

Making Geography Fun

Creative Lessons for Sixth Grade Geography



Educational Services

Division of Social Sciences

Introduction

The lessons in this packet are designed to address the geographic content and skills outlined in the sixth grade Competency-Based Curriculum for Geography. Each lesson covers specific objectives and competencies in the curriculum, as well as one or more of the Five Fundamental Themes of Geography. Lessons have been developed for each of the six components found in the social studies curriculum. Used in conjunction with **Teaching Ideas and Performance Strategies (TIPS)**, teachers will have a comprehensive series of lessons and strategies from which to develop their sixth grade Geography course. Additionally, the lessons have been correlated to the sixth grade Language Arts, Mathematics, and Science curriculum so as to facilitate interdisciplinary planning and instruction. These lessons are intended to be used as a resource for teachers. Teachers are strongly encouraged to adapt the lessons to match the needs of their students and, of course, to develop creative lessons of their own.

A Framework for Studying the World

THE FIVE FUNDAMENTAL THEMES OF GEOGRAPHY

For many students, the term "geography" means only the memorization of states, capitals, far away places, unheard of rivers, and leading products of the world's nations. In fact, the study of geography does include each of these; however, it also includes the study of people and culture, their resources, their relationship with their environment, their problems, and their relationship with other people and nations. In short, geography is far more broad in scope than it is often viewed.

In an effort to fully define geography and provide a systematic framework for studying the world, the Joint Committee on Geographic Education and the Association of American Geographers outlined "The Five Fundamental Themes of Geography." These themes have been gaining acceptance among educators and are now widely used in curriculum development. These themes will also provide a partial basis for the new national standards being developed in social studies. They are also found in the most recent geography textbooks. Locally, the Five Fundamental Themes serve as the organizational framework for the Geographic Understanding component of the Competency-Based Curriculum in social studies. A brief description of the five themes follows.

THEME 1 - LOCATION

Every point on the earth has an absolute, or exact, location that can be pinpointed using latitude and longitude. Each place also has a relative location. Relative location helps us understand how places are related and connected to other places. For example, Miami has an exact location that can be determined on a map (25.8 degrees North latitude and 80.3 degrees West longitude). Miami's relative location also makes it the economic and cultural crossroad to Central America, South America, and the Caribbean. Taken together, absolute and relative location give us the tools we need to answer the question: **Where is it?**

THEME 2 - PLACE

Just as every individual has a unique personality, every place has physical and human characteristics that distinguish it from other places. **Physical characteristics** include landforms, bodies of water, climate, soils, natural vegetation and animal life. These characteristics form the natural environment. The **human or cultural characteristics** of a place can be noted in its ethnic composition, language, economic activities, and architecture. The human characteristics often tell us much about the cultural heritage of a place. For example, Miami is known for its warm tropical climate and its proximity to the ocean. It is also known as a multiethnic city with a unique cultural identity derived from a mix of many cultures. Taken together, the physical and human characteristics of places provide keys to understanding the interactions and interrelationships between people and their physical environments. Place characteristics help us answer the question: **What is it like?**

THEME 3 - HUMAN-ENVIRONMENT INTERACTIONS

How people respond to and modify their environment is a central focus of geography. Human interaction with the environment produces both positive and negative effects. The study of geography helps us understand both. The study of geography also helps us to appreciate nature and to manage the environment responsibly. For example, the southern water flow from the Kissimmee River and Lake Okeechobee was changed in the late 1940's to promote development and farming. A reduced flow of fresh water to South Florida also resulted from this action. Geographers ask if the net gain of such action is positive or negative. Human-environment interactions help us answer the question: **What is the relationship between humans and the environment?**

THEME 4 - MOVEMENT

Humans interact with other humans both near and far. They communicate with each other, travel to different places, and rely on products and ideas that come from places beyond their immediate environment. The theme of movement helps students understand how they are connected with, and dependent upon, other regions, cultures, and people in the world. For example, the transportation of goods between Miami and Latin America is critical to the economy of South Florida and Latin America. In addition, Miami continuously receives new immigrants from Latin America and the Caribbean. This movement of people also promotes the movement and sharing of ideas between people. By studying the movement of people, goods and ideas we can answer the question: **How and why are places related to each other?**

THEME 5 - REGIONS

A basic unit of geographic study is the region, an area on the earth's surface that is defined by certain unifying characteristics. These characteristics can be **physical** (tropical region, mountainous region), **cultural** (French-speaking region, religious region) or **political** (United States, Commonwealth of Independent States). Geographers have developed regions as tools to examine and analyze the human and physical environment. Regions define manageable units from which to study the world and help us answer the question: **How are areas similar and different?**

In summary, the Five Fundamental Themes of Geography outline a far broader definition of geography than typically used. The relationship between geography and the study of history, government, economics, anthropology, sociology, and psychology is easily apparent. Furthermore, geography is a "bridge" between the social studies and other fields of study, including literature, science, art and music. Geographic education should be the responsibility of all teachers.

CONNECTIONS ACROSS THE CURRICULUM

GEOGRAPHY LESSON	GEOGRAPHY	LANGUAGE ARTS	MATH	SCIENCE
Hurricane Warning!	I A 1		IV A 6	
Movement	I A 1	II A 2, IV A 6, IV A 7		
Aunt Lizzie's Trunk	I A 1	V A 4		II A 5
I'm Thinking of a Place	I A 1	I C 8, III A 7 V A 6	III A 6	
The Web of Life	I A 1			IV A 1, IV A 2
Operation Bobsled Rescue	I B 1,2,3,4	II B 5, V A 3	II A 5	
Alien Alert!	I C 1, I C 4 I C 5, I C 7 I C 8	II A 1, II A 2, II A 3 III A 1, III A 2, IV A 7		
James the Jewel Thief	I C 2, I C 6	II B 5		
What Happened Here?	I C 3			I A 6, I A 7 VI A 3
Climographs	I C 9		III A 3, V A 1 V A 2, V A 6 V A 7	
GlobeBook, Inc.	II A 1, II A 2 II A 3, II A 5	I A 1, II A 1, II A 2 II B 9, V A 1		
If Then...What Now	II A 4, II A 6	I A 2, I C 15, V A 5		I A 7, II A 5, V A 2
The Great Debate...	III A 1,2,3,4	IV A 3, IV A 7		I A 6, II A 5, II A 6, IV A 1, V A 1, V A 2, V A 3
What if the Nile Changed Its Course?	IV A 2, IV A 4 V A 4	II B 5, IV A 3I		V A 1, V A 3
Where Have All the Forests Gone?	IV A 3 V A 2		V A 2	IV A 4

The Story of Coca Cola	V A 1 V A 5	I A 1, II B 5 IV A 6, IV A 7	
Culture Clash	V A 3 V A 6	I B 8, III A 8 IV A 1, IV A 6	I A 1
The Legend of Tenochtitlan	V A 7	I A 2, I A 4, I A 12	
Meeting of the United Nations	VI A 1, VI A 2 VI A 3	II A 5, III A 2	IV A 1 IV A 4
Population Puzzle	VI A 1, VI A 3 VI A 4	II B 5, IV A 6	II A 5, II A 6 V A 1

I. Geographic Understanding

GRADE SIX GEOGRAPHY LESSON PLAN

TITLE: HURRICANE WARNING!

COMPONENT: I. Geographic Understanding

OBJECTIVE: IA1 Cite examples of each of the Five Fundamental Themes of Geography: absolute and relative location.

GEOGRAPHIC THEME: This lesson introduces the geographic theme of location while also developing the themes of region and movement.

INTERDISCIPLINARY CONNECTIONS:

●Mathematics: IVA6 Students will locate coordinate points on a plane.

SUGGESTED TIME: One 30-60 minute class session

DESCRIPTION OF ACTIVITY:

1. Introduce the geographic theme of ABSOLUTE LOCATION - an exact place on a map or globe which can be pinpointed using latitude and longitude; and RELATIVE LOCATION - how one place connects/relates to other places.
2. Using a map, practice finding the absolute location of various places and then discussing the relative location of each place. Continue until you feel that students are able to work independently.
3. Distribute the worksheet: HURRICANE WARNING! and go over the directions with the students.
4. Students may complete the worksheets independently or in small groups.

ASSESSMENT STRATEGY:

Assign an individual or group grade to the HURRICANE WARNING worksheet depending on the selected method of completion. This activity could also be used as a competition.

MATERIALS/AIDS NEEDED:

- HURRICANE WARNING! worksheet (included)
- map with detailed area of the Caribbean (from text, student atlas or hurricane maps which are available at no cost from many local merchants).

HURRICANE WARNING!

Good Morning! It seems that we have a bit of a sticky situation this morning and you have been asked to help. We have just received word that a hurricane has formed and is heading towards land. Hurricane Wally is currently located at 10 degrees north latitude and 55 degrees west longitude. We need to warn the people in the Caribbean islands who could be in Wally's path. Unfortunately, all communication systems are down.

Freddy the Fearless Flier has volunteered to fly from Miami and warn the islands in the northern Caribbean. Freddy is having a problem with navigation and needs your assistance. Please give Freddy the absolute location of the following places (using latitude and longitude) so he can leave as soon as possible.

Nassau, Bahamas	Lat. _____	Long. _____
Havana, Cuba	Lat. _____	Long. _____
Kingston, Jamaica	Lat. _____	Long. _____
Port Au Prince, Haiti	Lat. _____	Long. _____
Santo Domingo, Dominican Republic	Lat. _____	Long. _____
San Juan, Puerto Rico	Lat. _____	Long. _____

In order to return home to Miami safely, Freddy has only enough time to fly to the six locations listed above. Luckily for us, Freddy has a brother who is also a pilot and lives in Caracas, Venezuela. His younger brother is somewhat short and is fondly known as Pete the Pint Size Pilot. Pete has been recruited to warn the islands close to Caracas of the impending storm. Pete is a good navigator and does not need the absolute location of each island. You need to assist Pint Sized Pete by telling him which islands he should warn. You should probably concentrate in the Lesser Antilles (Leeward and Windward Islands). Pete the Pint Size pilot will be able to warn eight islands. Choose and list which eight islands you think he should warn. In making your decision, take the following into consideration:

- Proximity to Caracas
- Possibility of being in the storm's path (it is moving northwest)
- Location of the island in relation to other islands (relative location)
- Can the people on the island warn other islands from their position?

Fearless Freddy and Pint Size Pete want to thank you in advance for your assistance.

Places for Pint Size Pete to warn:

- | | |
|----------|----------|
| 1. _____ | 5. _____ |
| 2. _____ | 6. _____ |
| 3. _____ | 7. _____ |
| 4. _____ | 8. _____ |

EXTENSION ACTIVITY:

Encourage students to read **Historical Catastrophes: Hurricanes & Tornadoes** by Billye Walker Brown and Walter R. Brown and/or **Hurricanes: Monster Storms from the Sea** by Ruth Brindze.

GRADE SIX GEOGRAPHY LESSON PLAN

TITLE: MOVEMENT

COMPONENT: I. Geographic Understanding

OBJECTIVE: IA1 Cite examples of each of the Five Fundamental Themes of Geography: movement.

GEOGRAPHIC THEME: This lesson introduces the geographic theme of movement.

INTERDISCIPLINARY CONNECTIONS:

●Language Arts: IIA2 Students will utilize aspects of the writing process to produce a biographical study.

IVA6 Students will give an oral presentation. (see extension activity)

IVA7 Students will develop criteria for the evaluation of oral presentations.

SUGGESTED TIME: Two or three 60 minute sessions.

DESCRIPTION OF ACTIVITY:

1. Introduce the geographic theme of MOVEMENT: the flow of people, goods and ideas.
2. Discuss the various ways in which products are imported from other countries and transported within the U.S.
3. Distribute the Movement/Product Place List. Choose one of the products from the list. As a whole group activity, locate the source of the product on a map and identify a possible route to Florida. Name specific points on the route such as: by ship through the Suez Canal, by railroad through the _____ Mountains, etc.
4. Discuss the route as well as alternate routes with the class. Students may then complete the activity independently or in small groups.

ASSESSMENT STRATEGY:

Maps may be graded for accuracy of location. Students may also be paired to

compare routes used.

MATERIALS/AIDS NEEDED:

- world map
- United States map
- Product Place List (included)

EXTENSION ACTIVITY: LANGUAGE ARTS/READING

Have students choose one of the products from the worksheet and write its biography. Example: "I am a vanilla bean from Madagascar." They may make a booklet with illustrations or write fictional accounts of their adventures as they travel about the world. You may choose to have students make oral presentations or design a display area of their work for the classroom.

Encourage students to explore related folk tales from various regions.

PRODUCT/PLACE LIST

Below are some of the resources/products that are imported into South Florida from other countries or other parts of the United States. Locate each place on a map and trace a probable route the product might take to reach Dade County. Name specific modes of transportation and places, such as by ship through the Panama Canal or by rail through the states of _____. Using a road map of the United States, identify which major roads could be used. **Your teacher will do number 1 with you.**

1. VANILLA - MADAGASCAR _____

2. RICE - INDONESIA _____

3. APPLES - WASHINGTON STATE _____

4. PINEAPPLES - HAWAII _____

5. BANANAS - ECUADOR _____

6. COFFEE - BRAZIL _____

7. DIAMONDS - SOUTH AFRICA _____

8. JUTE - INDIA _____

9. CORK - PORTUGAL _____

10. CARS-JAPAN _____

11. OLIVE OIL - SPAIN _____

12. OIL - ALASKA _____

13. WOOL - AUSTRALIA _____

14. TIN - BOLIVIA _____

15. COBALT - ZAIRE _____

GRADE SIX GEOGRAPHY LESSON PLAN

TITLE: AUNT LIZZIE'S TRUNK

COMPONENT: I. Geographic Understanding

OBJECTIVE: IA1 Cite examples of each of the Five Fundamental Themes of Geography: region

GEOGRAPHIC THEME: This lesson introduces the geographic theme of region.

INTERDISCIPLINARY CONNECTIONS:

- Science: IIA5 Analyze and discuss the requirements of living things with regards to environment.
- Language Arts: VA4 Students will develop and construct a framework for organizing information.

SUGGESTED TIME: 2-3 class sessions

DESCRIPTION OF ACTIVITY:

Session 1

1. Introduce the geographic theme of REGION - geographic areas that have similar physical or human characteristics (cultural, economic, social or political).
2. Have a bag prepared containing: suntan lotion, bathing suit and a Spanish/English dictionary.
3. Tell students that you have just won an airline ticket for a wonderful vacation. Pull down the world map and ask them to guess where you are going. After a few guesses, give them a clue. Take out the suntan lotion and tell them you have packed this for the trip. Look at the map and see what places, if any, can be eliminated.
4. Bring out the bathing suit and repeat the process. (Eliminate desert regions)
5. Show students the Spanish/English dictionary and explain that you will also need this for the trip. Discuss which regions you could be travelling to and allow students to select a vacation spot for you.

6. Explain to students that they will be working on an activity in which they will help Aunt Lizzie prepare for a trip. Have students randomly select a state in the United States and a month of the year. Distribute the "Aunt Lizzie's Trunk" worksheet. Have students fill in their states and months and complete the first section of the worksheet. Students may then pair up, share lists and try to guess where Aunt Lizzie is going.

Session 2

1. Have students review the "Aunt Lizzie" worksheet. Assign geographic regions to locations in your classroom; i.e., the northeast corner might be the "New England States." Ask students to look at their worksheet and decide to which region their state belongs.
2. Students will meet in groups according to their geographic region. Student atlases or appropriate texts will be helpful for group work. Have students complete section 2 of their worksheets together.
3. Have each group share its information with the class.

Session 3 (optional)

1. Instruct groups to organize and develop a travel brochure to promote its particular geographic region: include maps, descriptions, illustrations, promotional materials, etc.
2. Each group may wish to prepare a commercial or travel poster advertising its region.

ASSESSMENT STRATEGY:

Worksheets may be evaluated by the teacher or by peer sharing. An informal assessment will be ongoing throughout group work. Travel brochures may be assessed by the teacher or students.

MATERIALS NEEDED:

- bag containing: suntan lotion, bathing suit, Spanish/English Dictionary
- Aunt Lizzie's Trunk worksheet - included
- student atlases (if available), texts or other reference material

LITERATURE CONNECTION:

Gulliver's Travels by Jonathan Swift

Aunt Lizzie's Trunk

Part 1

You and your family are going to take a trip to _____ during the month of _____. Your Aunt Lizzie is going with you. After learning all you can about the physical features and weather you can expect during your vacation, you pack your trunk carefully. Your Aunt Lizzie asks you to check the contents of her trunk. You find the following items:

heavy wool pullover sweater	lightweight jacket	_____
turtleneck jersey	raincoat	_____
bathing suit	gloves	_____
suntan lotion	rubber boots`	_____
canteen	ear muffs	_____
fur lined boots	fur coat	_____
umbrella	wool hat	_____
mountain climbing equipment	snake bite kit	_____
sandals	jeans	_____
down jacket	short sleeve shirt	_____
sunglasses	snow skis	_____
sun hat	snorkel	_____
long underwear	sneakers	_____

You tell your Aunt that many of the articles she has packed for the trip will be unnecessary and should be taken from the trunk. Draw a line through the articles on the list that are unnecessary. If you can think of anything she should have packed, add to the list.

PART 2

Name _____ State _____ Region _____

Names of members of my group:

States they represent:

Physical features our states have in common:

Human features our states share (cultural, economic, social or political):

What souvenirs might we take home that are representative of this region?

For what reason would someone want to visit this region?

GRADE SIX GEOGRAPHY LESSON PLAN

TITLE: I'M THINKING OF A PLACE...

COMPONENT: I. Geographic Understanding

OBJECTIVE: IA1 Cite examples of each of the Five Fundamental Themes of Geography: place

GEOGRAPHIC THEME: This lesson introduces the geographic them of place while also developing the theme of region.

INTERDISCIPLINARY CONNECTIONS:

●Language Arts: IC8 Students will...apply reading/critical thinking skills with emphasis on...classifying/categorizing, clarifying information, using evidence from a selection to support opinion.

IIIA7 Recognizes a variety of cultural vocabularies and dialects.

VA6 Combines information from different sources.

●Mathematics: IIIA6 Evaluate arguments based on data analysis.

SUGGESTED TIME: Two 45 minute class sessions

DESCRIPTION OF ACTIVITY:

1. Introduce the geographic them of PLACE - the characteristics, both physical and cultural, that distinguish this area from every other place on earth.
2. Have students name characteristics of a particular place. List them on the chalkboard under the headings PHYSICAL CHARACTERISTICS and CULTURAL CHARACTERISTICS. Some examples of physical characteristics that students might list: climate, soil, landforms, vegetation; cultural characteristics: government, ideas, values, clothing, and language.
3. Explain to students that they are going to play a game called "I am Thinking of a Place...." For this game they will need a sheet of paper. Clues will be given regarding the physical and cultural characteristics of the place. Next to each clue number, students will list what they think the place is. Their answers may change as additional clues are given.
4. Clue #1 This place is in the northern hemisphere. (pause)
Clue #2 This place is south of the Rio Grande River. (pause)

- Clue #3 Many people here have dark-colored hair. (pause)
- Clue #4 There are mountains in this place. (pause)
- Clue #5 The official language of this place is Spanish. (pause)
- Clue #6 There are beaches in this place. (pause)
- Clue #7 Sugar cane is an important crop. (pause)
- Clue #8 This place is an island. (pause)
- Clue #9 Many people from this place have escaped to Miami for freedom.

Stop here and give the name of the place "Cuba." Determine which clue brought most students to this conclusion. Analyze clues and determine which clues might also apply to other places. Ask students to determine which clues were relevant to physical and which ones to human characteristics.

5. Continue the game as time permits. You might also want to use cities such as Paris, with the final clue relating to architecture; i.e., The Eiffel Tower is here.

DAY TWO

1. Review the geographic theme of PLACE. Discuss yesterday's game, "I am Thinking of a Place..."
2. Tell students that today they are going to choose their own place and design clues to "stump" their classmates. They may have no more than 10 clues. All information in their clues must be true. They may use textbooks or reference materials to research their clues.
3. Allow time for research and "clue writing." "I am Thinking of a Place..." may then be played in a large group setting or in small groups.

ASSESSMENT STRATEGY: Assessment may be done as a large or small group activity. The activity may be pursued competitively with group or individual points or rewards given according to the teacher's individual classroom system.

MATERIALS/AIDS NEEDED:

Paper, textbooks, atlases or any available reference material.

EXTENSION ACTIVITY:

Have students create board games for "I am Thinking of a Place...." This may be done as a cooperative learning activity with one person (or group) designing the board, another developing clues, and another designing the rules and strategies.

GRADE SIX GEOGRAPHY LESSON PLAN

TITLE: THE WEB OF LIFE

COMPONENT: I. Geographic Understanding

OBJECTIVE: IA1 Cite examples of each of the Five Fundamental Themes of Geography: human-environment interaction.

GEOGRAPHIC THEME: This lesson introduces the geographic theme of human interaction.

INTERDISCIPLINARY CONNECTIONS:

- Science IVA1 Describe the interdependence between living and nonliving things in an environment.
- IVA2 Explain the relationships, through specific examples, that exists among producers, consumers, and decomposers in an eco-system.

SUGGESTED TIME: One 30-60 minute class session

DESCRIPTION OF ACTIVITY:

1. Introduce the geographic theme of HUMAN-ENVIRONMENT INTERACTION, the way people have affected their environment and the way the environment has affected people.
2. Explain that students will be taking part in a simulation activity to demonstrate this principle. You will need a large ball of string and 10 student volunteers to sit in various locations around the classroom. Assign each student a number from 1 to 10.
3. Begin telling the following story:
There was once a beautiful lake. (Give student #1 the end of the string- he is the lake)
The lake contained small plants and algae produced through photosynthesis (Stretch the string from student #1 to student #2 who is the algae/small plants. Instruct both students not to let the string sag, keep a moderate tension)

The lake was surrounded by lovely trees. (Stretch the string from student #2 to student #3- the trees)

Tiny creatures were in the lake. They fed on the small plants and algae as well

that the string will not sag)

Larger fish and shrimp fed on the tiny creatures. (Stretch the string to student #5 who will represent the larger fish and shrimp)

A meandering river flows from the lake. Fish and shrimp often swim in the river. (stretch the string to student #6 who will be the river)

Wading birds such as heron come to the edge of the lake and river to hunt for fish and frogs. (Stretch the string to student #7 - the Heron)

A family lives in a home on the lake shore. They get fresh water from the lake. (stretch the string to student #8 who represents the family)

A prosperous fishing business is located on the river. (stretch the string to student #9 who represents the fishing business)

If students are scattered throughout the room, the string should now look like a gigantic web. Point out to the students that this represents the "Web of Life". Discuss how the points in the web are interdependent.

Now ask student #10 to step forward. This student represents a developer building a factory along the river. First he cuts down the trees. Have the "tree" student let go of the string. Discuss what happens to the "Web."

Next he pollutes the river and lake with chemicals from his factory. These kill the small plants and algae. (#2 drop string) The tiny creatures that live on small plants, algae and tree nutrients cannot survive (#4 drop string).

The fish and shrimp that eat the tiny creatures cannot survive. (#5 drop string) With no fish and shrimp to catch, the wading birds leave (#7 drop string) and the fishing company closes (#9 drop string).

Stop at this point and have students discuss human-environment interaction.

ASSESSMENT STRATEGY:

Have students write an evaluation of the activity. You might want to have them exchange and critique one another's evaluations.

MATERIALS/AIDS NEEDED:

Large ball of string.

EXTENSION ACTIVITIES:

Have students select an environmental article from the newspaper or magazine. Have students identify the human-environment interaction (if any) that caused the problem. Ask students to select articles from different areas of the world. Compare those problems to the environmental issues in Florida.

Note: Information and reference material is available from:
The Florida Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, Florida 32399-2400 904/488-9334

Activities and lesson/booklets are available from
Southwest Florida Water Management District 1-800-423-1476 and
The Tampa Tribune 813/272-7329 (Water Wise Week Teachers' Guide)

GRADE SIX GEOGRAPHY LESSON PLAN

TITLE: **OPERATION: BOBSLED RESCUE!!**

COMPONENT: I. Geographic Understanding

OBJECTIVES: IB1 Define key geographic terms and concepts; e.g. boundary, compass rose, hemisphere, latitude, longitude, map, map projection, scale, symbols.

IB2 Apply basic map and globe skills including cardinal and intermediate directions, determining distance using scale, interpreting map projections, interpreting legends and symbols, calculating time zones, and determining absolute locations using latitude and longitude.

IB3 Locate reference points on maps and globes; e.g. equator, Prime Meridian, Tropic of Cancer, Tropic of Capricorn, Arctic Circle, Antarctic Circle, International Date Line.

IB4 Determine the absolute location of each region studied and describe its relative location to other world regions.

GEOGRAPHIC THEMES: This lesson in physical and cultural geography develops all of the Five Fundamental Themes of Geography: place, location, region, movement and human-environment interaction.

INTERDISCIPLINARY CONNECTIONS:

● Mathematics: IIA5 Read the scale on a measurement device to the nearest mark

● Lang. Arts IIB5 Writes in a variety of modes...letters, journals, narrative,poetry.

VA3 Interprets and/or uses graphics such as charts, tables, diagrams, graphs, maps, labels and signs.

SUGGESTED TIME: Three 45 minute sessions

DESCRIPTION OF ACTIVITY:

Session One

1. Explain to the students that the United States Olympic Bobsled team has been kidnapped and is being held in a secret location. The kidnapers know that,

finally, the United States has a great bobsled team, and a chance at an Olympic GOLD! The plan is to hold them until the Olympics are over and their chances are gone. With the Olympics only two weeks away, the team must be found quickly.

2. As experts in geography, your students have been asked to help the C.I.A. in the search. The first session will deal with "Operation Bobsled Info" worksheet. The students will supply basic geographic knowledge and training for the CIA rescue team.
3. Distribute worksheet to the class. Allow students to use texts or reference materials to complete the worksheet. At the end of the session, go over the sheets together.

Session Two

1. Review concepts from session one.
2. In today's session, students will be asked to continue their efforts in "Operation Bobsled Rescue" by preparing a map and geography briefing for the C.I.A. rescue team.
3. Distribute "Official Secret Memo #2" and a blank outline map of the world to all students. Go over directions orally. Allow sufficient time for students to complete the assignment.
4. At the end of the lesson go over as a class or in small groups. Have students correct any errors on their maps.

Session 3

1. Review concepts from previous two days. Have textbooks with maps or student atlases available for reference.
2. Distribute "Official Secret Memo #3" and go over orally with the class. Students will use their reference materials to answer the first three questions.
3. When students get to question #3 they are instructed to show you their answer. If they have written "South America" give them the map of South America provided with this lesson. If their answer is incorrect have them recheck.
4. The final location students should have listed in Mount Aconcagua is the Andes Mountains.

ASSESSMENT STRATEGY

Student worksheets may be evaluated by the teacher for accuracy. Students may present their poems orally for group evaluation.

MATERIALS/AIDS NEEDED

Three "Operation Bobsled" worksheets and map of South America are included. Student Atlases or textbook with maps.

EXTENSION ACTIVITIES:

Students may work individually or in small groups to rewrite their poems into a rap to smuggle their coded messages to the C.I.A.

This also can be a music lesson, as students write their messages into songs, jingles, or T.V. commercials.

OPERATION BOBSLED RESCUE INFO SHEET

CLASSIFIED.... INFORMATION..... TOP SECRET !!!

Dear Geography Expert:

I am a special agent for the Central Intelligence Agency. I cannot give you my name for security reasons, but my code name is "Meatball." We are facing very difficult circumstances and are in need of your help. The U.S. Olympic Bobsled Team has been kidnapped and is being held in a secret place. We need to locate and rescue them quickly as the Olympics are only two weeks away.

You have been highly recommended as an expert in geography. I hope you will agree to accept this mission. We need to begin training our rescue team ASAP! Unfortunately, the best people for the job have no background in the geography skills they will need to find our team (code name: BIG BOB). Please help by writing explanations for the terms listed below and get them to me with haste. Your new code name will be Geo-X (geography expert). Please hurry!

Sincerely,
Meatball

boundary_____

Compass rose_____

hemisphere_____

latitude_____

legend_____

longitude_____

map_____

mapprojection_____

scale_____

symbols_____

OFFICIAL SECRET MEMO #2 OPERATION BOBSLED

CLASSIFIED INFORMATION

TOP SECRET!

TO: GeoX

Dear GeoX,

We have received yesterday's data and have used your information to brief "Rescue 1 Team." The rescue mission is proceeding according to plan. BIG BOB has still not been located and we are receiving increasing pressure to complete this mission. Time left is only thirteen days!

The rescue team training will continue as soon as we receive additional training materials from you. Requested information for today is as follows:

1. On a world map, locate and label the following:
 - equator
 - prime meridian
 - Tropic of Cancer
 - Tropic of Capricorn
 - Arctic Circle
 - Antarctic Circle
 - International Date Line
2. Place a compass rose in the lower right hand corner of the map showing cardinal and intermediate directions.

I hope a receive this information from you as quickly as possible. Remember time is crucial! Thank you for all of your help.

Geographically yours,

Meatball

OFFICIAL SECRET MEMO #3 OPERATION BOBSLED

TOP SECRETCLASSIFIED INFORMATION FOR GEO X ONLY

=====

To: Geo X

FROM: Meatball

Dear Geo X:

Operation Bobsled Rescue still continues according to plan although my superiors are getting anxious with only 10 days left. BIG BOB has still not been sighted but smuggled messages reveal that they are in an area where they have been able to train.

Satellite photos and secret contacts have presented some leads. Your geographic research is again needed to help us narrow down the possibilities. Please do the following research and send it to us as soon as possible.

Globally,

Meatball

1. Clues tell us that BIG BOB is in the Southern Hemisphere. Please list all continents (partially or completely) in the Southern Hemisphere.

2. We have reason to believe that BB is also in Western Hemisphere. Please list continents that are in the southern and Western Hemisphere.

3. The Equator and the Tropic of Capricorn both run through this continent. List the continent here_____. Show your teacher what you have written. If it is correct, you will receive a map of the continent.

4. The team is rumored to be training. They must be in what kind of region _____ What mountain range runs through this continent? _____

5. On your map, locate latitude 20 S and longitude 70 W. Look at the scale.

Using the scale, locate the point approximately 300 miles directly northeast of 20/70. According to our sources, this is where BIG BOB is being held. Please write the location _____.

6. The rescue team is supposed to make contact with BIG BOB at 8 p.m. at the location you listed. To coordinate our time correctly, we need to know what time it will be in Washington, D.C. at that precise moment_____.
7. The rescue will take place in four days, on December 3. Will the weather most likely be cool or warm on that date? _____
8. So we can send the proper personnel, can you find out what language is spoken in this region? _____
9. Also, we need to know what major city is nearby so we can coordinate our mission from a major airport. _____
10. Please list any other information you think might be helpful to us

Sorry, GeoX, but one last, and I might add VERY IMPORTANT request... Do not send this sheet back. Put the answers to questions 5 through 10 in the form of a poem. Answering on this sheet would be too obvious. We feel that our opposition would not be very likely to be interested in reading a poem. Hope to hear from your soon!!!

Desperately,

Meatball



GRADE SIX GEOGRAPHY LESSON PLAN

TITLE: ALIEN ALERT!

COMPONENT: I. Geographic Understanding

OBJECTIVES:

- IC1 Define key terms and concepts related to physical geography; i.e., archipelago, atoll, basin, bay, canal, canyon, cape, core (earth), delta, desert, erosion, fjord, gulf, hills, islands, isthmus, lake, mantle, mountain, ocean, peninsula, plains, plateau, river, sea, strait, valley, volcano.
- IC4 Identify the major types of landforms and bodies of water found on earth.
- IC5 Differentiate between continents, regions and countries.
- IC7 Cite examples of regions which are defined by characteristics other than absolute location (culture, language, religion). (see extension activity)
- IC8 Draw free-hand maps that include major physical features and political divisions. (see extension activity)

GEOGRAPHIC THEME: This lesson also reinforces all Five Fundamental Themes of Geography: Location, Place, Human/Environment Interaction, Movement and Region.

INTERDISCIPLINARY CONNECTIONS:

- Language Arts: IIA1,2,3 Students will engage in self initiated and teacher directed writing for a purpose, use aspects of the writing process, draft and revise writing.
- IIIA1,2. Grade-appropriate student vocabulary will be expanded.
- IVA7 Develops criteria and evaluates oral presentations by self and peers.

SUGGESTED TIME: Five 45 minute sessions

DESCRIPTION OF ACTIVITY:

Session 1

1. Inform your students that an Alien Ship has recently landed nearby. The alien aboard the ship has a translation device that allows him to communicate. Allow students to choose a name for the alien for future communications.
2. The alien says that he is overwhelmed by this "Planet Earth". His input transmitter has given him a planet earth guide. He is very frightened by these continents, regions and countries and fears that his life is in danger.
3. Distribute the alien's "Planet Earth Guide" and instruct students to complete the guide to help the alien overcome his apprehensions. Collect the handout at the end of the session.

Session 2

1. Inform your students that the alien was most happy to receive their information. He was almost ready to come out of his ship when his input transmitter told him about landforms and bodies of water. He heard about all the aspects of the physical geography of Earth. They will have to help him out, but the job is going to be much more difficult than originally planned. He is convinced that if the fjord does not get him, the lake will!
2. Divide the class into groups of five and distribute the Cooperative Learning Worksheet. Begin by having students place the name they have selected for the alien on their worksheets. Direct students to work cooperatively and solve problems concerning the project, as well as group dynamics, as they arise. Each group will prepare a presentation to the alien in hopes of convincing him to come out of his ship. Have textbooks, magazines and reference materials available (or allow students to check out materials from the media center.)
3. Work in cooperative groups.

Session 3

1. Work in cooperative groups on the presentation to the alien.

Session 4

1. Work in cooperative groups. At the beginning of the session, remind

students that they must have their presentations ready by the end of the session. Instruct each group to construct a criteria chart to help the alien evaluate the presentations. He had promised a ride on his ship and a small bag of VERY VALUABLE gems to the group that helps him get the courage to step off his ship.

Session 5

1. Oral presentations.
2. Evaluation- ALIEN VOTE. Using the criteria charts developed by groups, students will evaluate presentations and select the best plan for the alien.

ASSESSMENT STRATEGY:

The Session 1 activity may be evaluated by the teacher. The cooperative learning activity has a built in peer evaluation with student developed criteria. You may also wish to have students evaluate the group process within their own cooperative learning group.

MATERIALS/AIDS NEEDED:

- Planet Earth Guide (included)
- Alien Alert worksheets (cooperative learning - included)
- magazines, texts, reference materials

EXTENSION ACTIVITY:

Have students construct an "Alien Tour Guide Booklet" for Planet Earth. They should concentrate on world regions and emphasize culture, religion, language, and other human characteristics. Instruct students to draw a selected regional map that includes physical features and political divisions.

ALIEN ALERT!

Cooperative Learning Worksheet



The alien was very happy to receive your planet earth guides yesterday. He feels much better about continents, regions, and countries. He was almost ready to come out of his ship when his input transmitter told him about landforms and bodies of water. The physical geography of earth has him terrified. You will again have to help the alien. He is convinced that if the fjord doesn't get him, the lake will!

The first part of your job is to create a picture dictionary of the physical geography of the earth. Define the terms on the list, then either draw or paste in a picture of that physical feature. Be creative and make your presentations as attractive as possible. Name or identify specific examples of each feature.

When you have completed your picture dictionary, prepare a presentation for the alien which will help orient him to earth and calm his fears. You may use audio or visual aids in your presentation. Be creative!

archipelago	peninsula
atoll	plains
basin	plateau
bay	river
canal	sea
canyon	strait
cape	valley
core (earth)	volcano
delta	
desert	
erosion	
fjord	
gulf	
hill	
island	
isthmus	
lake	
mantle	
mountain	
ocean	



PLANET EARTH GUIDE

An alien has landed his spaceship nearby. He is terribly frightened by the AWESOME PLANET.....EARTH and is afraid to get off his space craft. Please help our alien, _____ overcome his fear of Planet Earth.

1. In the space below, write a brief letter to the alien telling him about our planet. Be sure to tell him about countries, regions and continents (He has NO CLUE! and fears they are things that will attack him) .
2. On the back of this sheet, draw and label the seven continents for the alien.

GRADE SIX GEOGRAPHY LESSON PLAN

TITLE: JAMES THE JEWEL THIEF

COMPONENT: I. Geographic Understanding

OBJECTIVES: IC2 Read and interpret various special purpose maps; i.e., highway, climate, political, physical, population.

IC6 Identify the major physical features, states and capitals of the United States.

GEOGRAPHIC THEME: This lesson reinforces all Five Fundamental Themes of Geography.

INTERDISCIPLINARY CONNECTIONS:

●Language Arts IIB5 Writes in a variety of modes: letters

SUGGESTED TIME: Three 30-45 minute sessions

DESCRIPTION OF ACTIVITY:

Session 1

1. Tell students that they have been employed as private investigators by Jeanette from Jonkoping (Sweden). It seems that Jeanette's jewels have been stolen by James from Johannesburg (South Africa). Have students locate Jonkoping and Johannesburg on a map.
2. Investigators in Johannesburg have found the hideout of the thieves. James escaped but a major clue to the whereabouts of Jeanette's Jewels was found. A piece of paper in the trash said "Off to the CAPITALS..." Along with this was blank map of the United States. The investigators in charge are not familiar with the United States. Therefore, the map is useless to them.
3. The first assignment on this case is to label the political divisions (states) and their capitals on the map. Distribute blank outline maps and allow students time to complete the assignment. Collect or have the maps placed in geography portfolios.

Session 2

1. Inform students that their maps were most helpful. The Johannesburg

investigators entered the data into their computers and figured out the next clue. To process the clue, they will need information about the physical features of the United States and have once again requested your help.

2. Discuss physical maps and their uses. Distribute outline maps of the United States. Ask students to prepare a physical map including: mountain ranges, major rivers, plains, etc. Allow students time to work individually, in pairs, or in small groups.
3. Collect maps or have students place them in their geography portfolio.

Session 3

1. Distribute "James the Jewel Thief Worksheet." Divide students into small groups, or allow them to work individually. Instruct students to use the political and physical maps they have made to complete the worksheet. Review directions on the worksheet.
2. Allow time to complete the activity. Collect.

ASSESSMENT STRATEGY:

Political and physical maps may be graded for accuracy. Letters may be processed by peer editing or formal teacher evaluation.

MATERIALS/AIDS NEEDED:

- "James the Jewel Thief" worksheet (included)
- outline maps of the United States (see Coca Cola lesson)
- atlases or other geographic reference sources



JAMES THE JEWEL THIEF!

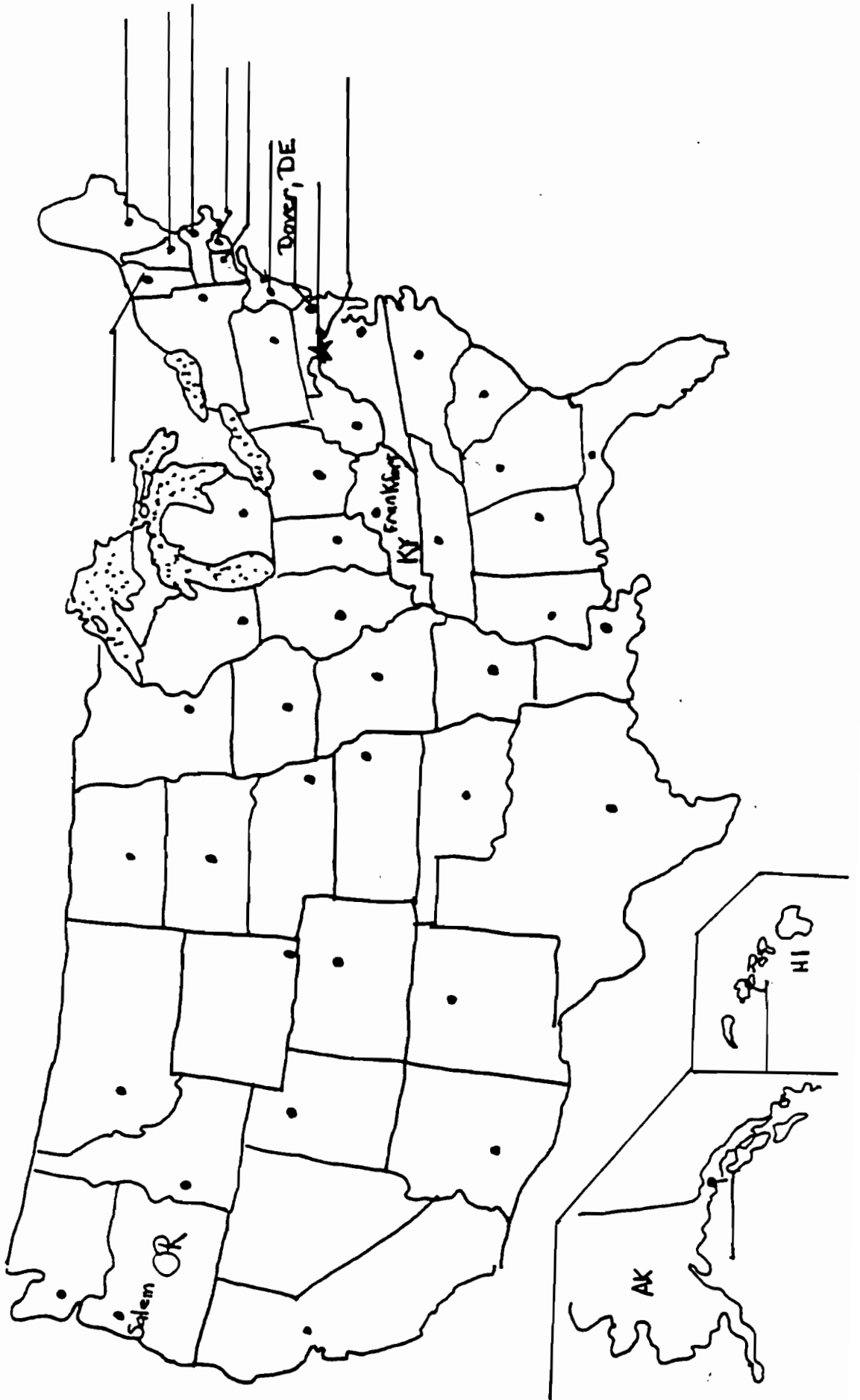
You have been hired as a special investigator by the famous firm of "Geofind Worldwide" (GWW, Inc.) of Johannesburg, South Africa. You are following James of Johannesburg, the infamous jewel thief. James has stolen the jewels of Jeanette from Jonkoping. Please use the capitals and physical features maps you have prepared to help GWW, Inc. find Jeanette's jewels.

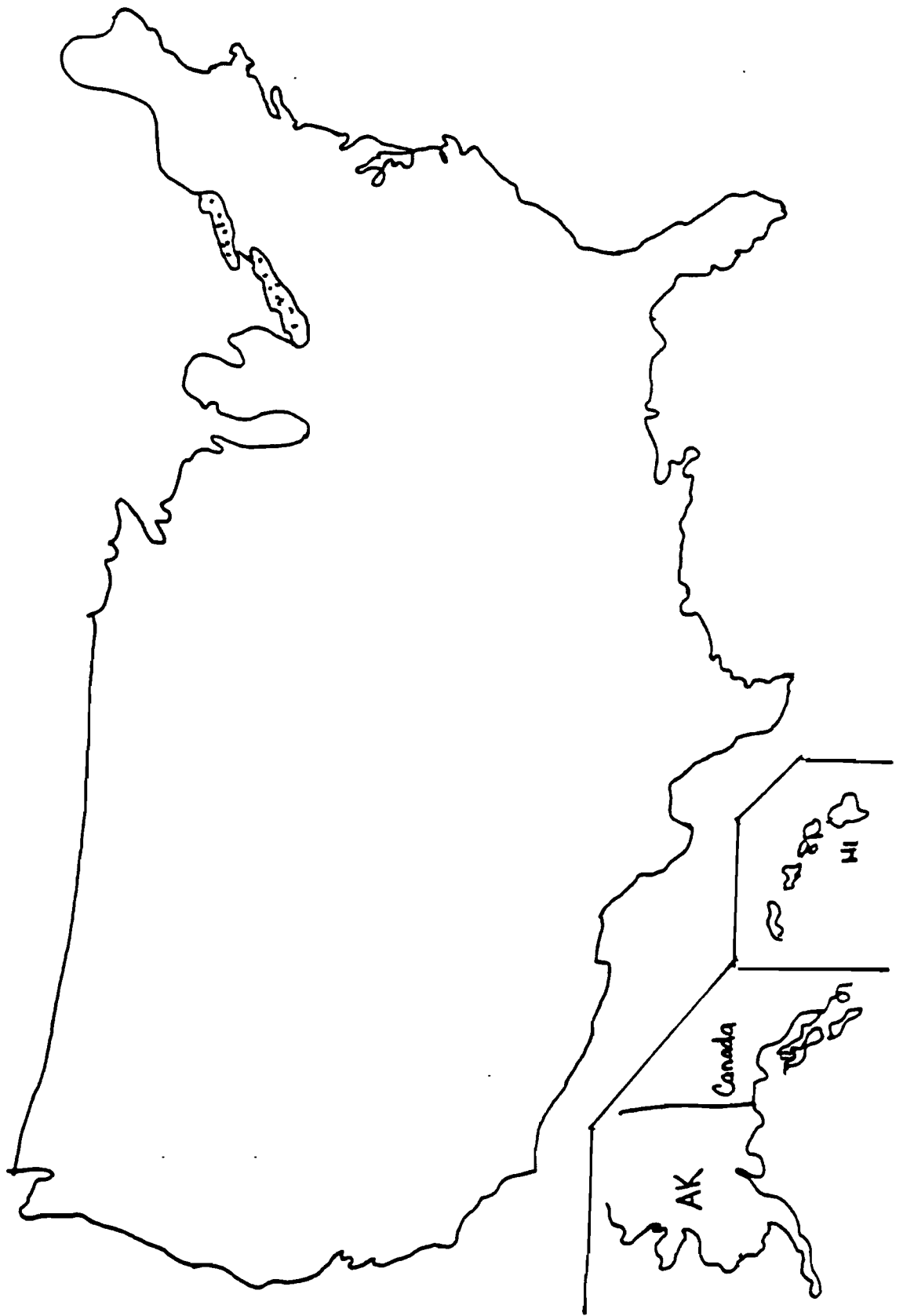
GWW, Inc. has a list of clues to help Jeanette find her jewels. Unfortunately only Jeanette will be able to pick up the clues. After you complete your investigation, please write a letter to Jeanette. In your letter give Jeanette specific directions to locate each clue (example: from Richmond, Virginia, cross the Appalachian Mountains to Frankfort, Kentucky).

To find clue:

- #1 Start at _____ (the capital of Maine), travel south to _____ (the capital of North Carolina where you will receive a clue at the airport.
- #2 From _____, North Carolina travel west across the _____ Mountains until you reach _____ (capital of Tennessee). Go to the Grand Ole Opry to receive clue #2
- #3 Travel north to _____, (the capital of Michigan). Heading west, cross Lake _____ to Madison, the capital of _____. At the city hall you will find clue #3.
- #4 Head west to Pierre, _____, then southwest to _____, the capital of Wyoming. Go down to the Red River for Clue #4.
- #5 Travel south through the _____ Mountains to Denver, the capital of Colorado. At the ticket office of Mile High Stadium, you will find clue #5.
- #6 Move in a northwesterly direction to _____, the capital of Oregon, on the Willamette River. Go to the Mission Mill Museum. Here clue #6 will lead to the jewels which are hidden in one of the restored homes of the museum.

When you have identified all of the places above, quickly write a letter to Jeanette giving her the information about how to find the clues. James the Jewel thief has a foreign buyer for Jeanette's stolen jewels. He will leave the United States to meet with the potential buyer as soon as he gets a new passport. You must help Jeanette recover her jewels before James leaves the country.





GRADE SIX GEOGRAPHY LESSON PLAN

TITLE: WHAT HAPPENED HERE?

COMPONENT: I. Geographic Understanding

OBJECTIVE: IC3 Describe the structure of the earth and the forces of nature that affect it; e.g., weathering, water, glaciers, wind and plate tectonics.

GEOGRAPHIC THEME: This lesson develops the geographic themes of place and region.

INTERDISCIPLINARY CONNECTIONS:

- Science: IA6 Solve a problem through interpretation and analysis of data and select appropriate alternatives based upon information gathered in a problem solving situation.
- IA7 Identify the cause and effect relationships within a problem and distinguish between scientific fact and opinion related to a problem.
- VIA3 Describe plate tectonics with respect to Earth's crustal movements and the effects on living things.

SUGGESTED TIME: One 45-60 minute session

DESCRIPTION OF ACTIVITY:

1. Distribute the handout "The Structure of The Earth" and introduce the following terms:

CRUST: outside layer of the earth - between 10 and 30 miles thick; forms the ground and ocean floor.

MANTLE: the second layer of the earth - from 1,800 to 2,000 miles thick; its temperature ranges from about 1,600 degrees F at the outer edge to about 4,000 degrees F near the core.

CORE: the third layer of the earth; it is made up of two layers- outer and inner core; the outer core is a thick liquid believed to be about 4,000 degrees F. The inner core, at the center of the earth, is solid and is thought to have temperatures as high as 9,000 degrees F. (If you wish to use a more concrete demonstration, slice a peach in half and demonstrate. The skin represents the crust, the fruit is the mantle, the seed is the core which may be broken open to show inner and outer

core.)

2. Introduce the following terms/concepts:

WEATHERING - breaking up rocks by forces such as changing temperature, water, plants, ice or chemicals.

WATER EROSION - can carve rivers, form deltas, canyons and create geysers from underground moving water.

GLACIERS - large slow moving body of ice and snow that can shape and level large parts of the earth's surface.

WIND - erosion involving movement of dust and sand; can form dunes and wear away rock surfaces.

PLATE TECTONICS - the earth's crust is made of plates. As they move, they slide past one another causing earthquakes, mountains and volcanoes to occur.

3. Prepare pictures to represent the above; e.g., photo of California after the earthquake, the Grand Canyon, volcanoes. Divide the class into groups of four or five and distribute a picture to each group. Have students complete the "What Happened Here?" activity. Remind them to state the problem, record their observations and base their hypothesis on the information they have gathered.
4. When all groups have completed the activity, let them share their pictures and hypothesis with the class. Discuss and entertain alternate hypotheses.

ASSESSMENT STRATEGY:

Groups may assess the hypotheses of other groups. The teacher may choose to collect and grade activity sheets.

MATERIALS NEEDED:

- Structure of the Earth handout (included)
- WHAT HAPPENED HERE? activity sheet (included)
- pictures of various geographic features as described above

WHAT HAPPENED HERE?

Look at the picture your teacher has given you. Investigate and try to determine what caused the particular physical phenomena in the picture. Use the information below about the forces of nature to complete the activity.

Weathering - breaking up rocks by forces such as changing temperature, water, plants, ice or chemicals.

Water Erosion - can carve rivers, form deltas, canyons and create geysers from underground moving water.

Glaciers - a large, slow-moving body of ice and snow that can shape and level large parts of the Earth's surface.

Wind - erosion involving the movement of dust and sand; can form dunes and wear away rock surfaces.

Plate Tectonics - the Earth's crust is made of plates. As they move, they slide past one another causing earthquakes, mountains and volcanoes to occur.

1. State the problem. (Identify the physical feature or occurrence.) _____

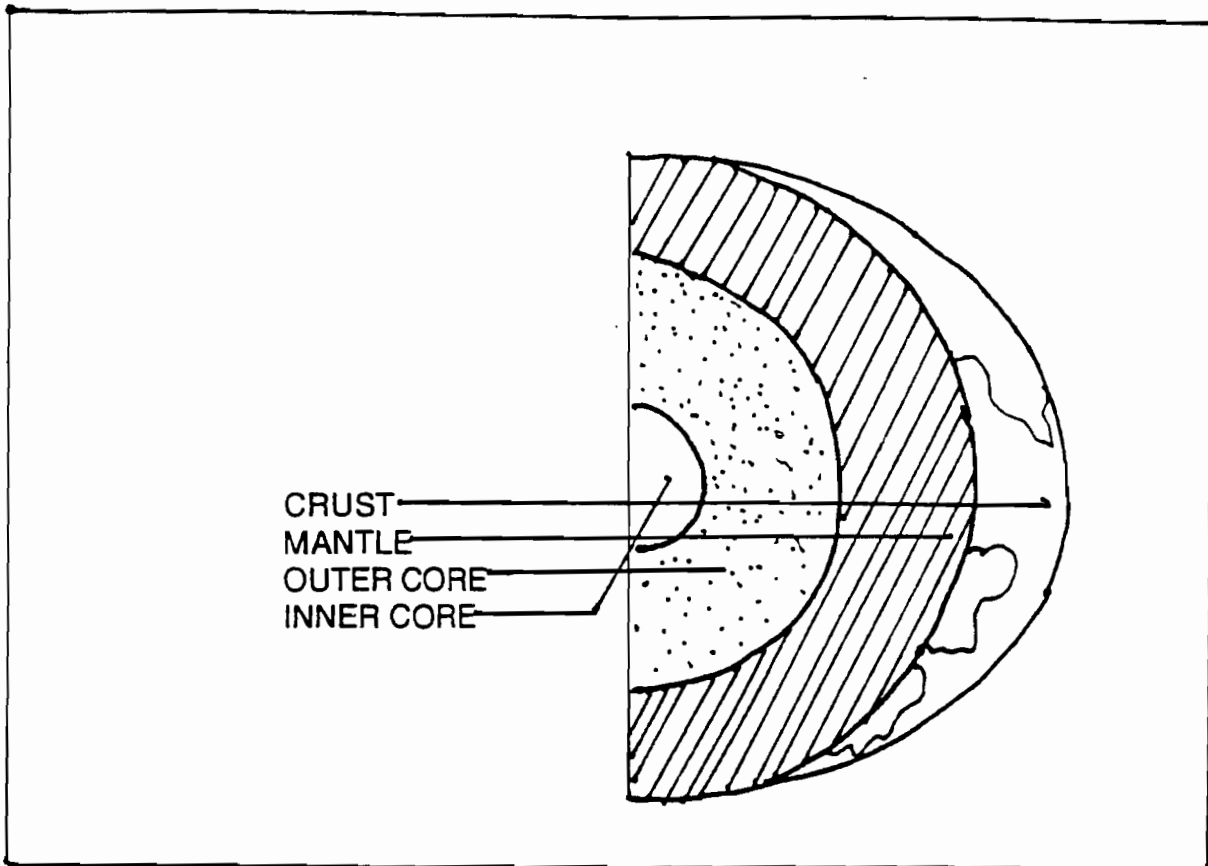
2. Record your observation. (What do you see in the picture?) _____

3. State your hypothesis. (What force (or forces) of nature caused the occurrence?) _____

4. Describe your supporting information. _____

5. State your conclusion. _____

THE STRUCTURE OF THE EARTH



The earth is made up of three layers. The first, or outside layer of the earth is the crust. The crust is the ground we live on as well as the floor of the ocean. The earth's crust is between 10 and 30 miles thick.

The second layer of the earth is the mantle. The mantle is composed of very hot, dense rock. Near the outside edge next to the crust, the temperature of the mantle is about 1600 degrees F. Near the core, the temperature reaches close to 4000 degrees F. The mantle is about 1800 to 2000 miles thick.

The third layer of the earth is the core. The outer core is composed of a thick liquid. Scientists believe that its temperature is about 4000 degrees F. At the center of the earth is the solid, inner core composed of metal. This layer may be as hot as 9000 degrees F.

GRADE SIX GEOGRAPHY LESSON PLAN

TITLE: CLIMOGRAPHS

COMPONENT: I. Geographic Understanding

OBJECTIVE: IC9 Describe regional differences in climate and list the factors influencing climate; e.g., location, elevation, and landforms.

GEOGRAPHIC THEME: This lesson addresses the Geographic Themes of location, place and region.

INTERDISCIPLINARY CONNECTIONS:

- **Mathematics:**
 - IIIA3 Investigate relationships and/or differences among the various types and units of measurement: inches, centimeters, degrees, Celsius, Fahrenheit.
 - VA1 Read and interpret tables, charts, bar graphs, line graphs.
 - VA2 Construct tables, charts, line graphs, pictographs and circle graphs.
 - VA6,7 Make predictions using data from samples; explain the difference between theoretical and real world probability.

SUGGESTED TIME: One 45-60 minute class session

DESCRIPTION OF ACTIVITY:

1. Introduce the term **CLIMATE:** the pattern of weather for a particular place over a period of time. Show a climate map and discuss types of climate:
 - TROPICAL - hot and rainy
 - DRY - desert or semi-desert with almost no rain
 - TEMPERATE - hot, humid summers and mild winters **OR** warm summers and cold, snowy winters
 - POLAR - cold year round
 - HIGHLAND - usually cooler and wetter than the lands around them
2. Discuss what makes up a climate and ask students why a particular place has a warm (or cool climate). Discuss precipitation and temperature. Introduce the term **CLIMOGRAPH:**

a graph that shows the average temperature and the average precipitation for a certain place over a certain period of time.

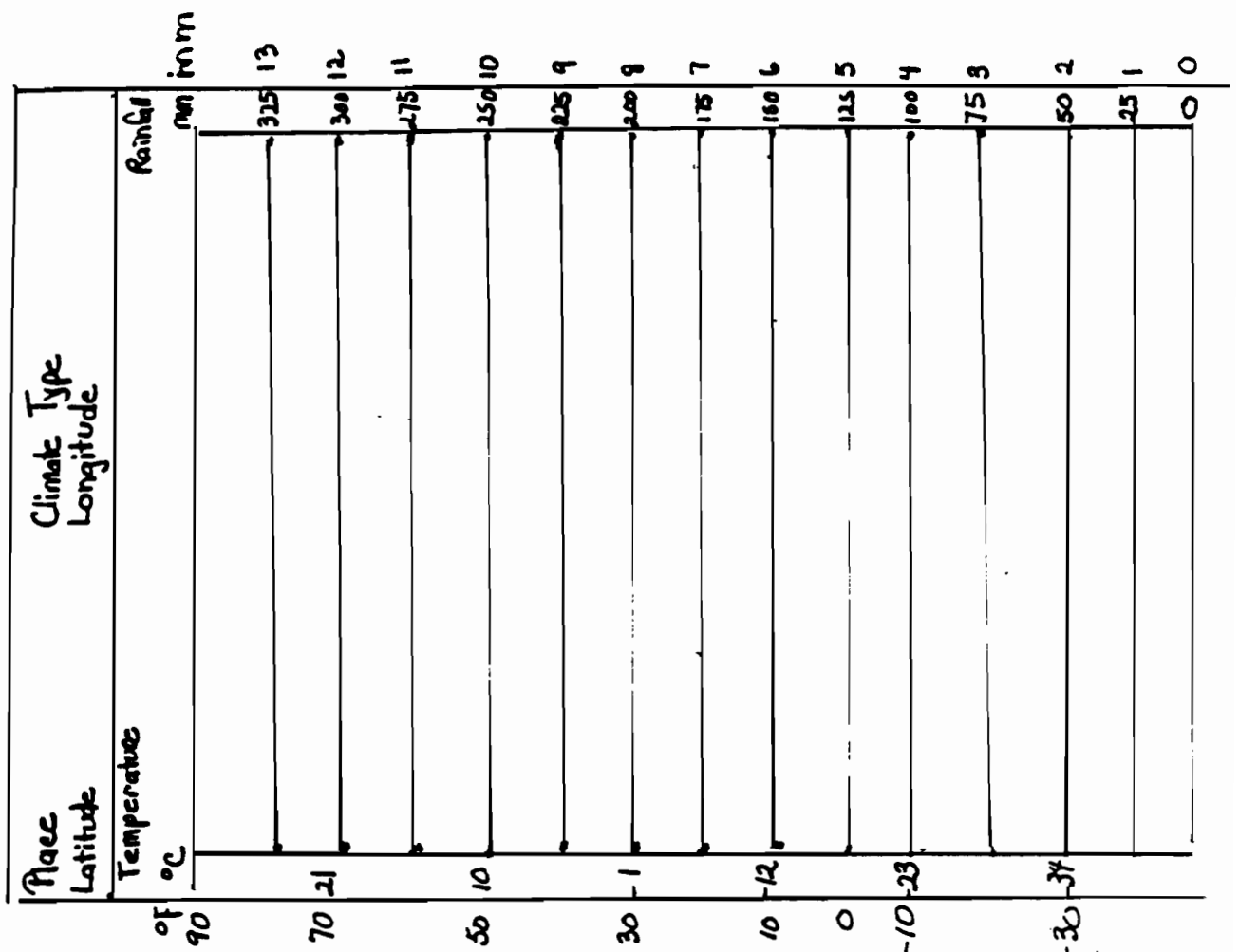
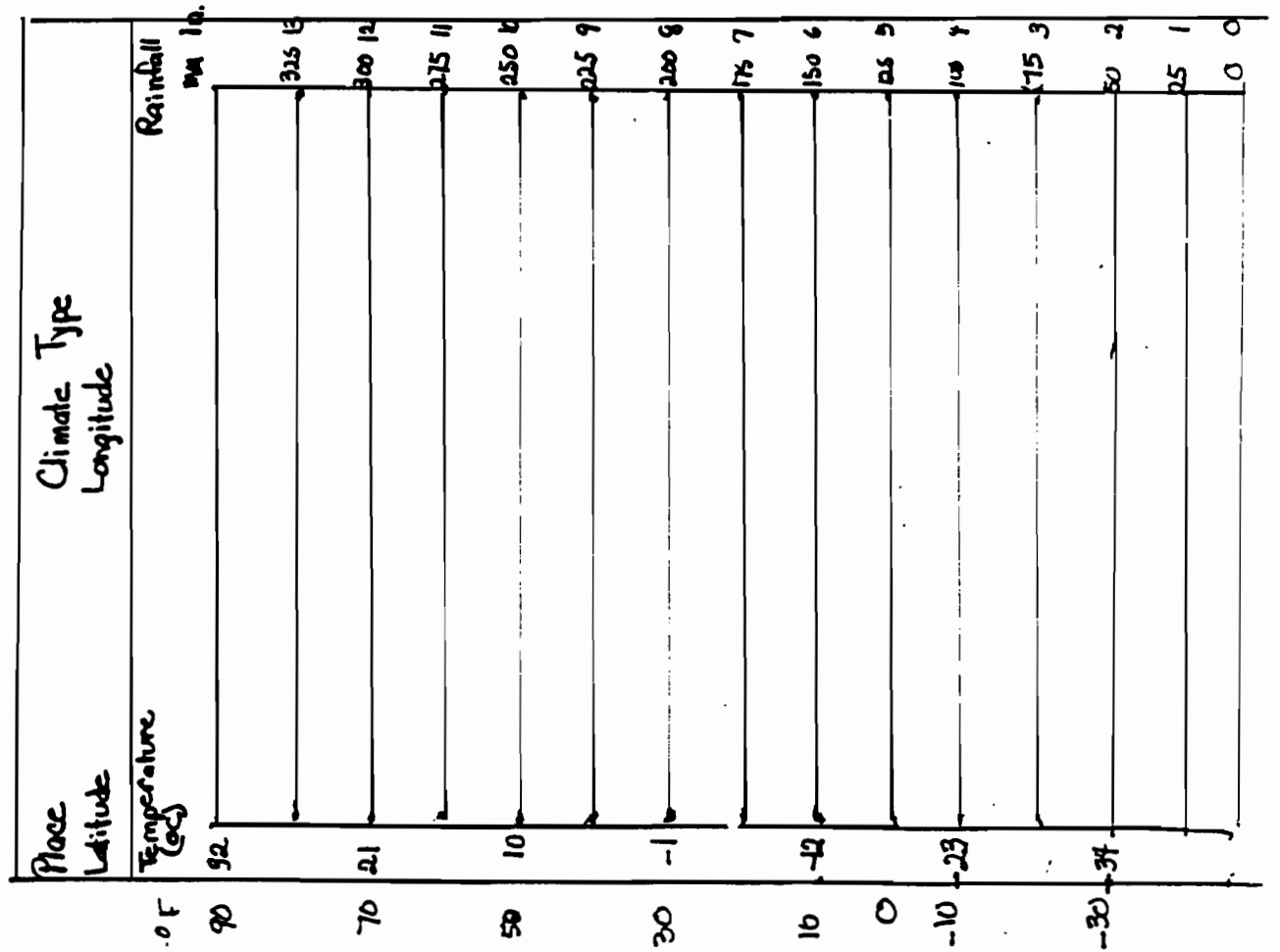
3. Distribute the CLIMOGRAPH worksheet. Look at the two climographs on the front of the worksheet. The climographs cover one year. The months of the year are indicated across the bottom. The scale for temperatures in both Celsius and Fahrenheit is located on the left side. Temperature is recorded as a line graph. The scale for monthly precipitation in inches and millimeters is located on the right side and represented as a bar graph.
4. Ask students if they see any differences in the two climographs, likenesses? How do the temperatures of the two places compare? (one is hot, one cold) How does the precipitation compare? (1 place has some rain, the other none) Using the climate classification system given in #1 above, how would you classify the two climates? (the one on the left is a dry, desert climate, the one on the right is a polar climate.) Tell students that the climographs are for Eismitte, Greenland and Aswan, Egypt. See if students can match the correct city. (Left- Aswan, Right- Eismitte.)
5. Divide class into groups of four or five students. Provide groups with copies of climate data tables from a source such as "Universal Atlas." Instruct students to choose two cities in the world and construct a climograph for each city. After students have completed their climographs they may exchange them within their groups and make observations and inferences from the data presented. They may make predictions and try to guess the city of the climograph or at least the climate classification.

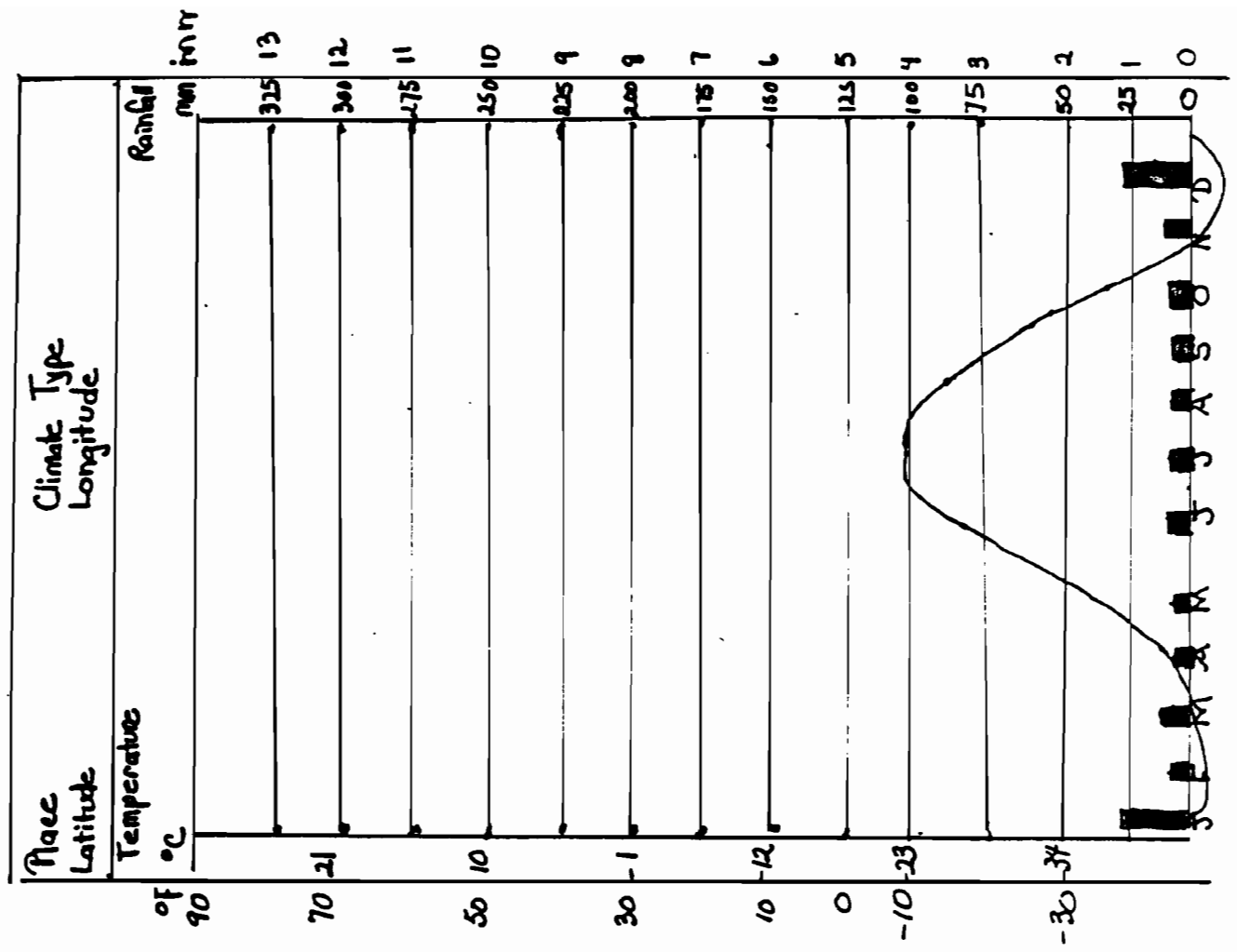
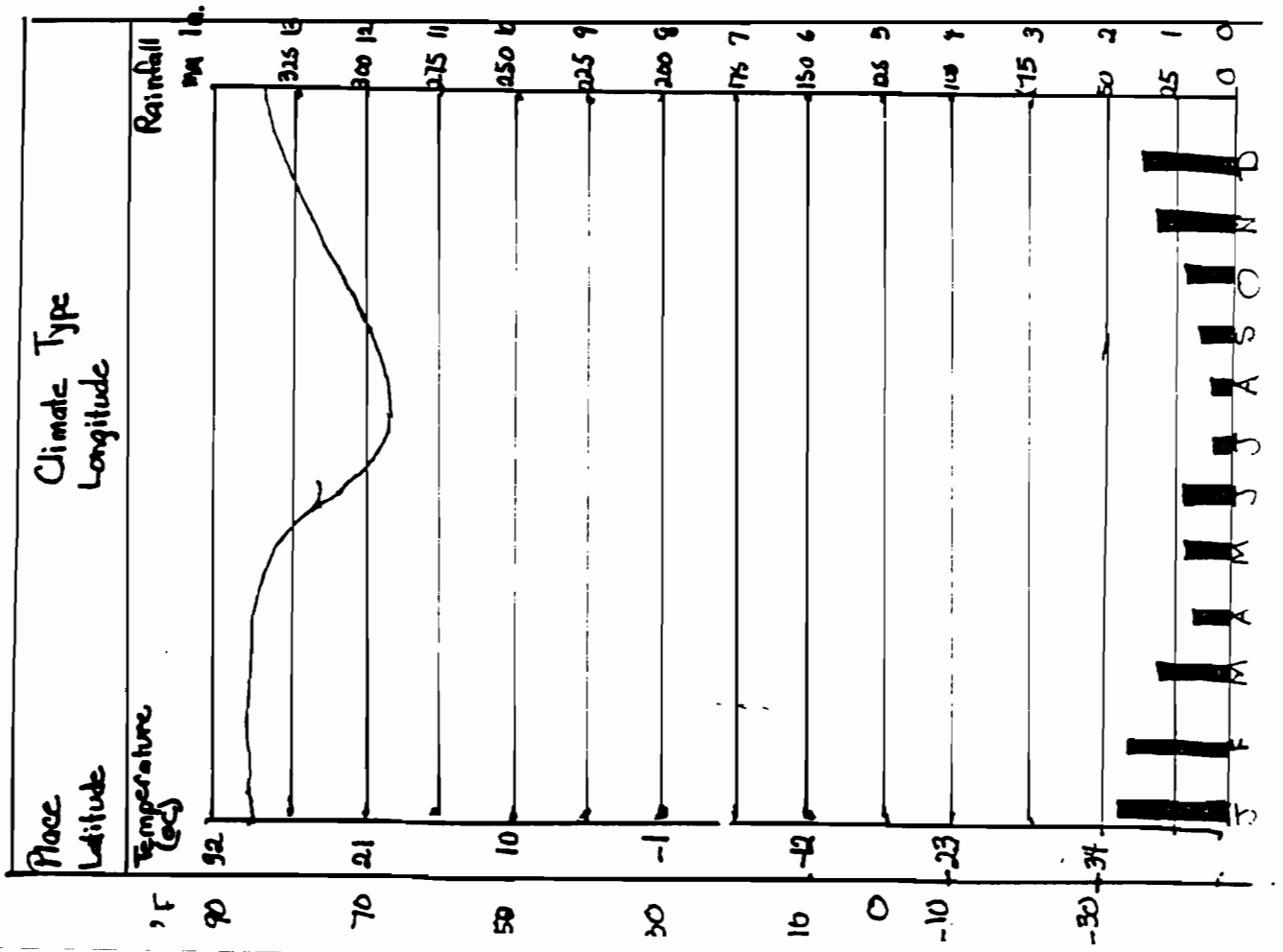
ASSESSMENT STRATEGY:

Climographs may be individually evaluated by the teacher, or groups might construct climograph quizzes to be administered within their groups or to exchange and quiz other groups.

MATERIALS/AIDS NEEDED:

- textbook or atlases
- Climograph worksheet (included)
- copies of climate data tables (from a source such as "Universal Atlas")





II. Historical Awareness

GRADE SIX GEOGRAPHY LESSON PLAN

TITLE: "GLOBEBOOK, INC."

COMPONENT: II. Historical Awareness

OBJECTIVES:

- IIA1 Identify significant early civilizations in a region.
- IIA2 Describe significant contributions made by civilizations in a region; e.g., social, political, economic, arts/humanities, religion, philosophy, technology.
- IIA3 Identify significant individuals in a region.
- IIA5 Arrange significant historical events of a region on a timeline.

GEOGRAPHIC THEME This lesson in historical geography develops all of the Five Fundamental Themes of geography.

INTERDISCIPLINARY CONNECTIONS:

- Language Arts:
 - IA1 Reads, views, listens to, and discusses a variety of multicultural materials to gain new experiences and insights as well as a deeper understanding and appreciation of self and others.
 - IIA1 Engages daily in both self-initiated and teacher directed writing for a variety of purposes to be reflected upon or shared.
 - IIA2 Uses aspects of the writing process- prewriting (collect data, develop a plan of organization)
 - drafting
 - revising
 - editing
 - publishing
 - IIB9 Maintains a portfolio of writing, containing pieces in progress and finished products.
 - VA1 Recognizes the need to use a variety of resources/reference materials appropriately.

SUGGESTED TIME: 2-3 class sessions

DESCRIPTION OF ACTIVITY:

1. After the introduction and discussion of significant early civilizations; i.e., Egypt, Mesopotamia, Rome, Athens, divide the class into cooperative learning groups of five to six students. Assign each group one of the civilizations previously discussed.

2. Distribute cooperative learning worksheets- "GlobeBook, Inc." to groups. Read and discuss the worksheet, brainstorm as to creative applications.
3. Provide access to adequate research and reading materials necessary to complete the activity.
4. Monitor and guide students in their research and cooperative learning activities.
5. Provide time at the end of the activity for oral group presentations.

ASSESSMENT STRATEGY:

Encyclopedia articles may be evaluated by the teacher or by groups. You may want to have students assess the production process within their groups or evaluate other groups' presentations.

MATERIALS/AIDS NEEDED:

- "GlobeBook, Inc." cooperative learning worksheet (included)
- Reference materials for selected regions

EXTENSION ACTIVITY:

Compile all encyclopedia articles developed into a Class Portfolio or Global Encyclopedia. Allow students to "check out" the encyclopedia to take home and share with their parents. Ask your Media-Center Specialist to display your encyclopedia for schoolwide use.

"GlobeBook, Inc."

"The Encyclopedia That Brings You The World"

Dear Geography Student:

The executives of "**GlobeBook, Inc.**" are in the process of creating a new and exciting encyclopedia for middle and senior high school students. We are developing global encyclopedias "for the students" that will be created "by the students." Since we have heard about the excellent geographers in Miami, you have been selected to be our first contributors.

Your assignment is to carefully study and research the history of the region assigned by your teacher. Then, working in cooperative groups, write an encyclopedia article on your region for "**GlobeBook, Inc.**" Please make your article interesting and attractive. Be sure to include early civilizations in your region and contributions made by these civilizations. Identify any important individuals from this region. Make a timeline arranging important historical events of your region. Please illustrate your article and include a map of the region.

To guide you in your writing, divide the following roles among the members of your group:

- Text Authors:** write the text of the article
- Cartographer:** make an attractive map of the region
- Timeline developer:** create an accurate timeline of the important historical events of the region.
- Illustrator:** create illustrations related to the text and/or timeline for your article.

When each member of your group has completed his or her assigned task, work together in compiling your finished product. Prepare a brief presentation to share with your classmates.

Thank you for your cooperation in this matter. The staff of "**Globebook, Inc.**" will be eternally grateful to you for your efforts.

Sincerely,

Rich Moneybags
CEO
"**Globebook, Inc.**"

GRADE SIX GEOGRAPHY LESSON PLAN

- TITLE:** IF THEN.....WHAT NOW
- COMPONENT:** II. Historical Awareness
- OBJECTIVES:** IIA4 Assess how innovations in agriculture, urbanization, and industrialization have affected culture.
IIA6 Relate significant events in a region's past to current events or problems in the region.
- GEOGRAPHIC THEME** This lesson develops the fundamental geographic themes of place, movement, and human-environment interaction.

INTERDISCIPLINARY CONNECTIONS:

- Language Arts:
 - IA2 Reads fluently a variety of materials at grade level, using appropriate settings such as flexible groups, rereading, paired and other cooperative reading activities.
 - IC15 Responds to and interprets materials read in a variety of ways, such as class and small group discussions, writing, graphics, music, drama...
 - VA5 Paraphrases and summarizes content from sources.
- Science:
 - IA7 Identify the cause and effect relationships within a problem and distinguish between scientific fact and opinion related to a problem.
 - IIA5 Analyze and discuss the requirements of living things with respect to physical characteristics and environmental needs.
 - VA2 Explain the impact of extinction of plants and animals on man and man's role in this process.

SUGGESTED TIME: 2 class sessions

DESCRIPTION OF ACTIVITY:

DAY ONE

1. Introduce and discuss the following terms: agriculture, urbanization, industrialization, and culture
2. When you feel confident that students are familiar with the above terms, divide the class into small groups, distribute the accompanying worksheet and instruct students to read the story "If Then...What Now?"

3. Instruct groups to discuss questions 1,2, and 3 on their worksheets. During the discussion session, each group should make a list of decisions made by the village people and an effect caused by each decision. They should then list how each cause and effect situation affected the culture of the people; e.g., Did their housing, clothing, eating habits, or leisure time activities change as the village grew?
4. When groups have completed their lists, each group should choose a spokesperson. The teacher or class leader should pose each question to the class as a whole and record the response from each group on the chalkboard. Open questions, lists and ideas for class discussion. Ask the class for conclusions or possible solutions to the problems.

DAY TWO

1. Ask students to return to their "If Then...What Now?" groups from the previous day.
2. Provide reference material on the history of Miami, or allow students to go to the library for research on this subject.
3. Students should compare the history of the city of Miami to the city in the story. (You may wish to assign a different region or civilization to each group for study rather than having all groups do Miami).
4. Following the same procedure as the previous day, have students address questions 4 and 5. Again, permit a class discussion of small group responses.

ASSESSMENT STRATEGY:

Groups may evaluate their process in developing this lesson and critique the conclusion of other groups. A written evaluation may be used if a more formal evaluation is desired.

MATERIALS/AIDS NEEDED:

- "If Then...What Now?" Worksheet
- Reference materials on the history of Miami (or other selected region)

EXTENSION ACTIVITY:

Choose an event in history such as the Civil War. Have students discover the effects of this event on culture. Did it affect clothing, language, eating habits, social structure, government, etc.? For a more recent event that most students in Miami could relate to, complete this activity using Hurricane Andrew. Students could discuss the effect (if any) this event will have on the history and culture of South

Florida, as well as predictions for its impact on the city in the future. Did Andrew bring about any cultural changes (clothing, language, eating, housing, etc)?

IF THEN.....WHAT NOW?

A long time ago, a group of people lived near a river. There were many fish in the river. There were beautiful trees that provided the people with fruit and shade. Many vegetables and grains were available because the fertile soil was excellent for farming. Meat was always plentiful because animals could be hunted as they came to the river to drink. The little village grew and prospered.

More people wanted to come to live in the village. It began to grow larger and soon became a town. The people of the town decided to cut some of the trees to make room for new houses. Several businesses saw the booming town and decided to move their factories there. The people were very happy. Progress was coming to their town. As more workers arrived, more land had to be cleared for housing. Farmland and fruit orchards were sold to developers to build homes, businesses and shopping areas.

The people were happy because they were making more money. Some farmers who sold their land took other jobs. Other farmers relocated their farms outside the city. The soil was not as rich in this location, so the farmers used fertilizers to help their crops grow. The people no longer hunted animals for meat because the animals did not come through the busy city to drink in the river. Instead, meat was brought in from other areas in refrigerated trucks to be sold in the supermarket. There was little shade in the downtown area of the city because all of the trees had been cut down by developers. In fact, it was hard to see much greenery anywhere in the city.

Pollution was becoming a problem. Run-off from the farmers' fertilizers and chemicals from the factories had polluted the river. People were afraid to eat fish from the polluted river. Fish was brought in from other areas in refrigerated trucks. The many cars and trucks in the area were causing air pollution. The city commission called a meeting to work on the problems of overcrowding, water, and air pollution. Some of the original villagers came to the meeting. They presented the commission with a lovely painting of the their village in its early years, with its peaceful rivers, shade trees and farmland. Everyone wondered....What Happened?

Meet with your group and discuss the following questions:

1. What decisions did the people of the village make that affected their environment?
2. What was the effect of each of these decisions on their village?
3. How was the culture and lifestyle of the village affected by the changes to the environment?
4. How does the history of Miami compare to the city in this story?
5. Give examples of events in Miami's past that have an effect or have caused a

problem for the city today.

III. Civic Responsibility

GRADE SIX GEOGRAPHY LESSON

TITLE: THE GREAT DEBATE...SHOULD DADE COUNTY EXPAND?

COMPONENT: III. Civic Responsibility

- OBJECTIVES:**
- III A1 Examine the major geographic features of Dade County and the state of Florida.
 - III A2 Identify local environmental issues including land and water management, waste management and air pollution.
 - III A3 Obtain appropriate information about local environmental issues from, maps, atlases, pictures, primary sources, graphs, tables, charts, diagrams, reference materials, newspapers, periodicals, and appropriate government agencies.
 - IV A4 Apply the five step decision-making model (define the problem, list alternatives, state criteria, evaluate alternative, make the decision) to local environmental problems.

GEOGRAPHIC THEME: This lesson in Civic Responsibility reinforces all of the Five Fundamental Themes of Geography.

INTERDISCIPLINARY CONNECTIONS:

- Language Arts:
 - IV A3 Formulates questions that clarify meaning and participates in class discussions that include higher level critical thinking such as analysis, synthesis, and evaluation.
 - IV A7 Develops criteria for the evaluation of oral presentations by self and peers including conveying of meaning, engagement of audience, body language (eye contact, gestures, posture), articulation, pronunciation, voice modulation, timing, and standard conventions of English.
- Science:
 - IA6 Solve a problem through interpretation and analysis of data and select appropriate alternatives based upon information gathered in a problem-solving situation.
 - II A5 Analyze and discuss the requirements of living things with respect to physical characteristics and environmental needs.

- IIA6 State and relate the portion of the Universal Organizational Hierarchy that recognizes the interrelationships of living things (species, population, community).
- IVA1 Describe the interdependence between living and nonliving things in an environment (cycles, biotic and abiotic factors, climate, physical habitats, succession).
- IVA4 Identify renewable and nonrenewable resources by researching local, state, national, and international information (employing computer technology whenever possible).
- VA1 Identify how people have used scientific principles in land use (erosion, wildlife habitat loss, deforestation, reclamation, urban development).
- VA2 Explain the impact of extinction of plants and animals on man and man's role in this process (genetic engineering, genetic diversity, hunting, wildlife protection, etc.).
- VA3 Investigate how people have used scientific principles in management of air and water resources (contamination and quality).

SUGGESTED TIME: Two 45-60 minute sessions.

DESCRIPTION OF ACTIVITY:

Day One

1. Introduce and discuss the geographic features of South Florida. Ask students who come from other regions to describe the geographic features of their hometown. Compare and contrast the geography of South Florida to that of other areas.
2. Distribute the **Geography of South Florida** resource sheet. Using the map on the resource sheet, discuss the topography of the region.
3. Next, examine the diagrams of the freshwater wetlands, oolitic limerock ridge, and the shoreline mangrove. Ask students questions about what kinds of animals might live in each area, what the food chain might be, and how each area helps balance the ecosystem of South Florida, etc.
4. Distribute the Population Growth Tables to students. Discuss patterns

of population growth in Florida, Southeast Florida, and the United States. Brainstorm as to how the population growth in South Florida might affect each of the geographic areas discussed from the Geographical Resource Sheet. List ideas (hypotheses) on the chalkboard.

DAY 2

1. Review the lesson from Day 1. Distribute "Habitats" and discuss how urbanization had affected each habitat. Go over hypotheses listed on the board from yesterday, revise, expand.
2. Explain to students that they will be participating in a simulation activity. They will be simulating a debate at a Dade County Commission Meeting. The question for the debate is: Should Dade County permit the expansion of urban development to the west? The class will be divided into three groups. Assign all students to one of the following groups:
 - A. **PRO-Expansion Group** -You are politicians, businessmen, and land developers. The politicians see the expansion as bringing more money, taxes, and voters into the area. They feel that all South Floridians will benefit from expansion. Businessmen see the potential to bring more businesses into the area, make more money, create new jobs and improve the economy. The land developers will probably become very wealthy from all of the construction. They promise to help the community with some of their profits. They will donate land in the development for a new school and library.
 - B. **ANTI-Expansion Group**- You are farmers, fishermen, environmentalists and public employees. The farmers are against expansion because it will destroy their farmland. They will lose their way of life and warn that there will be fewer farm products available and prices will be higher because fruits and vegetables will have to be shipped in from other areas. The fishermen feel that their livelihood will also be destroyed. The new businesses and expansion will cause increased water pollution which in turn will harm the fishing industry. An increase in population will also increase the number of boaters who may damage or destroy coral reefs and seagrass areas. The environmentalists are against the expansion because it will destroy the natural habitat of many endangered species (both plant and animal). They also feel that increased businesses and population will cause increased air and water pollution. Public employees are against expansion because it will create an additional strain on their already overburdened systems. They foresee more crime, health care problems, increased traffic, overcrowding in the schools, and a need to raise

taxes to pay for additional services such as roads, waste disposal, etc.

- C. **County Commissioners-** You are elected members of the county commission. It is your job to listen to the debate, evaluate each group's position and make a decision about westward expansion.
3. Give each group time to meet and plan. Group A and B need to develop an opening statement that clearly states their position on the issue and can be delivered in 3 minutes or less. They also need to develop a set of questions which will probe the opposing groups' viewpoint in an attempt to sway commissioners to their side. Group C must develop criteria to evaluate each group. The evaluation may include, but is not limited to the following:
- presentation: eye contact, body language, voice modulation
 - accuracy of content
 - articulating point of view clearly
 - creativity
- Group C should also develop a set of questions to ask each group to determine their knowledge and dedication to their point of view.
4. After sufficient planning time, begin the debate. It should proceed as follows:
- Opening Statement- no more than 3 minutes for each group
 - Question Period- each group (A& B) is given 4 minutes to question the other group. The county commissioners then have 5 minutes to direct questions to both groups.
 - Discussion session- meet again as a group to go over points, issues, etc. Use this time to prepare a dynamic closing argument. This may take 5-10 minutes.
 - Closing Statement- 2 minutes for each group.
 - Commissioners evaluate , vote , and announce results

All times listed may be varied to suit your individual class needs.

5. If time permits, discuss and evaluate the activity as a group.

ASSESSMENT STRATEGY:

Debate will be assessed by student-developed criteria as outlined in # 3 above. Students may share their evaluations with the group if desired. Teachers may use student evaluations in assessing this activity.

MATERIALS/AIDS NEEDED:

Handout 1- The Geography of South Florida (included)

Handout 2- Florida's Population Growth (included)

Handout 3- Habitats (included)

EXTENSION ACTIVITY:

Read article, "Profiles of Students in Action, Saving What's Left of Florida." (included)

Ask students to react to the article and explore possibilities for their own involvement.

RELATED LITERATURE:

Civics for Democracy by Katherine Isaac

The Dade County Environmental Story Edited by Sande Haynes, Dennis Ross and
Joseph E. Podgor

The Nature of Dade County by Sande Ross

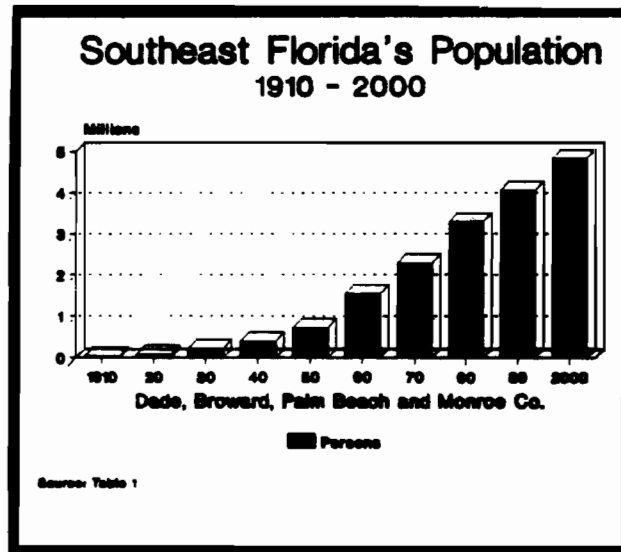
50 Simple Things Kids Can Do To Save the Earth, The Earthworks Group

Average Annual Population Growth By Decade 1950-1990

Region	1950-1960	1960-1970	1970-1980	1980-1990
Southeast Florida	8.0	4.0	3.8	2.5
Florida	6.0	3.2	3.7	3.0
United States	1.7	1.3	1.1	1.0*

* Compound annual growth to 1988

Source: *Florida Statistical* various issues.

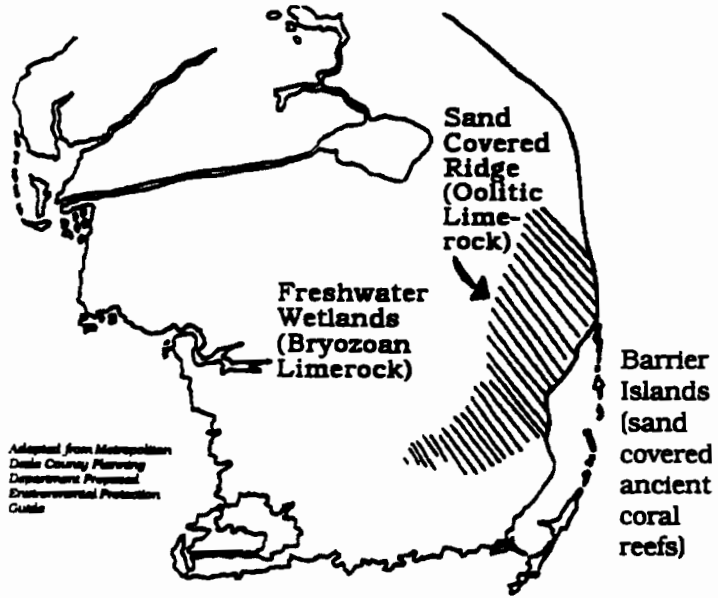


Population of Southeast Florida

Year	Broward	Dade	Monroe	Palm Beach	Southeast Florida	Percent Growth
1910	-	11,933	21,563	5,577	39,073	-
1920	5,135	42,753	19,550	18,654	86,092	120.3
1930	20,094	142,955	13,624	51,781	228,454	165.4
1940	39,794	267,739	14,078	79,989	401,600	75.8
1950	83,933	495,084	29,957	114,688	723,662	80.2
1960	333,946	935,047	47,921	228,106	1,545,020	113.5
1970	620,100	1,267,792	52,586	348,993	2,289,471	48.2
1980	1,018,257	1,625,509	63,188	576,758	3,283,712	43.4
1989	1,242,448	1,873,078	78,966	865,507	4,059,999	23.6
2000	1,474,228	2,083,029	91,400	1,183,962	4,832,619	19.0

Source: U.S. Bureau of the Census, *U.S. Census of Population, Vol. 1, Characteristics of Population, Part 11, Florida* for various years and Bureau of Economic and Business Research, *Florida Estimates of Population, April*

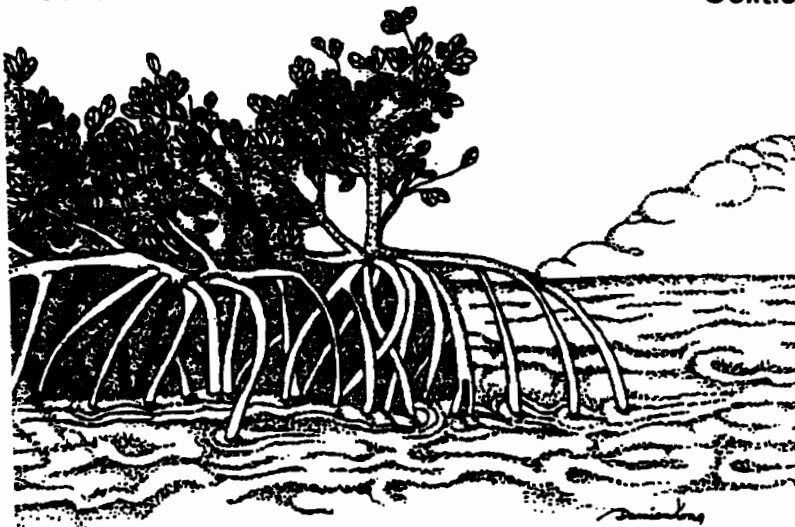
GEOGRAPHY OF SOUTH FLORIDA



Freshwater Wetlands



Oolitic Limerock Ridge



Mangrove Shoreline

PROFILES OF STUDENTS IN ACTION

Kids Against Pollution, a nationwide group started by Closter, New Jersey students, is calling for an amendment to the U.S. Constitution to guarantee the right to clean air, water and land.¹ Student journalists from Hazelwood, Missouri challenged school censorship of their student newspaper in the U.S. Supreme Court.² And students in Roxana, Missouri raised almost \$6,000 to buy 10 acres of endangered rainforest in Costa Rica.³ Students all over the United States are working to improve their schools, community, country and world. The following profiles of students in action serve as inspiring examples that show students can and do make a difference.

SAVING WHAT'S LEFT OF FLORIDA

It all started in 1987, when Charles DeVeney, a teacher at Coral Springs High School in Florida, was biking to work and saw that land near the school was slated to be cleared for development. He spoke to his outdoor education class about the rapid rate of deforestation in southern Florida and of his desire to preserve some of the area's nature for future generations. The students wanted to know what they could do.⁴

So DeVeney and his students formed a club, called Save What's Left, to try to save the 68 acres of dense wetlands, including a large stand of cypress trees, that were to be cut down to build soccer fields. The students began by writing letters to anyone they could think of who might be able to stop the destruction of the trees.⁵

At first, no one in the community listened. So Save What's Left students began to gather signatures on petitions to protest the development. Standing on the sidewalk in front of their school, they held signs asking drivers passing by in their cars to stop to sign the students' petition. The response was so overwhelming that on the second day of petitioning, the highway patrol had to direct traffic. Save What's Left eventually gathered 3,500 signatures from community residents concerned about the rapid rate of development.⁶

Upon further investigation, the students discovered that the developers had skirted regulations concerning development of wetlands. Because more than 10 acres of wetlands were at stake, the developers needed federal permission to build. But instead of going through the federal Environmental Protection Agency (EPA), which would have required public scrutiny of the project, the developers obtained two special permits - each for less than 10 acres - from the Army Corps of Engineers. The Corps, which is authorized to issue permits when less than 10 acres are involved, issued two permits in different names to allow the developers to bypass the EPA. Because the permits had already been issued and because the conflict involved federal agencies, local officials' hands were tied.⁷

But Save What's Left never gave up. The students spoke at city and county council meetings and gathered petitions to convince the City and County Commissions to ask residents to vote to buy the land. After two years, the issue was put on the ballot for the voters to decide. In March of 1989, Broward County voters approved a \$75 million bond issue to buy the 68 acres of Coral Springs trees as well as 13 other sites in the county. The 68 acres turned out to be the largest cypress tree stand left in Broward County.⁸ County Commissioner John Hart said, "It was because of people like these kids in Save What's Left that this got done."⁹

The city of Coral Springs and Save What's Left have since begun a project to completely restore the land over the next few years. Eventually it will be used as an outdoor classroom in which to teach environmental appreciation and to inspire other environmentalists to use their power to "save what's left." The outdoor education class that Save What's Left advisor Charles DeVeney teaches is so popular that some students wait two years to enroll.¹⁰

Save What's Left has grown to 300 members at Coral Springs High School and has expanded to schools in five other states as well as Yugoslavia and Colombia. Soon it will expand to Bolivia and Puerto Rico. And,

in its four years of existence, the club has compiled an impressive list of achievements. Students collected over 25 tons of phone books for recycling. They participate in annual beach cleanups. They protested a proposed garbage incinerator, initiated a school recycling program and launched dozens of other school and community projects.¹¹

Save What's Left students also picketed to protest the building of a strip shopping center. They argue there is no need for another shopping center, especially in an environmentally sensitive area. DeVeney and 10 club members were invited by Governor Lawton Chiles to attend 1991 Earth Day celebrations at the state capital.¹² And the students have been featured in several local and national newspapers and magazines. DeVeney was named Coral Springs High School Teacher of the year for 1987-88 and Citizen of the Year by the *Coral Springs News*.

In October 1990, Save What's Left members posted signs throughout Coral Springs near land being cleared for development. The students attached signs to trees reading "Please Save These Trees" and "Don't Let Them Kill Me." "It was a silent protest," said advisor DeVeney, "because the trees can't speak for themselves."¹³

The "silent protest" caused quite a stir in the community. The students, their advisor and the school board received threatening letters from Coral Ridge Properties, the developer involved, charging that the students had trespassed and insinuating that DeVeney should be fired.¹⁴ Several newspapers supported the students' right to protest and attorneys in the community offered their services, if needed. Parents enthusiastically supported DeVeney and convinced the school board to endorse his activities.¹⁵

Asked why the club members are waging their campaigns, student Jennifer Swanberg answered, "I just got scared. I thought that one day I'd have kids with three heads because of all the pollution. We have to do something about it."¹⁶

The club once again took on developers to protest proposed changes in the city's tree ordinance. The students protested the city's Planning and Zoning

Board proposal to allow developers and homeowners to replace each tree they remove — no matter how old or large — with a smaller, younger tree. Save What's Left students drafted their own ordinance for evaluation by the Planning and Zoning Board.¹⁷

"There will always be another game or another party," said Save What's Left member Alex Pomareda. "But there might not be another chance to save the environment."¹⁸

Save What's Left is setting up a computer network that will allow access to information and suggestions for starting a branch of this environmental group. Contact Charles DeVeney at Save What's Left, c/o Coral Springs High School, 7201 West Sample Road, Coral Springs, FL 33065.

CHANNEL ONE BOYCOTT

Students at North High School in Fargo, North Dakota returned to school in September, 1990 to find a newly-created 20-minute home room class.¹⁹ School administrators created the class, by cutting the students' lunch period, to require students to watch Channel One, a television news program with commercials that is beamed into classrooms across the United States via satellite.²⁰ North High School agreed with Whittle Communications, the producer of Channel One, to require students to view the program every day in exchange for a TV satellite dish, two video cassette recorders and 37 television sets.²¹

Students at North High quickly objected to Channel One. Said student Leslie Doran, "I was looking forward to the program until I actually saw it. But the news lacked any kind of depth."²² Student Jared Eide said of Channel One's news program, "You get more out of reading the newspaper headlines."²³ Other students objected to the cut in lunch time and to the mandatory viewing.

The concerns of students at North High School were not the first. Critics around the country objected to the viewing of commercials (advertisers pay Whittle Communications \$150,000 for each 30-second commercial aired on Channel One) during classroom time. Only two minutes of the program is national news.

IV. Economic Understanding

GRADE SIX GEOGRAPHY LESSON

TITLE: WHAT IF THE NILE CHANGED ITS COURSE?

COMPONENT: IV. Economic Understanding
V. Cultural Awareness

OBJECTIVES: IVA2 Examine the relationship between economic development and a region's geography; e.g., the availability, use and conservation of natural resources; geographic barriers to trade, relative location to strategic waterways/geographical crossroads.

IVA4 Determine how people in a region meet their economic needs and wants; e.g., methods of earning a living, distribution of wealth in the region, trade.

VA4 Describe how environmental factors including climate, topography, and natural resources have influenced the growth and development of culture.

GEOGRAPHIC THEME: All five geographic themes are developed in this lesson.

INTERDISCIPLINARY CONNECTIONS:

- Science: IVA1 Describe the interdependence between living and nonliving things in an environment.
- VA3 Investigate how people have used scientific principles in management of air and water resources.
- Language Arts: IIB5 Writes in a variety of modes: expository, persuasive, narrative/ expressive. (see extension activity)
- IVA3 Formulates questions that clarify meaning and participates in class discussions that include higher level thinking such as analysis, synthesis and evaluation.

SUGGESTED TIME: Two or three 45 minute sessions

DESCRIPTION OF ACTIVITY:

Session 1

1. Review with students all of the things the Nile provides - food, drink, transportation, animals, clothing, electricity, cultural, and political links, etc. List items on the chalkboard as students name them. If students are unfamiliar with this area, read an appropriate section in the text or view an introductory film such as: "The Nile, Profile of a River" available through DCPS film library #16925 (others also available-see DCPS Film and Video Catalog)
2. Ask students to imagine what would happen if the Nile suddenly stopped flowing through Egypt. Have them list all of the consequences. (Work individually or in groups.)
3. Remind students to list the geographical, cultural and economic consequences to the present site of the Nile River Valley if the river disappeared.
4. Share ideas and discuss. Have students explain why (or why not) they think "Gift of the Nile" is an appropriate name for Egypt.

Session 2

1. Review session #1.
2. Review the physical characteristics of the Sahara desert.
3. Ask the class to imagine all of the things that would happen if the Nile began to flow across the Sahara.
4. Individually, or in small groups, have students list the impact the river would have on the desert; e.g., grass begins to grow, insects come to live in the grass, new farm land. Continue until the point is reached where people move to the area and a civilization begins to develop.
5. As students construct their new Saharan scenario, remind them to structure a physical, social and political environment as well. See if they can identify and find ways to avoid problems presently occurring in the Nile Valley.

ASSESSMENT STRATEGY:

Teacher observation and questioning during the process is an effective method of assessing progress. Portfolio evaluations provide a more formal assessment. The

extension activities may also be evaluated or graded.

MATERIALS/AIDS NEEDED:

- textbook or a brief reading resource on the Nile and/or Egypt

EXTENSION ACTIVITIES:

- Create a travel brochure advertising the new Sahara.
- Music: Compose a song or national anthem for your civilization.
- Science: Research geology (concentrate on formations created by flowing rivers).
- Create a time line for your civilization. Calculate the amount of time needed for each stage of development.

** Note This activity can be adapted to any region under study; e.g., Europe - change the course of the Danube; South America - change the course of the Amazon.

GRADE SIX GEOGRAPHY LESSON PLAN

TITLE: WHERE HAVE ALL THE FORESTS GONE?

COMPONENT: V. Cultural Awareness
IV. Economic Understanding

OBJECTIVES: IVA3 Define and give examples of renewable and non-renewable natural resources.

VA2 Discuss how people have impacted the environment and the environment has impacted people in different regions of the world.

GEOGRAPHIC THEME: This lesson in cultural and economic geography develops the fundamental geographic themes of human-environment interaction, place, and region.

INTERDISCIPLINARY CONNECTIONS:

●Mathematics: VA2 Construct tables, charts, line graphs and pictographs.

●Science: IVA4 Identify renewable and non-renewable resources by researching local, state, national and international information.

SUGGESTED TIME: One 45-60 minute session

DESCRIPTION OF ACTIVITY:

1. Introduce the term **NATURAL RESOURCE** (a material that humans take from the natural environment to survive and to satisfy their needs). Ask students to name as many natural resources as they can think of. List responses on the board.
2. Discuss the terms: **RENEWABLE RESOURCE** (a resource that can be replaced by nature or people after it has been used; e.g., trees) and **NONRENEWABLE RESOURCES** (resources that cannot be replaced after they are used; e.g., fossil fuels.) Classify the natural resources listed on the board into renewable and nonrenewable.
3. Ask students if they think it is possible to use up a renewable resource and, if so, how. Today's lesson will deal with forests. Have students name things forests provide: air to breathe, shelter, habitat for animals, shade, wood for homes and other wood products, paper and paper

products, energy for cooking and heating, etc. Are trees classified as renewable or nonrenewable? Discuss. What if people cut down too many trees before new ones had time to grow?

4. Distribute "Where have All the Forests Gone?" worksheet. Explain that many people in less developed countries (LDC's) use wood as their main source of energy. In LDC's, over two-thirds of the population use wood for cooking and heating. In some remote or rural areas, especially in Africa, as much as 90% of the energy comes from wood. Look at and discuss Table 1: "Energy Use Provided by Wood."
5. Locate the countries from the worksheet on a map.
6. Look at and discuss the information presented in Table 2: "Years To Reduce Forest Cover by Half".
7. Instruct students to create a bar graph using the information given on the hand-out. For example, list the country of India. The first bar will represent the percentage of energy from wood (33%), the second bar will represent the number of years it will take to reduce the forest cover by half (231). Students may choose a different color for the two sets of data. Continue until each country has been put on the graph.
8. Have students analyze the graphs they have created. Is there a relationship between amount of energy derived from wood and the rate of deforestation? What variables are involved? (population, population growth, amount of forest cover to begin with, etc.)
9. Discuss other causes of deforestation: clearing of land for farming, urban development, wood and paper product production.
10. Give students the following information: Every minute, about 100 acres (enough to fill 50 football fields) of rainforests are being destroyed. If you took all the paper an average American uses in one year and stacked it up, the stack would reach the top of a two-story house. Discuss and explore solutions to the problem of deforestation. Have students identify ways they can help solve the problem.

ASSESSMENT STRATEGY:

Student graphs may be evaluated by the teacher.

MATERIALS/AIDS NEEDED:

- WHERE HAVE ALL THE FORESTS GONE? information sheet

EXTENSION ACTIVITY:

Plan a class or group project to help stop deforestation; e.g., saving paper, recycling, planting a tree, adopting a rainforest. Many suggestions are available in the book 50 Simple Things Kids Can Do To Save the Earth by The Earthworks Group.

WHERE HAVE ALL THE FORESTS GONE?

Table 1: Percentage of Energy Use From Wood (1980's)

Brazil	20%
Burkina Faso (Africa)	96%
India	33%
Indonesia	50%
Nepal	94%
Nicaragua	50%
Nigeria	82%

Source: Worldwatch Institute, State of the World, 1988.

Table 2: Years to Reduce Forest Cover By Half

Brazil	139
Burkina Faso	041
India	231
Indonesia	139
Nepal	017
Nicaragua	026
Nigeria	026

Population Data mid-1990	Population (millions) by 2025	% Increase Expected
Brazil	150	63%
Burkina Faso	9	152%
India	853	69%
Indonesia	189	46%
Nepal	19	83%
Nicaragua	4	138%
Nigeria	119	167%

Source: Population Reference Bureau: World Environment Data Sheet, 1991

V. Cultural Awareness

GRADE SIX GEOGRAPHY LESSON PLAN

TITLE: THE STORY OF COCA COLA

COMPONENT: V. Cultural Awareness

OBJECTIVES:

- VA1 Define culture and list the five institutions found in all cultures; i.e., family, religion, education, government and economics.
- VA5 Define cultural diffusion and cite examples of cultural diffusion in a region.
- VIA5 Describe how changes in communication and transportation have influenced the rate by which people, goods, and ideas move from one place to another.

GEOGRAPHIC THEME: This lesson in cultural geography develops the geographic themes of place, location, region and movement.

INTERDISCIPLINARY CONNECTIONS:

●Language Arts:

- IA1 Reads, views and discusses a variety of multicultural materials to gain new experiences and insights as well as a deeper understanding and appreciation of self and others.
- IIB5 Writes in a variety of modes: persuasive, such as commercials, advertisements, letters, essays.
- IVA6 Gives oral presentations, with emphasis on oral tradition - dramatizations.
- IVA7 Develops criteria for the evaluation of oral presentation by self and peers.

SUGGESTED TIME: Three 45-60 minute sessions

DESCRIPTION OF ACTIVITY:

Session 1

1. Introduce the term **CULTURE**: the way of life that distinguishes a people. Brainstorm as to what makes up a culture. List students' responses on the board. Guide students to include items from all five institutions: family, religion, education, government and economics. Next, introduce

the term **CULTURAL DIFFUSION**: the spread of culture from one group of people to another.

2. Discuss the ways that aspects of a culture might spread from one place (or region) to another. Discuss the spread of a particular custom such as hand shaking or celebrating a holiday. Ask questions such as: How did the custom of decorating Christmas trees spread to the United States from Germany? Why do certain aspects of a culture not spread to other regions; e.g., no Fourth of July fireworks in Great Britain, no Cinco de Mayo celebration in France, or Bastille Day in Moscow).
3. Tell students they are going to study cultural diffusion by looking at the spread of a particular product. Ask students if they know what the most widely recognized symbol in the world today is? (the O.K. symbol) Now see if they can guess the second most widely recognized symbol in the world. (The Coca Cola symbol)
4. Distribute outline maps to students and begin reading the Coca Cola Story.

The Coca Cola Story

The year is 1886. We are in Atlanta, Georgia. (Have students locate Atlanta on their maps and mark the location.) A local pharmacist, John S. Pemberton invented a drink syrup. A bookkeeper at Mr. Pemberton's company picked the name Coca Cola for the drink and wrote out the name in his own handwriting. His writing still appears on the Coca Cola label today. Mr. Pemberton sold his syrup to local soda fountains and it became very popular. The popularity of Coca Cola attracted new investors, new plants and new market areas. (Have students look at their maps and predict where the product might travel. Discuss transportation and mass communication systems of the time.)

In 1891, the business was bought by Asa Chandler for a cash amount of \$2,300. From 1891 to 1900, plants were built in Dallas, Texas; Los Angeles, California; and near Philadelphia, Pennsylvania. (Have students locate these cities, mark them on their maps and draw lines connecting Atlanta to each city.) Discuss how the product might have spread out from these new locations.

By the year 1900, Coca Cola was being sold in every U.S. state and territory. (Have students mark, color or shade

each state that existed in 1900 on their maps.) The product spread to Canada (shade Canada on student maps).

5. Ask students to hypothesize as to how Coca Cola spread to other continents and countries. Discuss. Tell students that Coca Cola products are available on every continent except Antarctica. Coke is sold in 195 countries in the world and one can ask for a Coca Cola and be understood in many different languages.
6. Tell students that by the year 1953, Coca Cola had spread throughout the world. See if this information helps them track the diffusion. If not discuss the spread of American culture and products during and after World War II. On the world map, have students locate places where United States soldiers were stationed. (You may continue to have students mark the locations to which Coke spread and connect.) When completed, maps should show the spread of Coca Cola from Atlanta to regions throughout the world.

Session 2

1. Divide the class into groups. Assign each group a particular region of the world. Each group will then select an aspect of United States culture: idea, custom, product, etc. to spread to this part of the world. (Products must be geographically appropriate for the region; e.g., no snow-clearing machines for the tropics.)
2. Groups will decide how the "culture spread" will progress. How will the idea or product arrive. How will it be accepted? Is it necessary? Will the people of the region desire it?
3. Each person in the group will then select a particular city or country within the region and prepare a television commercial to sell their idea or product. Students may need to research their particular "market area" to know how to appeal to regional needs and culture.
4. As a class, develop criteria for oral presentation of the commercials. Criteria should include conveying of meaning, engagement of the audience, body language, articulation, and presentation.

Session 3

1. Present commercials and evaluate.

ASSESSMENT STRATEGY:

The student-developed assessment tool will be used for peer evaluation.

MATERIALS/AIDS NEEDED:

- text or reference materials
- United States and World outline maps (included)

EXTENSION ACTIVITIES:

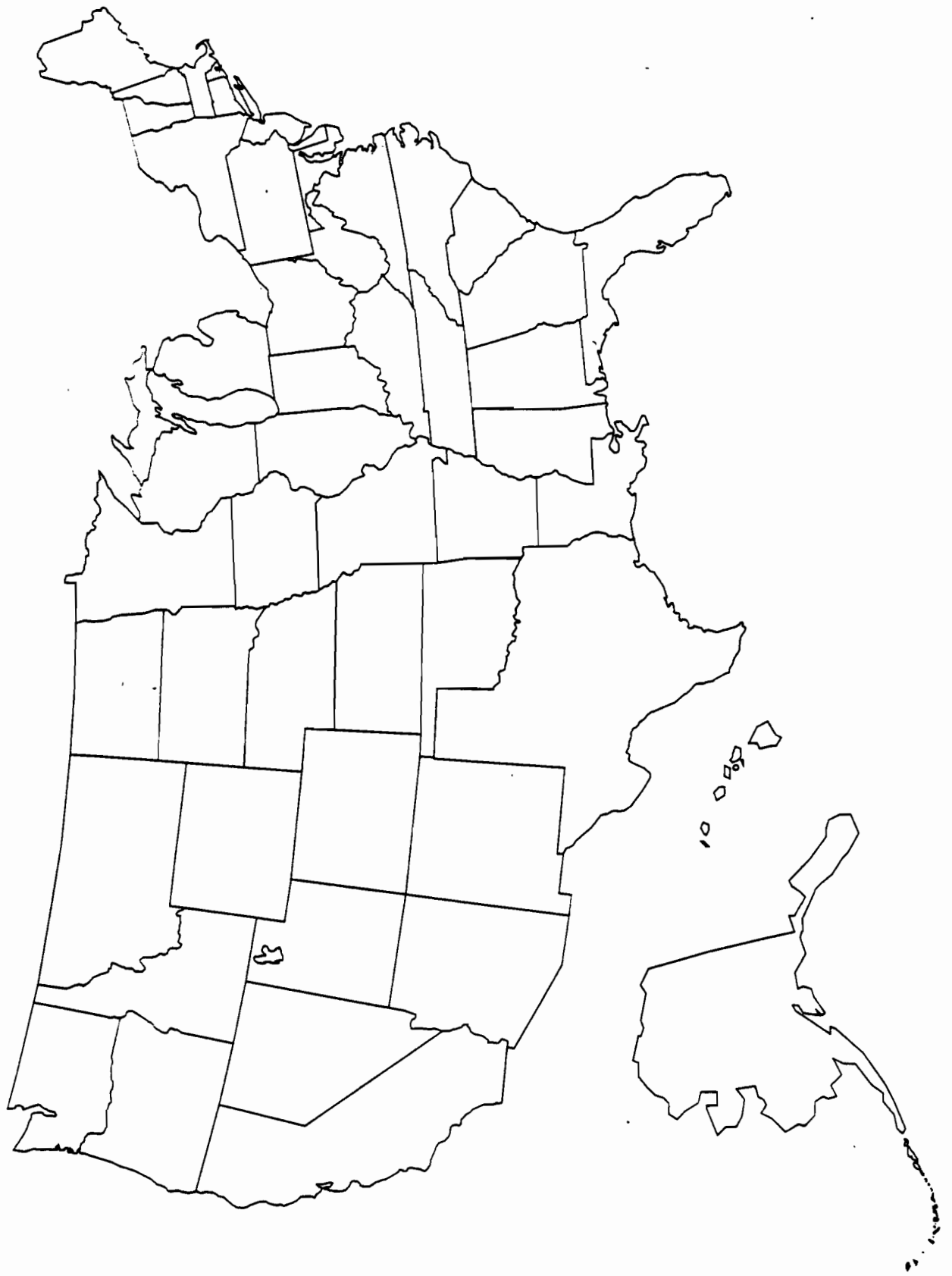
- Music: Trace the spread of a song throughout the world. One suggestion might be to look at American music popular in other countries and languages.
- Language: Find examples of cultural diffusion in our language: sauerkraut, kindergarten, waffle, ballet, avocado, etc.
- Social Studies: A worksheet is included for extension or reteaching activity "The Spread of Islamic Religion."
- Literature: Explore literary works that have become popular in many regions. Many books are available in school libraries, such as:

British Folk Tales by Crossley-Holland

Tales from a Taiwan Kitchen by Cora Cheyney

Tales from the Arabian Nights by H.J. Dawood

And the Green Grass Grew All Around - Folk Tales from Everyone by Alvin Schwartz.





GRADE SIX GEOGRAPHY LESSON PLAN

TITLE: CULTURE CLASH!

COMPONENT: V. Cultural Awareness

OBJECTIVES: VA3 Identify the common cultural characteristics of a region; e.g., language, traditions/customs, art, music, food.

VA6 Define and cite examples of ethnocentrism.

GEOGRAPHIC THEME: This lesson in cultural geography will develop the geographic themes of place and region.

INTERDISCIPLINARY CONNECTIONS:

●Science: IA1 Identify steps of the scientific method.

●Language Arts: IB8 Applies reading/critical thinking skills with emphasis on recognizing propaganda, clarifying information, and using evidence from a selection to support opinion.

IIIA8 Recognizes sexism and physical and cultural bias in oral and written language as well as in pictures.

IVA1 Recognizes and appreciates cultural similarities and differences among people as expressed in their communication behavior.

IVA6 Gives oral presentations, with emphasis on the oral tradition - news broadcasts. (see extension activities)

SUGGESTED TIME: One 45-60 minute period.

DESCRIPTION OF ACTIVITY:

1. Locate the "Congo" (Zaire) River on a map. Explain to students that explorers named this river "Congo." The name was later changed to the Zaire River by Africans to reflect their heritage. Many people still refer to it as the Congo.
2. Read "Culture Clash on the Congo - Part 1" to your students. Ask students to get out a sheet of paper and hypothesize about the motivation of the Africans based on their own cultural knowledge and value systems.

3. Have students predict what would have happened to the explorers if they hadn't fired back. Students should record their predictions on their papers.
4. Discuss students' answers to these questions and explore solutions.
5. Introduce and discuss the term **ETHNOCENTRISM**: a habitual disposition to judge foreign peoples or groups by standards and practices of one's own culture or ethnic group.
6. Read "Culture Clash on the Congo - Part 2. The Other Side of the Story" to the class.
7. Instruct students to re-read their original hypothesis. Ask if students would like to re-evaluate their hypothesis.
8. Discuss and generalize as to how cultural misunderstanding might occur in other situations.
9. Explore, conclude and make projections as to how the situation could be avoided. Apply this knowledge to how cultural misunderstandings might affect foreign relations and have students write their conclusions.

ASSESSMENT STRATEGIES:

Oral discussions may be assessed informally. Student conclusion sheets may be graded by the teacher or evaluated through peer sharing.

MATERIALS/AIDS NEEDED:

- story sheet, "Culture Clash on the Congo" (included)

EXTENSION ACTIVITIES:

- Have students research and present customs and cultural habits of different regions that might be misunderstood.

- **Language Arts/Drama:** Students prepare a "Good Morning Congo" television broadcast (include geography, customs, etc.)

- **Music:** Create an African drum or regional instrument.

- **Government:** Inform students that "Culture Clash on the Congo" is loosely based on the story of Stanley Livingston. Prepare a mock trial for Mr. Livingston based on the events in the reading.

CULTURE CLASH ON THE CONGO

Part 1

Good evening. I hope it's good! Anyway, I've had a dreadful day so far. You see, they tell me that I'm the first white man ever to travel this river, the Congo. Early this morning, my men and I came upon some African natives in their canoes. They circled around us and stared at us. Whenever someone yelled the word "mutti" (which means sticks), they would throw their wooden spears at us. We didn't know what to do, but finally, to save ourselves, we fired our guns. That seemed to scare them away. After they left, we could hear many drums down the river. About two hours later, more natives came out and circled us. The same thing happened all over again. As we traveled down the river, we were getting very nervous as the drums continued to beat.

In the afternoon, we saw a huge fleet of canoes coming right toward us. It was a WAR FLEET! There were over 2,000 men, at least! We counted 54 HUGE WAR boats and canoes. They were bearing down on us. The drums pounded in our heads! A giant war canoe paddled by 80 men led the war fleet. Warriors in war dress and feathers were in the front. The ones who looked like the chiefs were in the back. The war drums continued, and the natives joined in loud war chants as they neared us.

I told my men to be ready to fire when they saw the first spear. The big canoe headed right at us. At the last second, it swerved and missed us. As it came right next to us, the warriors threw their spears. My men began to fire. After a few minutes, the Congo warriors began to regroup. We were angry and felt a hatred for these murderous savages who attacked us for no reason. We followed them and fought them in the village and hunted them in the woods until we felt we could safely return to our boats.

Part 2

Good evening, I am the king of the people who live beside the river you call Congo. I was very excited and happy this morning to hear good news from the drums that men with white skin were coming down the river. I was very happy! I told my people that men with white skin must come from the River Kingdom. They must be our brothers who have drowned in the river. The river took their color but gave their lives back to them. Now, they are coming home to us at last.

I commanded my people to prepare a great celebration. We prepared a wonderful feast, put on our best clothes and decorated our bodies. We went out in our big canoe to greet them. I brought all my men with me. We sang songs of great joy because we wanted to show great honor to our first white men from the river.

As we came near the white men, their sticks spit fire and small things from them. Some of my men fell down. Some had little holes in their bodies. Many were bleeding or dead. We do not know how this happened. It must be war! We hurried back to our village. They followed us with their fire sticks. We ran into the forest! When we came home, we found many of our people dead and bleeding--our village was burned. The white man is evil.

SIXTH GRADE GEOGRAPHY LESSON PLAN

TITLE: THE LEGEND OF TENOCHTITLAN

COMPONENT: V. Cultural Awareness

OBJECTIVE: VA7 Develop an understanding for cultures other than one's own by reading literature, stories, myths, and listening to music and examining art.

GEOGRAPHIC THEME: This lesson in cultural geography develops the geographic themes of place, movement and human-environment interaction. It also reinforces objective VA1 - identifying the five institutions found in all cultures.

INTERDISCIPLINARY CONNECTIONS:

- Language Arts: IA2 Reads fluently a variety of materials at grade level, using appropriate settings such as flexible groups, rereading, paired and other cooperative reading activities.
- IA4 Listens to a diverse selection of literature read aloud on a frequent basis.
- IA12 Reads and identifies literary forms, such as fables, folktales, and myths.

SUGGESTED TIME: One or two 45-60 minute class sessions (may be longer if supplemental activities are utilized)

DESCRIPTION OF ACTIVITY:

Session 1

1. Ask students if they have heard that Mexico City is "sinking." Continue questioning as to why.
2. Tell students that the Mexican flag explains why the city is sinking. Show the flag and ask students if they can now explain the problem. If not, inform students that you are going to tell them a story that is really an ancient Aztec legend.
3. Tell students the story:

The ancestors of the Aztecs were a poor farming people. One of their gods had encountered a problem and had to leave the earth. Before he left, he made a promise to his people:

If you follow my commands, you will become rulers of a mighty empire. When this has happened, some day, I will return to you. You are to leave this area and begin a new city. You must build the city when I send you a sign. You must build your city where you see an eagle, sitting on a cactus, eating a snake.

According to the legend, the people wandered throughout the land for a long time. One day as they were going through the Valley of Mexico, they saw a great lake - Lake Texcoco. On an island in the lake, the legend says that there was a cactus. An eagle was sitting on the cactus, eating a snake. The people saw this sign and built their city at this site. They named the city Tenochtitlan - cactus city. The city grew and became a great empire. Causeways were built as well as floating gardens. Parts of the lake were drained as the city expanded.

4. Again show students the flag of Mexico and ask if they can explain why Mexico City is sinking. (Mexico City is built on the site of Tenochtitlan - lake bed of Old Lake Texcoco. Most of the soil beneath the city is wet. This makes it very spongy and unstable.)
5. Discuss the importance and relevance of myths and legends to culture. Have students look for evidence of the cactus/eagle symbol in other parts of the Mexican culture; e.g., national seal, coins, government buildings.
6. Have students research and explain how religion and the Legend of Tenochtitlan led to the destruction of the Aztec Empire. (Aztecs thought that the Spanish Conquistador Cortes was their god Quetzalcoatl returning to earth and welcomed him into the city. He entered the city and conquered the Aztecs.)

Session 2

1. Divide students into small groups. Have mythology, legend and folktale materials available. Have groups choose myths or legends from a particular region. Students should prepare a presentation of their myth/legend for the class.

2. Encourage students to relate their myth or legend to the particular culture it represents.

ASSESSMENT STRATEGY:

Presentations may be evaluated by the teacher or by groups using student developed models.

MATERIALS/AIDS NEEDED:

- picture of Mexican flag (included)
- resource materials - folktales, myths and legends

EXTENSION ACTIVITIES:

- View the film "The Story of the Aztecs." DCPS Film Catalog # 16380
- Have students write their own myth explaining a common physical feature; e.g., How the Grand Canyon came to be.



VI. Global Perspective

GRADE SIX GEOGRAPHY LESSON

TITLE: MEETING OF THE UNITED NATIONS

COMPONENT: VI. Global Perspective

OBJECTIVES: VIA1 Use appropriate skills and resources to access, analyze, and synthesize information.

VIA2 Identify examples of persistent global problems; e.g., hunger and poverty, overpopulation, acid rain, pollution, destruction of habitats, territorial conflicts, and refugees.

VIA3 Cite examples of opportunities nations have to interdependently solve environmental and human problems.

GEOGRAPHIC THEME: This lesson develops and reinforces the fundamental geographic themes of place, region, movement and human-environment interaction.

INTERDISCIPLINARY CONNECTIONS:

●Language Arts: IIA5 Writes in a variety of modes: letters.

IIIA2 Acquires and strengthens a personal, active vocabulary in speaking and writing in an interdisciplinary/integrated context.

●Science: IVA1 Describe the interdependence between living and nonliving things in an environment.

IVA4 Identify renewable and nonrenewable resources by researching local, state, national, and international information.

SUGGESTED TIME: One 45-60 minute session.

DESCRIPTION OF ACTIVITY:

1. Read to class (or reproduce and distribute) the background information sheet on tropical rainforests (included).
2. Divide the class into six groups. Assign each group the role of a different interest group.

- A. You are poor farmers who farm by slash and burn agriculture and depend on this for a living (slash and burn - sections of rainforest are cut and burned to clear land for crops. This works well until the land is worn out, then they move to another section). **YOU NEED TO CUT RAINFORESTS FOR BASIC SURVIVAL!**
 - B. You are the owners of a large cattle ranch in South America. You sell beef to many other parts of the world, employ many people and make a nice profit. Detractors complain that your profits don't go to the poor people who really need them and that cattle ranching causes erosion and wears out the land. **YOU NEED TO CUT RAINFOREST AREAS TO CONTINUE CATTLE RANCHING.**
 - C. You are medical researchers that have found a cure for cancer. The chemical for your cure comes from the bark of a tree that only grows in the rainforests. Your cure will save the lives of thousands of people throughout the world. **YOU NEED TO CUT THE RAINFORESTS TO PRODUCE YOUR MEDICINE.**
 - D. You are government leaders of a country that has borrowed very large amounts of money from banks in the United States. To repay the debt, you are having to use profits made from the rainforest such as cattle ranching and selling timber. **YOU MUST CUT THE RAINFOREST IN ORDER FOR YOUR COUNTRY TO SURVIVE.**
 - E. You are members of the World Environmental Protection Society. You are very concerned about what the cutting of the rainforests is doing to the earth. Deforestation is causing erosion and drought in some areas. Carbon Dioxide released from burning forests is adding to the greenhouse effect and adding to global warming. You fear that cutting the rainforests will affect the air we breathe and the weather all over the world. **YOU MUST SAVE THE RAINFORESTS TO SAVE THE EARTH'S ATMOSPHERE AND CLIMATE.**
 - F. You are members of the scientific team Save the Endangered Species. Every day we are losing rare plant and animal species. Some scientists think there might be as many as SIX extinctions per hour. By cutting rainforests, we are destroying habitats and depriving the world of many potential foods, medicines, products and natural wonders. **YOU MUST SAVE THE RAINFORESTS TO SAVE THE PLANTS AND ANIMALS.**
3. Instruct each group to assume the point of view of their assigned interest group and prepare a brief (1-2 minute) presentation expressing their viewpoint.
 4. Distribute the worksheet, "United Nations Emergency Meeting" and review instructions. Allow time for group work.

5. Each group will give a brief presentation according to the worksheet instructions.
6. Allow time for discussion and debate.
7. Take a class vote on the issue. See if students working together can solve problems for another interest group. For example, in some areas, cattle ranchers are given incentives to switch to dairy farming. Dairy cows are kept in pens and cause less damage. Dairy farming is a year-round income. Beef cattle are sold one or two times a year, dairy products can be sold all the time.
8. Have students write letters to their senators stating their concerns for the rainforests.

Senator Bob Graham or
U.S. Senate
Washington, D.C. 20515

Senator Connie Mack
U.S. Senate
Washington, D.C. 20515

ASSESSMENT STRATEGY:

Presentations may be evaluated by the teacher or by peer evaluation. Letters may be assessed formally for a grade.

MATERIALS/AIDS NEEDED:

- UNITED NATIONS EMERGENCY MEETING handout (included)
- RAIN FOREST BACKGROUND INFORMATION handout (included)

EXTENSION ACTIVITY:

Plan a school wide RAINFOREST AWARENESS WEEK. Write to: "How to Organize a Rainforest Awareness Week" from Creating Our Future, 1640 Francisco Street, Berkeley, CA 94703

RELATED LITERATURE:

One Day in the Tropical Rainforest by Jean C. George

Rain Forest by Helen Cowcher (Fiction)

Rain Forest Secrets by Arthur Dorros

Rain Forest Destruction by Tony Hare

50 Simple Things Kids Can Do To Save the Earth - The EarthWorks Group

UNITED NATIONS EMERGENCY MEETING

WELCOME to New York and this special meeting of the United Nations. You have been asked here today to help us decide the fate of the tropical rainforests. At the end of this session, a vote will be taken to decide if special measures will be taken to stop the destruction of the tropical rainforests.

Each of you will have time to meet in your special interest groups. In about 15 minutes, a spokesperson from your group will make a 1-2 minute presentation stating your group's position to the assembly.

At the conclusion of the session a vote will be taken on the issue.

The Special Interest Group I represent is _____.

Use the space below to outline your position (main points, etc.).

RAIN FOREST BACKGROUND INFORMATION

Some scientists estimate that our world is losing more than 40,000 square miles of tropical rain forest each year. Estimates also indicate that about 100 acres are being cut down each minute. At the present rate, all of the earth's rain forests could be cut down in several decades.

Why are tropical rain forests being cut down?

- Cattle ranching - also contributes to erosion.
- Slash-and-burn agriculture - areas of rain forest are cut and burned to clear land for farming; crops do well until the land is "worn out" then a new section is cut and burned.
- Lumber - trees are cut and sold to other countries to make wood products.
- Commercial farming - large corporations raise a few major crops on large commercial farms which they sell to other countries.
- Government action - governments who owe money to U.S. banks allow cattle ranching and logging as a means of repaying debts.

What are some of the consequences of cutting down tropical rain forests?

- Habitat destruction for many plants and animals. Almost one-half of all of the earth's plant and animal species live in the rainforests.
- Many scientists feel that the destruction of rainforests can change the world's weather and climate patterns.
- Native people are losing their living place. As they leave the area, their culture is lost.
- Deforestation leads to erosion and water pollution as soil washes into rivers and streams. Fish and wild animals that use the rivers are sometimes killed.
- The burning of rainforests releases carbon dioxide into the air, which heightens the greenhouse effect and adds to the global warming problem.

GRADE SIX GEOGRAPHY LESSON PLAN

- TITLE:** POPULATION PUZZLE
- COMPONENT:** VI. Global Perspective
- OBJECTIVES:**
- VIA1 Use appropriate skills and resources to access, analyze, and synthesize information.
 - VIA3 Cite examples of opportunities nations have to interdependently solve environmental and human problems.
 - VIA4 Discuss the impact of science and technology on the environment and society.
- GEOGRAPHIC THEME:** The Fundamental Geographic themes of place, location and region will be developed in this lesson.

INTERDISCIPLINARY CONNECTIONS:

- Science:
 - IIA5 Analyze and discuss the requirements of living things with respect to physical characteristics and environmental needs.
 - IIA6 State and relate the portion of the Universal Organizational Hierarchy that recognizes the interrelationships of living things (species, population, community).
 - VA1 Identify how people have used scientific principles in land use.
- Language Arts:
 - IIB5 Writes in a variety of modes: expository, persuasive, narrative.
 - IVA6 Gives oral reports, with an emphasis on oral tradition.

SUGGESTED TIME: Two 45-60 minute class sessions

DESCRIPTION OF ACTIVITY:

Session 1

1. Introduce and discuss the following terms:

Life Expectancy: The average number of years a person can expect to live.

Infant Mortality Rate: The number of infant deaths per 1,000 live births.

Birth Rate: The number of infants born per 1,000 population.

2. Locate the following countries on a map. You may duplicate the enclosed world map and have students shade the countries on individual maps (see The Story of Coca Cola lesson).

United States

Haiti

Sweden

Guinea

India

3. Distribute the "Population Puzzle" worksheet and instruct students to complete it individually. These may be collected and graded individually or placed in student portfolios.

Session 2

1. Return "Population Puzzle" worksheets (or have students take them from their portfolios). Divide the class into small groups and distribute the "World Population Conference" sheet. Read the instructions with the class and provide time for groups to work together.
2. Call the conference to order. Read each question on the worksheet and have a spokesperson from each group respond. Record answers on the board. Allow discussion time and then take a vote on the most generally accepted answer. Continue this process through all of the questions. If students do not arrive at the idea of the impact of science and technology, lead discussions to the following:

●**Low birth rate countries:** industrialized; women in the work force; birth control available; more formal education.

●**High birth rate countries:** less industrialized; less access to medical care and birth control; agricultural; value large families as workers; less formal education; fewer women work outside of the home.

●**High Infant Mortality:** less technology for agriculture - less production; lack of medical care, technology, and facilities; poor pre-natal nutrition and care; lack of sanitation.

●**Lower Infant Mortality:** better nutrition (increased food production due to technology); doctors, medicine, hospitals are available; good pre-natal care; education; better sanitation.

●**Low Life Expectancy:** poor nutrition, sanitation, medical care, education; more danger in less technological occupations. The opposite is true for countries with longer life expectancies.

3. Tell students to imagine that they are news broadcasters for a major television network. They are to write a news broadcast announcing the results of the World Population Conference. Broadcasts should be shared with the class. NOTE: If you prefer, students could be newspaper reporters and write an article on the conference for a newspaper.

ASSESSMENT STRATEGY:

Worksheets, oral broadcast presentations or newspaper articles may be formally evaluated for a grade or placed in student portfolios. This activity also lends itself to individual or peer evaluation.

MATERIALS/AIDS NEEDED:

- world political map (included, see the Story of Coca Cola lesson)
- "Population Puzzle" worksheet (included)
- "World Population Conference" worksheet (included)

POPULATION PUZZLE

COUNTRY	BIRTH RATE (per 1,000 Population)	INFANT MORTALITY (per 1,000 live births)	LIFE EXPECTANCY for MALES	POPULATION Estimate in millions-1992
AUSTRALIA	15	8.0	73	17.8
GUINEA	47	148.0	40	7.8
HAITI	45	106.0	53	6.4
INDIA	30	91.0	58	882.6
ITALY	10	8.6	73	58.0
SWEDEN	14	6.0	75	8.7
UNITED STATES	16	9.0	72	255.6

1. List each country that has a birth rate greater than 19 births per 1,000 population.
2. On the map, put a dot (●) on each country listed on the chart. Do you see any relationships in the location of the countries? If so, describe the relationship.
3. List each country that has an infant mortality rate greater than 50 deaths per 1,000 live births.
4. Put an X on each of the countries you identified for question #3. Are they located in the same region of the world? Do they have the same climate?
5. Do you see any relationship between birth rate and infant mortality? If so, what relationship?
6. Do you see any pattern in the life expectancy of males?
7. Is there any relationship between the life expectancy for males and infant mortality rate? If so, state the relationship.
8. Is there any relationship between infant mortality, life expectancy for males, and birth rate? If so, explain this relationship.

WORLD POPULATION CONFERENCE

Good Morning! Welcome to the World Population Conference. As a delegate to this most important conference, you have been carefully chosen to help solve some problems facing a number of countries in the world today. As you meet in your groups please consider each of the questions listed below.

At the end of the conference a spokesperson from each group will be asked to present the opinion of his/her group on each question. A vote will be taken to decide the viewpoint of the general conference assembly. Please consider each question carefully and from various viewpoints. We must understand the problem before we can take steps to solve it.

1. Why do you think the countries of Australia, Italy, Sweden and the United States have a low and similar birth rate? (Do they have the same climate, topography, religion, political system, etc.?) _____

2. Considering all cultural, geographical, and economic factors, why do you think the countries of Guinea, Haiti, and India have such a high birth rate? _____

3. How do you explain the high infant mortality rate of Guinea, Haiti and India?

4. What is the reason for the lower infant mortality rate for Australia, Italy, Sweden, and the United States? _____

5. Please explain the difference in life expectancy for males in the countries of Australia, Italy, Sweden, U.S., Guinea, Haiti, and India. _____

6. Is there any way countries of the world can work together to improve the infant mortality of countries like Guinea, Haiti and India? How? _____

7. How can the world community help solve the problem of low life expectancy in certain countries? _____

