduction of Biome Vocabulary.

Distribute resource books on biomes around the room. Using the Biome Vocabulary Worksheet, define the vocabulary related to Biomes. Allow time for brainstorming and investigation into the resource books. Arrive at a collaborative definition and write it on your copy on the overhead. Allow time for the students to copy the worksheet.

Day 2 through 5: Follow the above activity with the graphic organizer for Biomes. Brainstorm about where the students have gone on vacation. Let them tell you what it was like there. Describe the Biomes briefly. The graphic organizer will feature six different Biomes and the characteristics that define them. At this time challenge the students to bring in as many pictures as they can that illustrate a different Biome. Magazine pictures, postcards, or even snap shots from their most recent family vacation will do. As the week goes on they will have a better concept of how each biome is distinct from the other. Arrange the pictures on large banners in collage formation. As the collages grow, each banner will assume its own character with color. The whites and blues will emerge in the tundra and taiga. The oranges, golds, and reds will predominate the temperate forest. The rich green will preside over the tropical rain forest. The grasslands will be a sea of yellow and green. The desert will display brown and yellow.

Begin the section for independent study. Each child is given 6 graphic organizers and a packet that contains information on the six Biomes. The students are instructed that over the next three days they are to read each section on the Biomes and list on the graphic organizer:

1. the name of the Biome
2. the areas in the world that Biome can be found
3. the climate of the Biome
4. the plants of the Biome
5. the animals of the Biome

On the last day of this section of the activity, use the transparencies, for the graphic organizers, on the overhead, to summarize each biome and allow any student who did not get each section completed to copy and fill in his paper.

These papers were then filed into their World History notebook and used as resources for the following activities.

Day 6 through 10: For the next 5 days the students will be using the research information, that they gathered last week, to complete the various Stations. The class room will be set up into 5 different stations. Each station will consist of tables arranged so that they can seat up to 6 to 7 people. Each table will be the station for a particular activity. Enlist the help of two or three parents for each day to help the students stay on task and give special attention to anyone that has trouble working independently. The students will spend one day at each station. As it happened, some stations took longer to complete than others. Some of the students even needed to take the activities home to complete. And of course there were those who were finished in no time. So allow for some flexibility in moving from one station to another.

Station 1: At this station I wanted to integrate my World History curriculum with the Language Arts writing process. The students will draw from their graphic organizers and from various resource books, that are on the tables, to write a story about life as an animal in one of the Biomes. They will go through all the steps of proofreading, editing, and rewriting. Parents will be there to assist in this process.

Station 2: Students will summarize their graphic organizer notes into one capsulized component. They will use a paper plate, divide it into 6 equal parts, (probably the most difficult task of the whole three weeks) to summarize the location, animals, plants, and descriptive details about each particular Biome. This activity provided the students with a compact way to compare and contrast the characteristics of each Biome. Next year I plan to have our Math teacher use our pie plates as an integrated activity and have them divided before we begin our stations.

Station 3: This station allowed for a little creativity. The students were encouraged to make up their own Biome, name it, and invent characteristics, plants and animals that would exist there. They were free to draw any number of features on their island as they saw fit.

Station 4: Station 4 required a little research. Resource materials were provided through library books and encyclopedias. The goal was to be able to identify each animal and match it to the corresponding Biome.

Station 5: The artistic students excelled at this station. We were simply doing shadow drawings to break the monotony of reading, research, writing. However, it gave the kinesthetic learners an avenue to release some energy.

Station 6: Each student was instructed to create a six panel accordion book to represent the land features and plants of each Biome. The students drew upon their graphic organizers, resource books and Biome collages to help them, organize their drawings. Again and again, the students would refer back to their Biome collage banners for color, shape, and dimension. This was the most time consuming station.

The students were given 50 points for each station that they completed. Any station that was incomplete, inaccurate, or poorly done was marked off.

C. Culminating Activities:

Day 11 through 15: As a culminating activity the students were required to give a Biome project presentation. Each student was given detailed instructions on what was required to complete this assignment. Each student was alerted as to how they would be evaluated. They were assigned to cooperative groups consisting of four students. Before they began work on the project, each participant signed a contract pledging their cooperation. The students were given three days of class time to work on their presentation. On the fourth day the presentations began. I videotaped the presentations and we viewed them several months later to the delight and embarrassment of many of the participants.

D. Evaluation

The evaluation consisted of four criteria. The first was the completion of all of the stations. The second was the biome presentation. The third was the biome test. And the fourth was a notebook test that I administered several weeks later to measure their ability to collect, organize, and synthesize material.

Biome Vocabulary

- Biome
- Biosphere
- climate
- Precipitation
- Tundra
- Taiga
- Conifers
- Deciduous Forest
- Grassland
- Prairie
- Tropical Rainforest
- Desert
- Irrigation

Accordion Biomes

Directions

- You need to make each part of your "Accordion" represent **land features** and **plants** of a specific Biome.
- You may draw and use magazine pictures to complete each section of your "Accordion."
- When completed please fold on each dotted line so your biomes look like an "Accordion."

Biome Projects Presentation

Due Date

Will Vary

Requirements

- A. Presentation must last 10 minutes.
- B. You must display animals.
- C. You must display plants.
- D. You must describe climates.
- E. You must include at least 2 other facts about the biome.
- F. You must have a model of the biome.
- G. You must have a map showing the biome's location in the world.
- H. You must be dressed the way that someone would be dressed if they lived in that biome.
- I. Everyone must present.
- J. You must prepare a quiz consisting of five questions to ask the class after you finish presenting.
- K. You must collect and correct the quizzes.

Helpful Hints

- Make a poster
- Make a bulletin board
- Make a diorama
- Sing a song
- Do a rap
- Wear costumes
- Make a mobile
- Make up a game
- Make up a puzzle
- Bring in pictures
- Draw pictures
- Use the overhead

Grading Policy

- Valued at 200 points
- Work must be divided equally.
- All requirements must be fulfilled.
- Behavior checks will result in a loss of 5 points per check.
- The group is graded as a whole.

Biome Test

Using the six biomes listed below, answer the following sentences.

- Tundra
- Taiga
- Temperate Forest
- Tropical Rainforest
- Grasslands
- Desert

1. Where would you want to go for a skiing vacation?
2. Where would you travel to see a polar bear?
3. If you wanted to collect beautiful pinecones, where would you find them?
4. You want to live where there are all four seasons, which biome is right for you?
5. You are going on Safari in Africa. What biome has the most exotic animals?
6. Where would you travel for HOT,HOT,HOT,HOT, always the same climate?
7. If you are a farmer planting crops, which biome is best for you?
8. You want to ride a camel in Egypt, what biome is that?
9. Buffaloes used to graze in great numbers in America, you want to see if there are any left in existence. You travel to which biome?
10. It's fall and you want to see the leaves change color, where would you go?
11. You are going to Hawaii to go surfing, what is this biome?
12. South America has a great trip for you down the Amazon River, what biome is that?
13. You want to take pictures of those darling Koalas in Australia, where do they live?
14. Yucca, yucca, yuccas are everywhere in this biome?
15. You want to collect exotic plants in this biome, where do you travel?
16. You are going to cut your very own Christmas tree, you have traveled to which biome?
17. You are going to Vermont for the Maple Syrup Festival, what biome is that?
18. You cannot believe it, you are so hot during the day in this biome and so cold at night. What is the name of this biome?
19. Cattle love grazing in this biome. What is it?
20. You do not need to take a rain coat to this biome, however you better bring a parka. Where are you?