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ABSTRACT

This unit is intended to dispel misconceptions students may have about Africa and its people, and to help students to develop a greater appreciation of that land and its people. The unit focuses upon the physical aspects of Africa and the customs, religion, and attitudes of its people. Ten lessons are included: (1) The continent of Africa; (2) The topography of Africa and stereotypes; (3) Weather and dress; (4) The desert and a day in the life of African teens; (5) Pyramids and religions in Africa; (6) The rainforest and African cuisine and etiquette; (7) The savanna and its effects on people; (8) African exports and its international effects; (9) The unit nears the end--an African meal; and (10) Written exam and "fun with Africa." A bibliography also is included. (DB)

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AFRICA: INTO REALITY  
AN INTEGRATED UNIT PLAN IN SOCIAL AND NATURAL SCIENCE

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## ABSTRACT

This unit is about Africa, It looks at the physical aspects of the continent and the customs, religion, and attitudes of its people. With Africa being a large part of American past and the impact Africa is having on the international future of the World it is changing the way we look at ourselves and others. I believe this unit will help to dispel incorrect views and attitudes students currently have about Africa.

The lessons look at the physical aspects of Africa including the topography, weather and weather bands that give Africa its wide range of habituates, Africa's past and future, and Africa's people. As we investigate Africa's people we look at culture, customs, viewpoints, religions, cuisine and etiquette. In looking at Africa's past we marvel at the pyramids and the desert. And, of course, no unit on Africa could be complete without a look at the "Big Game".

It is hoped that with these lessons comes a greater appreciation of Africa and a willingness to look at ourselves in a new light.

## PURPOSE

- I. Africa is often called "The Dark Continent". It is hoped that these lessons will show the students:
- A. That the continent of Africa is not just one big continent but a group of countries on one block of land.
  - B. That it is not a place where Tarzan swings from trees but has grasslands and desert also.
  - C. That there are differences between the United States and Africa, just as there are similarities.
  - D. That an increase of awareness will eliminate misconceptions and negative attitudes about Africa and it's people.

## RATIONAL

The people of the 21st century will need to know about Africa. This continent has influenced our nation's past and will continue to influence our future. Africans who came to America as slaves set the stage for changes to come. Some of these changes were the Civil War and the Civil Rights Movement. There are still many changes to come from this continent for a glance at any newspaper reveals areas where Africa is influencing the lives of Americans and the World today. A few examples of these headlines include Apartheid, results of Africa's energy resources and its political and social changes.

Future citizens will have to be knowledgeable about Africa to help it harness and benefit from the abundant resources that are there and to understand the impact it is having on their world.

## GOAL

The goal of this unit is to increase the students knowledge of the continent of Africa and the people who live there and replace it with knowledge that eliminates distorted views. We will investigate the physical aspects of the continent, the religion, customs, dress, exports, and etiquette. These lessons will help students understand that there are differences between our two nations and yet there are several things we have in common.

## BEHAVIOR EXPECTATION FOR THIS UNIT

1. Help the others in your group to understand and complete the project.
2. Only the hands that made it can destroy it.
3. Raise your hand if you need help.
4. Listen when others are talking.
5. Use equipment as discussed.

AFRICA: INTO REALITY  
AN INTEGRATED LESSON

LESSON 1 THE CONTINENT OF AFRICA

I. PREVIEW

- A. This lesson looks at the continent of Africa which represents one of the reflects seven land masses on the earth. The students are asked to look at Africa and it's place on the globe.

II. OBJECTIVES

- A. At the end of this lesson the students will be able to:
1. Depict life in Africa as they know it.
  2. Put together a puzzle of the continents.

III. MATERIALS

- A. List of questions for drawing the picture of how the students currently see Africa. (See 1-A).
- B. Continent puzzle
1. Continent puzzle (Arnold, 1985) (See 1-B).
  2. Heavy paper.
  3. Crayons.s
  4. Markers
  5. Scissors
  6. Rubber cement
- F. Large wall map of Africa. This will be used in most of the lessons so display it in a place that the students can easily get to.

IV. PROCEDURES

- A. Introduce the lesson by having the students make a list, on the board, of what Africa is and has.
- B. Explain to the students that in small groups they will be drawing a picture of Africa while answering the following questions (See 1-A).



These questions should be displayed so the students can refer to them while they draw.

1. What kind of people live in Africa?
2. What so they do for entertainment?
3. What animals live in Africa?
4. What is the weather like?
5. What do their homes look like?
6. How do they light their homes?
7. How do the heat their homes?
8. How do they cook?

C. Hand out paper, crayons and markers.

D. Discuss the pictues they have drawn about Africa and display them in a place where the students can refer to them as the unit progresses.

E. Discuss the continent of Africa in relationship to the world.

1. Show globe and explain the patches of blue, green, and brown.
2. Land covers one-third of the earth's surface. The remainder is covered by water.
3. The biggest land masses are called continents. They included North America, South America, Europe, Asia, Africa, Australia, and Antarctica.
4. Ask the students which continent they live on and which they think is Africa.
5. Explain that except for Asia and Europe the continents are surrounded by water.

F. Make continent puzzle (See 1-B)

1. Handout the continent map of the world and give students time to identify the continents they know. Go over continent's names.
2. Let students color map.

3. Cement to heavy paper.
4. Cut out continents.
5. Place the pieces of the map in the desk.
6. Try to name the continents and put map together.

G. Close the lesson by having the students review the names of the continents on the world map.

#### V. EVALUATION

- A. Have students correctly name the continents.
- B. Depiction of life in Africa as they know it.

#### VI. METHODS USED IN THIS LESSON

- A. There are many methods used in this lesson below are just a few:
  1. Cooperative learning, hands-on, discussion, brainstorming, drawing, lecture, guided discovery, review.

#### VII. RESOURCES

Arnold, C. (1985). Land Masses - Fun, Facts and Activities. Franklin Watts: New York.

ATTACHMENT 1-A

Questions for the board to be answered in a drawing.

What kind of people live in Africa?

What do they do for entertainment?

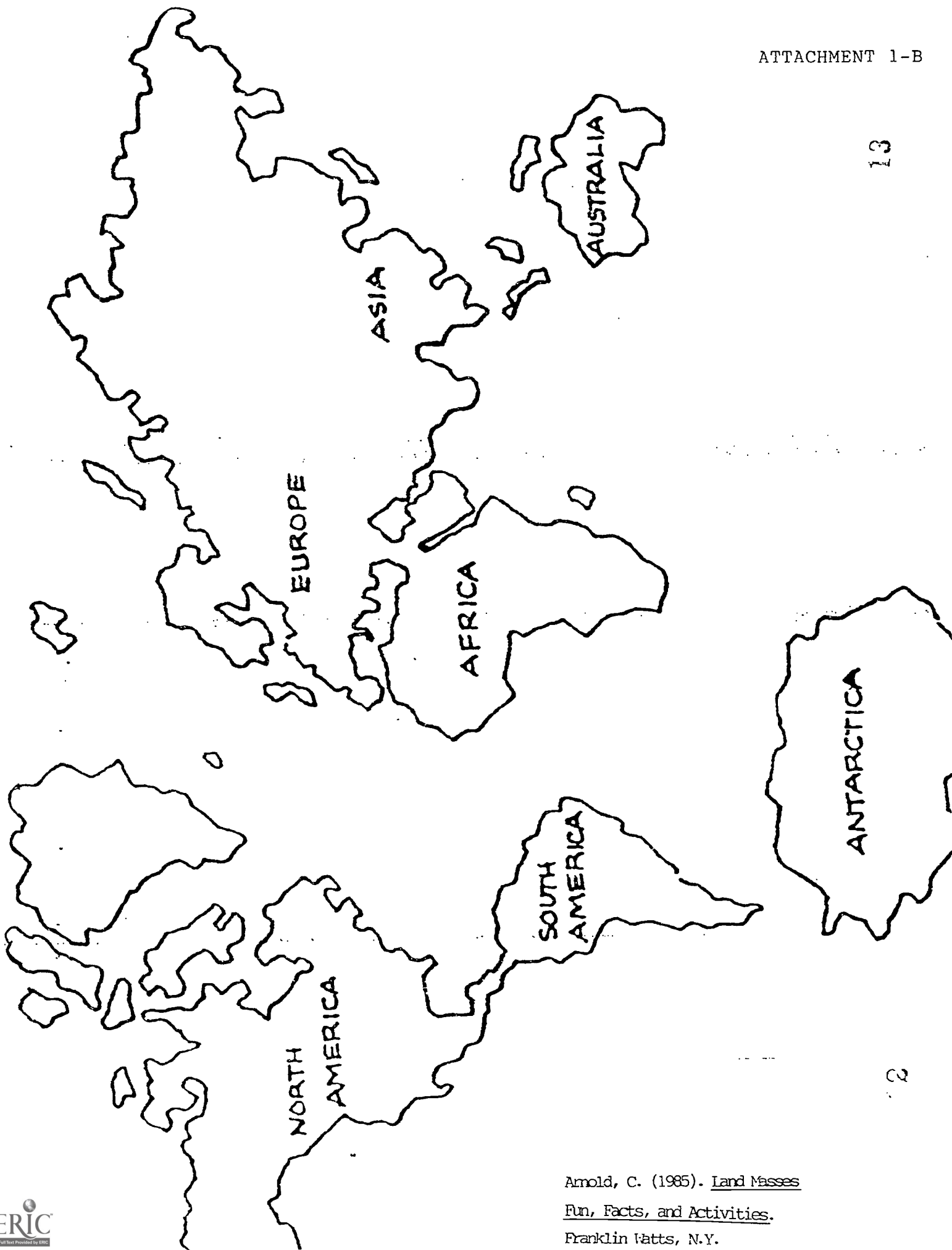
What kind of animals live in Africa?

What is the weather like?

How do they light their homes?

How do they heat their homes?

How do they cook?



AFRICA: INTO REALITY  
AN INTEGRATED LESSON

LESSON 2            THE TOPOGRAPHY OF AFRICA AND THE STEREOTYPES  
                      AFRICANS HAVE OF AMERICANS

I.    PREVIEW

- A.    This lesson looks at the physical aspects of the continent and examines African stereotypes of Americans.

II.   OBJECTIVES

- A.    At the end of this lesson the students will be able to:
1.    Depict the topography of Africa on a map.
  2.    Interpret information from an article and relay it to a map.
  3.    Explain how stereotypes hinder cross-cultural understanding.
  4.    Describe some African stereotypes of Americans.

III.  MATERIALS

- A.    Handouts entitled:
1.    The African Land (See 2-A.)
  2.    Stereotypes Liberian Teenagers Have About Americans (Merryfield, 1989) (See 2-B).
  3.    Stereotypes Kenyan Teenagers Have About Americans (Merryfield, 1989) (See 2-C).
  4.    What do African Schools Teach About the United States (Merryfield, 1989) (See 2-D).
  5.    Topography map of Africa (See 2-E).
- B.    Overhead projector
- C.    Transparencies
1.    Topography of Africa (See 2-F).

2. The countries of Kenya and Liberia  
(See 2-G).

#### IV. PROCEDURES

- A. Review continents of the world and ask for further ideas on what Africa is or has.
- B. Explain the group activity.
  1. Read The African Land (2-A).
  2. On the topography map of Africa (2-E) determine from the above article the placement of mountains, lakes and rivers.
- C. Discuss map by using overhead projector and the transparency of the topography of Africa (2-F) with the correct placement of mountains, lakes and rivers.
- D. Introduce the concept of stereotype. Relate to pictures completed in lesson one.
- E. Where do we get these images from? List on board. (movies, T.V., newspapers, personal experience, books)
- F. Review the background of Liberia and Kenya. Use overlay transparency of these countries (See 2-G) to show proper placement on African continent.

1. "Liberia was never colonized by Europeans.

In 1816 the United States Congress chartered a white philanthropic group to return freed slaves to Africa. Eventually 45,000 former slaves set up the government of the country, named Liberia for liberty. In 1847 Liberia became Africa's first black republic. Descendants of the settler group, known as Americo-Liberian, ruled the Africans born there until the 1980 coup d'etat of the army sergeant, Samuel Doe. American missionaries and businessmen, especially rubber companies like Firestone, greatly influenced the development of Liberia. It remains today the only African nation historically tied to the U.S. Liberia's currency is the American dollar. It's official language is English." (Merryfield, 1989)

2. "Kenya was colonized by the British who declared a protectorate over it in 1895 in order to protect their economic interests in Uganda and to keep their German rivals to the south. This partition of East Africa by European powers took place without any thought to the settlement or wishes of the local people. Within thirty years a strong white settler class dominated Kenya politically and

economically. By law, only whites could grow cash crops. It took the Mau-Mau uprising of the 1950's and the leadership of Jomo Kenyatta to secure independence from the British rule in 1963. Many scholars consider Kenya one of Africa's success stories. Compared with its neighbors, Kenya is politically stable and economically viable. British influence continues in such areas as law, education and religion. English and Swahili are the national languages." (Merryfield, 1989)

F. Ask the following questions for understanding.

1. Are both Liberia and Kenya African nations?
2. How are their cultures the same? Different?
3. How are their histories the same? Different?
4. Do they share a common boarder?

G. Divide the class into groups. Hand out the articles on American stereotypes held by Kenyans and Liberians. (See 2-B & C).

H. Discuss reactions. Are they true? What misconceptions do Kenyan or Liberians have about Americans? What are their perspectives? On what points do they agree? Does one country have a more favorable view of Americans? How can you tell the Liberians have closer ties to the U.S.?

I. Have students determine where the Africans get their views of Americans. List their responses on the board and compare them with the list made earlier.

J. Have students determine what they learned about Africa and at what time. Hand out What Do African Schools Teach About The U.S.? (See 2-D). How does this compare with what Americans are taught? Which is better informed?

K. Close the lesson by having students write a reflective paper on American stereotypes of Africans. Based on this lesson, how would you explain the American stereotypes of Africans that are listed on the board? How do you think Africans would react to these stereotypes?

#### V. EVALUATION

- A. The reflective paper.
- B. The topographical map.

VI. METHODS USED IN THIS LESSON

A. There are many methods used in this lesson below is just a few:

1. Cooperative learning, hands-on, review, shared reading, brainstorming, discussion, lecture.

VII. RESOURCES

Arnold, C. (1985). Land Masses - Fun, Facts and Activities. Franklin Watts: New York.

Graff, E. (1980). Africa. Cambridge Book Co: New York.

The Grolier Society. (1951). Land and People. The Grolier Society: New York.

Merryfield, M. (1989). Lessons From Africa. Indiana University: Indiana.



## ATTACHMENT 2-A

### THE AFRICAN LAND

Africa is a very large land mass. If you were to measure it you would find that it is about two times as wide as America and three times as long.

Africa lies mostly in the tropical rainforest area of the world. Across the equator, or the middle, Africa is about 2,500 miles wide and from top to bottom is about 3,400 miles long. Africa is nearly equal from north to south and east to west. The distance across the United States is 2,600 miles so as you can see Africa is very big.

**The Mountains and Plateaus.** The area below the Sahara desert is like a plate turned upside down and lifted on one side. On the side to the east is the highest mountains. Some of these mountains are over 1 mile high or about 6,000 feet. As you move to the west you go down hill. The central part or plateau of the continent is only 2,000 feet high and very flat. On the western side of this plate the mountains are only 1,000 feet high and very close to the coast.

Africa has very few mountain ranges. In the northeast corner are the Atlas Mountains, to the east are the Ruwenzoris Mountains, and to the south are the Drakenburg Mountains.

The Atlas Mountains are along the Mediterranean Sea and create a natural barrier between the Sahara Desert and the western coast.

The Ruwenzoris Mountains are along the equator. This range of mountains are snow-capped and are usually hidden behind a misty fog. It is in this mountain range of volcanic origin that the best known African mountains exist, Kilimanjaro with a height of 19,340 feet, Kenya at 17,038, Ras Dashan at 15,340 and Cameroon at 13,354 feet high.

The Drakenburg Mountains run parallel to the southeast coast of Africa and extend all the way to the Cape of Good Hope.

**The Great Rift Valley.** The great Rift Valley was created by the crust of the earth splitting apart, raising on the sides and settling in the center into deep canyons. The Great Rift Valley stretches from the Red Sea down the eastern side of Africa to the southern tip and disappears under the Indian Ocean. This valley is about 4,000 miles long and in places 30 miles wide. It can get as deep as 2,000 feet, Many of Africa's deepest lakes are in the Great Rift Valley.

**African Rivers.** There are four major rivers in Africa. In the northeast is the longest river in the world. It is called the Nile. The Nile River begins at Lake Victoria and flows 4,160 miles to the Mediterranean Sea. The Nile is the major source of draining one million square miles of African land.

In the center of Africa is the Zaire River. Africa's second longest river, it flows 2,718 miles. This river begins near the Lakes Nyasa and Tanganyika. It flows across the equator and then swings wide to the west. It then turns south before dumping it's water into the Atlantic Ocean.

The third longest river is the Niger River. It is about 2,000 miles long. This river is long because of the natural barriers it must deal with. It begins only 200 mile from the ocean but because of the mountains it must go in a wide north-eastern curve. It then turns east and south to reach the Atlantic Ocean.

The Zambezi River is the fourth river. It is more than 1,550 miles long and is the only river to empty into the Indian Ocean. This southern river has long stretches of good sailing but half way to the Indian Ocean it becomes very rough and takes a drop of 420 feet over Victoria Falls.

**African Lakes.** Lake Victoria is the largest body of fresh water in Africa. Lake Superior is the only lake on the world that is larger. It is almost 27,000 square miles in area. The ports of it's shores are very busy with shipping every day.

Lake Tanganika is Africa's second largest lake. It lies between Lake Victoria and Lake Nyasa. It is very narrow, only 30 to 50 miles wide, but 450 miles long and reaches a depth of 4,708 feet.

Lake Nyasa is also narrow and long, 360 miles long. It drains into the Zambezi River and, like the other lakes, is located in the Great Rift Valley.

#### RESOURCES

Dickey, N. (1991). Funk and Wagnalls New Encyclopedia. Funk and Wagnalls Inc.: N.Y., 8, 320 and 2, 414.

Lorimar, L. (1991). Lands and People. Golier Inc.: Danbury, Conn.

Graff, E. (1980). Africa. Cambridge Book Co.: N.Y.

**STEREOTYPES LIBERIAN TEENAGERS HAVE ABOUT AMERICANS**

1. Americans are very smart. Americans learn very fast. Most American children are so clever that they complete school at an early age.
2. White Americans are racist. American whites do not share neighborhoods with black Americans. They don't want black children to attend school with their white children.
3. Americans are good workers. They pay attention to their jobs and perform their duties with excellence.
4. Americans don't discipline their children. American teenagers can do anything they like. Children almost control their parents.
5. Americans are very large people. Most Americans are huge in size. This is due to all the good food they eat.
6. Americans like to lock themselves indoors. Americans keep to themselves and always lock their doors. They don't like to sit outside or be friendly with their neighbors.
7. Americans are violent people. Most carry handguns. If one provokes another person, he or she is instantly shot.
8. Americans are wealthy. Americans get the highest salaries in the world. Even laborers make much money.
9. Americans grow the most food of any nation. Americans grow much food, and they eat much food.
10. You can buy anything you want in America. The U.S. is the best place to buy videos, TVs, refrigerators, suitcases, sheets, and many other items. Their clothes are the latest styles.

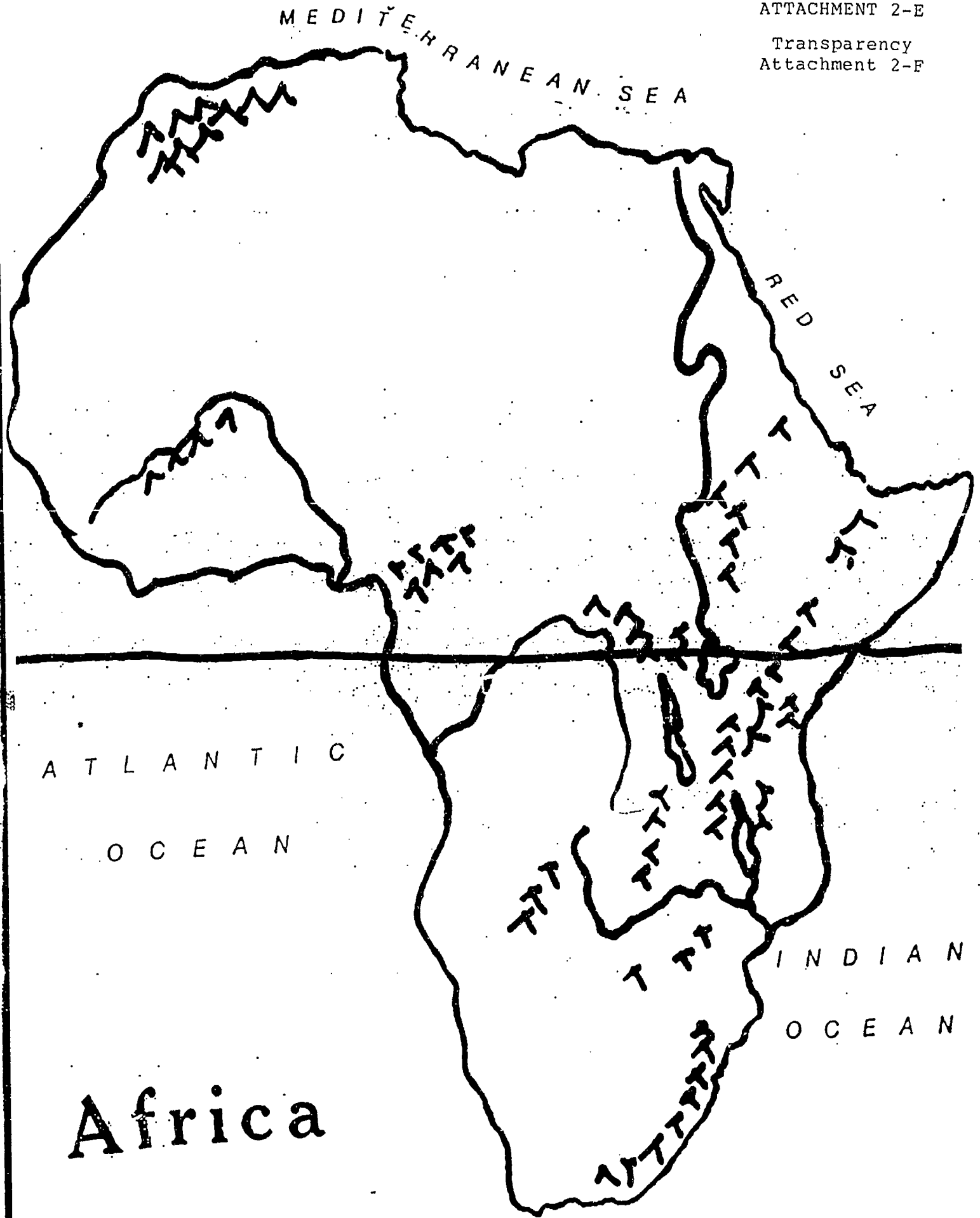
**STEREOTYPES KENYAN TEENAGERS HAVE ABOUT AMERICANS**

1. Americans all look alike. Americans are white, tall, huge, and have big, long noses.
2. Americans are very rich. All Americans own two or more cars and have so much money they just do not know what to do with it. There are no poor people in America.
3. Americans carry guns with them at all times. Americans take guns everywhere they go. People should be careful because if an American is angered, he will shoot to kill.
4. Americans are tough and rough people. They like to fight. Crime is a big problem in the U.S. It is a dangerous place to visit.
5. Americans feel superior and have domineering characters. They think they are the best people in the world and believe everyone else is inferior.
6. Americans do not like Africans. White Americans do not like black Africans because they have common ancestry with black Americans. White Americans think all blacks are inferior. They associate black Americans with slavery.
7. Americans are very hardworking people. Americans are industrious and work harder than any other people in the world. There are no lazy people in America.
8. Americans like sports. The American enjoys his free time with boating, motoring, baseball, football, and other sports.
9. Americans live in towns and cities. Americans don't live in villages or rural areas.
10. Americans eat a lot of good food. They eat anywhere and anytime. They eat while walking, talking, standing, or sitting. This is why Americans are so big, bulky and tall. Most of them are very fat with stomachs sticking out.

**WHAT DO PRIMARY AND SECONDARY STUDENTS IN SELECTED AFRICAN COUNTRIES  
LEARN ABOUT THE UNITED STATES?**

- The Gambia**      Primary--U.S. political system.  
Secondary--American history (migration, British colonial rule, Civil War); role of America in world development.
- Ghana**            Primary--only in general world geography.  
Secondary--the geography of the United States, including the states of the United States; the U.S. is a manufacturing country; the U.S. is a great producer of some agricultural products.
- Kenya**            Primary--the people of America (different people who live in America), their way of life, e.g., food, customs; trade between Kenya and America.  
Secondary--How different people earn their living in America; the relationship between America and Kenya; system of education in America; major economic activities of America; federal system of government; the agrarian revolution; the emergence of the United States as a world power; the Great American Railway; world currencies, the dollar; the beginnings and development of science in the United States; the rise of the United States as a world power; cotton, maize, tobacco, fishing, coal, iron ore; hydro-electric projects and industrial development; urban centers such as New York.
- Lesotho**          Primary--where the U.S. is in the world; what it produces in terms of minerals, raw materials, agricultural products, industrial products.  
Secondary--During world history, America is one of the countries they learn about; its Civil War; slavery is always related to America.
- Liberia**          Primary--U.S. Philanthropic organizations founded in Liberia in 1822; seasons in the United States; American style of dress; American history, literature, current events, economics (free enterprise).  
Secondary--geography of America; American form of government; American system of education; location of states; way of life; kinds of food eaten.
- Malawi**          Primary--geography of the United States, its physical features, climate, industries, agriculture.  
Secondary--students learn about the car manufacturing industry in the U.S.; the St. Lawrence and Great Lakes Waterway; irrigation farming in California; history in relation to the World Wars and post-war treaties and alliances and the slave trade. All these are treated as case studies.
- Nigeria**          Primary--America as a world power; the cultures and history of the U.S.  
Secondary--American history and geography.
- Sierra Leone**    Primary--the position of the United States on a world map; the goods that are imported from the U.S. through international trade; the role of the U.S. and Sierra Leone in the United Nations; the name of the U.S. president; U.S. as biggest world power; Peace Corps comes from the US; religious missionaries come from the United States.

- Secondary--mapping of North America; geographic regions; the conditions necessary for the growth of wheat, corn, oats, barley in the U.S.; settlement of immigrants in the U.S. in the original 13 colonies; opening of the West after independence and in the 19th century; music and dress from the U.S.; U.S. government; economics; debate on world powers (U.S. being one).**
- Somalia**      **Primary--American families.**
- Secondary--The Cold War between the US and the U.S.S.R. after World War II; the Marshall Plan; imports from the U.S. to our country.**
- Sudan**      **Primary--geography and economics of the US; physical and human resources.**
- Secondary--some history related to world wars through world history.**
- Swaziland**      **Primary--the federal system of the United States; life of a U.S. child, geography of the U.S.; introduction to the history of the U.S.**
- Secondary--U.S. history; North American geography in detail.**
- Tanzania**      **Primary--American agriculture and industry; they learn that the headquarters of the United Nations is in New York.**
- Secondary--students learn more about industries and agriculture of the U.S.; that the United States is a great producer of different minerals; and that the U.S. is the home of technology.**
- Uganda**      **Primary--large scale farming and mechanization; wheat transportation by sea to other countries.**
- Secondary--land forms; natural resources; industry; transportation; cities.**
- Zambia**      **Primary--discovery of America by Columbus and Vespucci; the history of the American people; the American struggle for independence and the Declaration of Independence; American economic strength; U.S. economy; agriculture; current affairs as things happen in the United States.**
- Secondary--American economic power; American military power; the East/West blocks with America and Russia highlighted as superpowers; American history; its economy, including agriculture and industry.**
- Zimbabwe**      **Primary--crop production in the United States; U.S. as a world power; large number of blacks taken there as slaves.**
- Secondary--geography of the United States; history of the United States; system of government; representative of the western world.**



Overlay of Liberia on Kenya





AFRICA: INTO REALITY  
AN INTEGRATED LESSON

LESSON 3 WEATHER AND DRESS

I. PREVIEW

- A. This lesson asks the students to examine the temperature and rainfall in Africa and consider the relationship between clothing and culture.

II. OBJECTIVES

- A. At the end of this lesson the students will be able to:
1. Label the major weather bands of Africa on a map.
  2. Graph the rainfall and temperature of five zones.
  3. Compare and contrast the weather of Africa to Vermont.
  4. Describe Swazi clothing.
  5. Explain the relationship between dress and culture.

III. MATERIAL

- A. Rainfall graph (See 3-A).
- B. Temperature Graph (See 3-B).
- C. List of rainfall and temperature for five zones in Africa (See 3-C).
- D. Handouts entitled:
1. Weather of Africa (Caldwell, 1961) (See 3-D).
  2. Swazi Customs (Merryfield, 1989) (See 3-E).
  3. Climate (Graff, 1980) (See 3-F).
- E. Map of Africa (Attachment 3-G).
- F. Paragraphs about weather (See 3-H).
- G. Tape

- H. Scissors
- I. Sketches of Swazi dress (See 3-I).

#### IV. PROCEDURES

- A. Have class review where Liberia and Kenya are on the continent.
- B. Discuss the reflective paper
  - 1. Have any students who wants read theirs and hold open discussion on conclusions.
- C. Have class read - Weather in Africa (3-D).
- D. Explain to the students that from this article and the one entitled Climate (3-F) are group will determine where the five weather bands are to placed on the map. The other will graph the rainfall and temperature for five African zones.
- E. Divide the class into two groups. Give one group the articles on weather and a map of (3-G) Africa. The other group receives the rainfall and temperature graph and statistics (3-A,B,& C).
- F. Putting one person from each group to form a new group they will discuss the zones and determine where the paragraphs on weather (3-H) and the graphs are to be placed on the map (3-G). The paragraphs belong as follows:
  - 1. Batswana- Semi-Arid.
  - 2. Kenya - Savanna.
  - 3. Liberia - Rain forest.
  - 4. Niger - Desert
  - 5. Morocco - Mediterranean.
- G. Create the new groups of two people and hand out tape and scissors to complete project.
- H. Ask students to evaluate the project by comparing the project to Vermont.
  - 1. Which zone(s) is most like Vermont?
  - 2. How are the zones different from each other?
  - 3. How are they alike?

4. Which would you like to live in?
  5. How would you dress if you lived in the rainforest savanna, semi-arid, desert and mediterranean? List on the board.
  6. Have you worn any of these clothes in the past year?
  7. What other types of clothes have you worn? (special club uniform, sports).
  8. How do girls dress differently than boys?
  9. How do we dress like people from other nations?
- I. Explain to the students that they are going to examine sketches of clothing that people from Swaziland wear and try to match the clothing with the description of Swazi customs and traditions just as the would match an American in a graduation gown to graduation. Remind the students that some clothes are worn in many different settings just like American blue jeans and t-shirts.
  - J. Explain to the students that as the teacher reads they are to try to determine the custom that goes with the sketch. Tell the students there is no perfect match. Some customs or sketches will be left over.
  - K. Hand out Swazi Customs (3-E) and the Sketches (3-I).
  - L. After the students complete their attempt to match customs with dress, have them share their results with the class.
  - M. Ask students to compare Swazi dress to American dress.
    1. What is unique to Swaziland?
    2. Do Americans have a "traditional dress" in the same sense as other countries?
    3. What is the relationship between dress and culture?
  - N. Close lesson by reviewing the different weather zones of Africa and reinforcing that every country has a special way of dressing.

V. EVALUATION

- A. Finished weather map.
- B. Knowledge expressed about dress and customs.

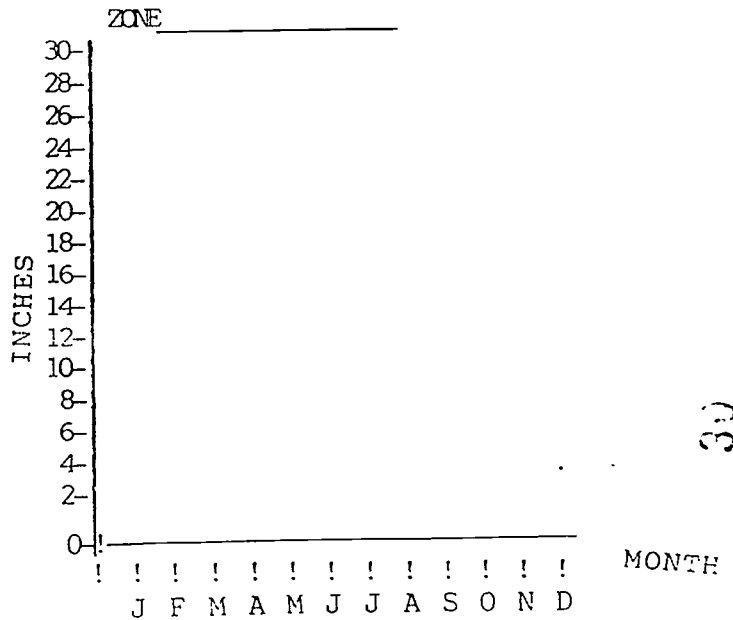
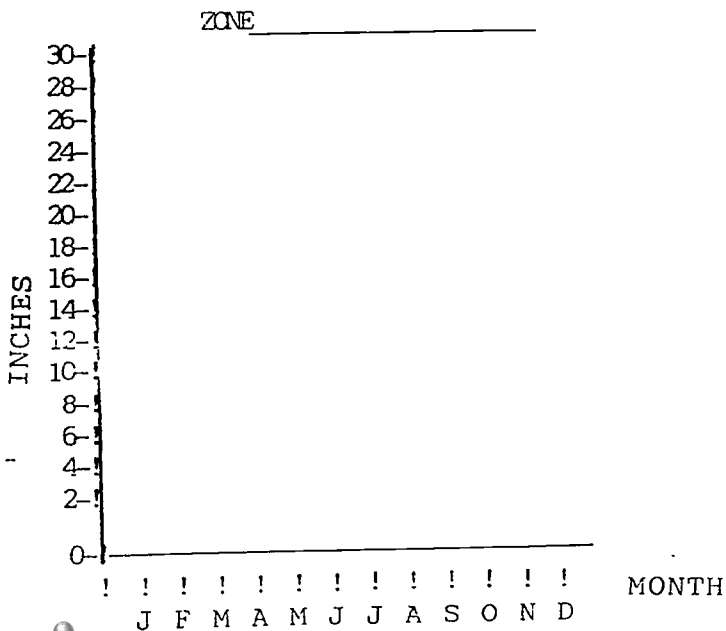
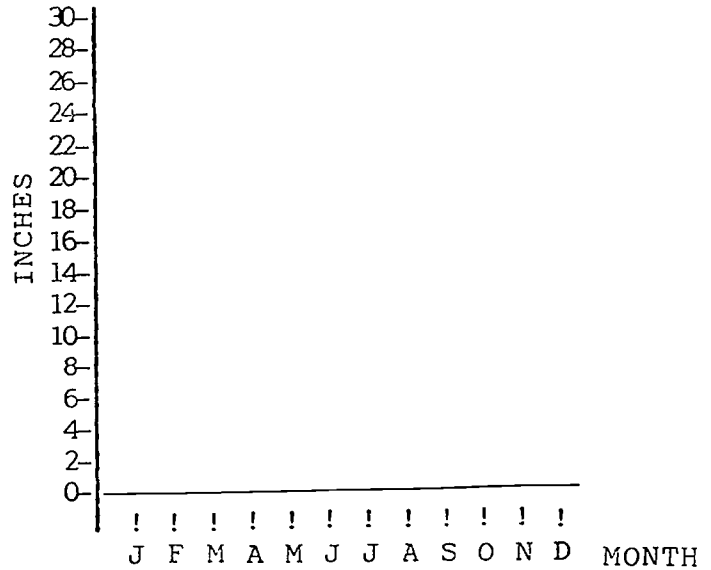
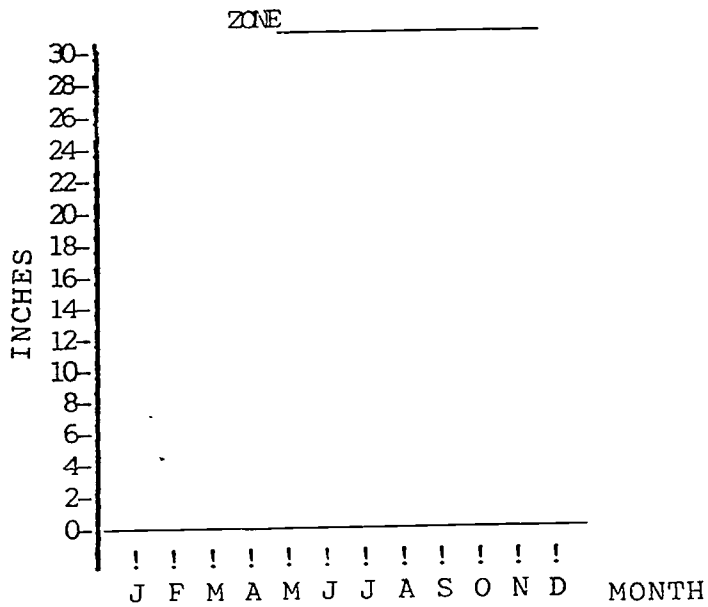
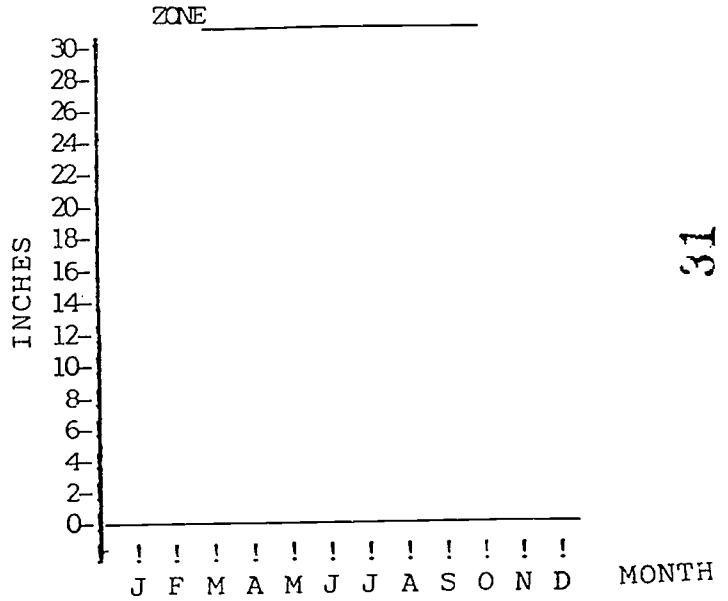
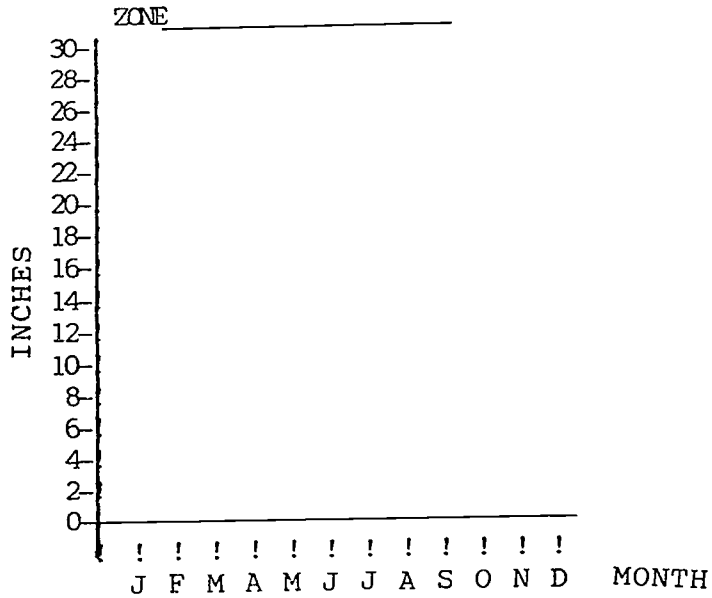
VI. METHODS USED ON THIS LESSON

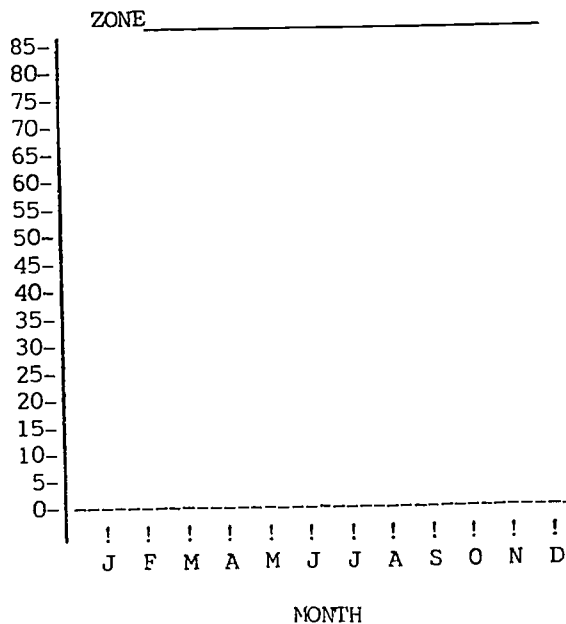
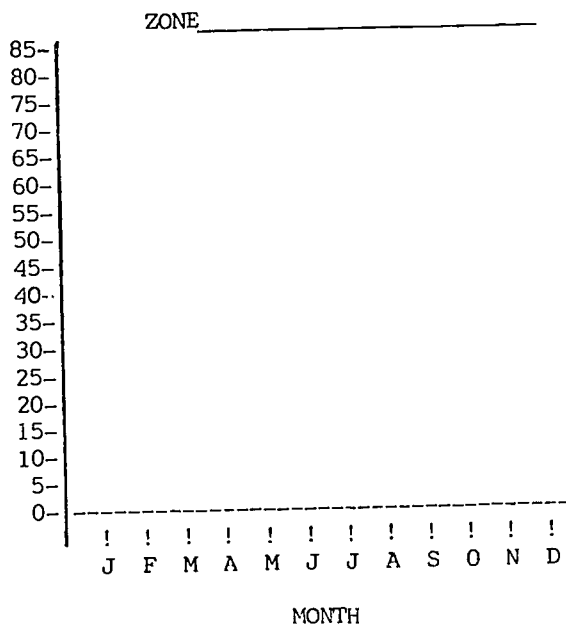
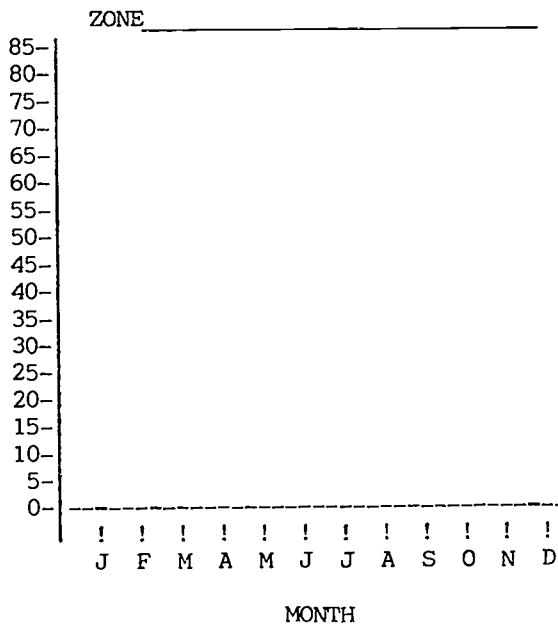
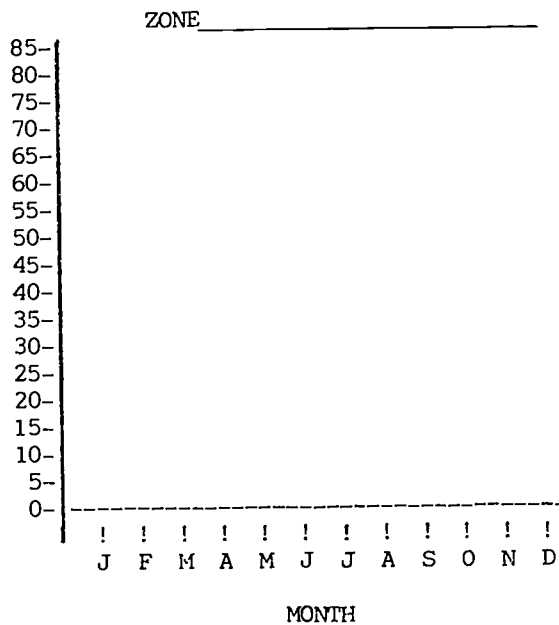
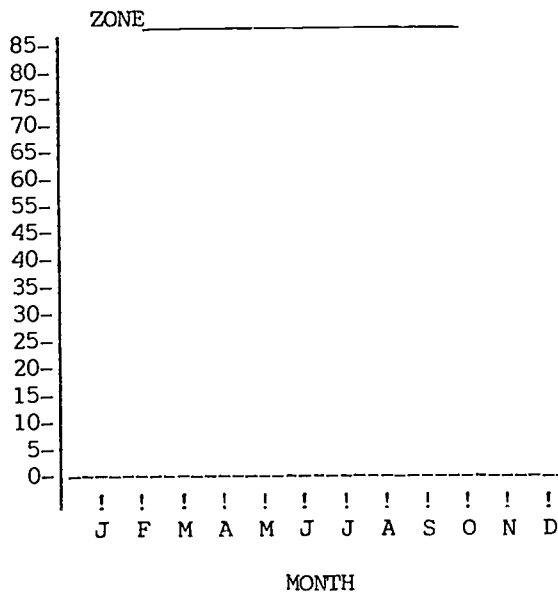
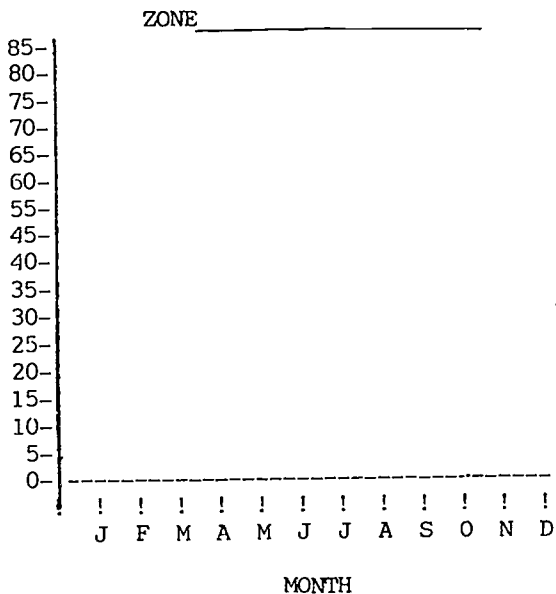
- A. Many methods are used in this lesson among them are the following:
  - 1. Hands-on, cooperative learning, discussion, review, graphs, shared reading, compare and contrast.

VII. RESOURCES

Caldwell, C. and Cladwell, E. (1961). Our Neighbors of Africa. The John Day Co.: N.Y.  
N.Y.

Graff, E. (1980). Africa. Cambridge Book Co.: N.Y.





ATTACHMENT 3-C

RAINFALL AND TEMPERATURE

Plot the rainfall and temperature in the graphs.  
Decide what amount of rainfall and what temperature belongs to each weather band and place it on the map.

ZONE A Francistown, Botswana

Temperature in F

Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
88			83			75			90		

Rainfall in inches (15")

Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
4	3	2	.7	.2	.1	0	0	0	.9	2	3

ZONE B Nairobi, Kenya

Temperature in F

Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
77	78	77	75	72	70	70	70	75	75	73	73

Rainfall in inches (37")

Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
2	3	5	8	6	2	.6	.9	1	2	4	5

ZONE C Monrovia, Liberia

Temperature in F

Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
89			90			80			80		

Rainfall in inches (174")

Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
.2	.1	5	12	13	36	24	19	30	25	8	3

ZONE D Bilma, Niger

Temperature in F

Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
81			111			108			101		

Rainfall in inches (0.9")

Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
0	0	0	0	0	0	.1	.5	.3	0	0	0

ZONE E Casablanca, Morocco

Temperature in F

Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
63			69			79			76		

Rainfall in inches (16")

Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
2	2	2	1	.9	.2	0	0	.3	2	3	3

## The Weather in Africa

The equator is an imaginary line around the middle of the earth. In countries near the equator it is hot, and there is lots of rain.

The equator crosses the middle of Africa. The weather is hot, and sometimes it rains and rains and rains. The countries on the parts of Africa near the Atlantic Ocean and the Indian Ocean are always hot and wet.

The people who live in the middle of Africa have better weather. This is where high mountains are seen. In high places it is cool and pleasant.

In America we have fall and winter, spring and summer. In most parts of Africa the people know only two seasons. There is the rainy season when it may rain for days and days, and the dry season when the skies are clear.

Hot weather with much rain makes trees grow fast and tall. There are many palm trees in the hot parts of the world. If you lived in Africa you might climb a palm tree to get the coconuts.

In the deserts little rain falls, and the weather is very hot. Trees and flowers will not grow if there is no rain. But here and there in the desert there is a place called an oasis (oh-AY-sis). An oasis is a place where there is a spring of water or a well. The people who live in the desert build houses near an oasis.

Here is another interesting thing about the Africans who live in the desert: They ride camels. Farmers in the desert use camels to pull plows.

Part of Africa is south of the line called the equator. In parts of the world south of this line it is summertime when we are having our winter. And when we are having our summertime, it is the cool time of the year there.

In America, birds build their nest during spring and summer. But in many parts of Africa, the birds build their nest when it is fall or winter in our country.

Africa is an interesting continent. There are deserts where it is hot and dry. In the jungles or bush country, it is hot and wet.

In the middle of Africa, the weather is cool. There are high mountains covered with snow. The highest mountain is named Kilimanjaro. It is in the country called Tanzania and is 19,340 feet high.

Caldwell, J. and Caldwell, E. (1961). Our Neighbors in Africa. John Day CO.: N.Y., 10-14.



## SWAZI DRESS AND CUSTOMS

### The Incwala Ceremony (Marking Consumption of Fresh Fruit)

During the summer season (January), when farm produce is ready for consumption, the Swazi people stage a six-day ceremonial holiday to mark the consumption of the fresh fruit of the season and give thanks to God for giving them rain and protecting their King's health throughout the year. This ceremony takes place every year. Swazi have a king as their political leader. They have high regard for their king and each clan has some blood ties to him. The king to them is a father, and God-given leader. He is the one who plays a significant part during the *incwala* ceremony. People from all walks of life in the country converge at the King's Residence (Lobamba) to celebrate this festive seasonal ceremony. They wear special kinds of clothes. The warriors, though non-aggressive, carry war gear, and a shield, (symbolizes protection) and a black stick (symbolizes dignity). They also wear capes made of oxtail ends sewn together. The King and male members of the royal household wear leopard skins around their loins. Ordinary men wear treated buckskins.

Throughout the six days there is singing, dancing, and festivity. There is food for everyone. During the main day of the ceremony, the King will eat a specially prepared dish from the fresh farm produce of the season. This ceremony goes with some African rituals. All groups of people play a part in the success of this ceremony, e.g., teenagers would have gone to the bush (rural areas) to cut branches of a certain sacred tree, older men would have used the branches to make an enclosure where the King performs all the rituals of the day. After the King has eaten his specially prepared meal, which is composed of yam (special kind of pumpkin), his subjects will be permitted to start eating new farm produce of that season. This is a very old custom which was started many, many years ago but is still cherished and practiced by the Swazi people today.

### Clothes and Occupations in Swaziland

Many Swazi have modern sector jobs in industry, business, banking, health care, education, and so forth. The clothes they wear to these jobs are usually chosen for ease and convenience. Swazi have been greatly influenced by western styles of dress.

### Birth of a Child

After a woman has given birth to a child, she and her child have to remain indoors for three months. After three months, the child may be introduced to the outside world. That is when the father sees his child for the first time. It is taboo for any male to see a child that is less than three months old. During the months the mother is in seclusion, (i.e., three months after giving birth), she is not expected to cook for the family for she is considered unclean. Her sisters may come to her family to play her role. She is further expected to abstain from sexual intercourse for six months. Immediately after the child is introduced to the outside world, a family traditional healer comes and strengthens the young baby with strong medicines so that the baby will be able to resist the evils of the outside world. A day will be announced when friends and relatives will come and see the child. Everyone will wear their best clothes. They will bring gifts for the child, and an older member of the family will announce its new name. An animal will be slaughtered and there will be feasting to celebrate the birth of the child.

### Death Custom

When a member of the family dies, relatives are informed. They will come to the family of the deceased to mourn. Funeral arrangements will be made. If the deceased is a member of the royal family, he will be buried in the ground. If he is not, he will be buried in the ground. All family members and relatives are to observe a mourning period of six months for a young person and a year for an adult. Special mourning clothes are worn by women during the mourning period. Men are exempted from wearing mourning clothes because it is believed that they may be called at any time by the King for state duties, e.g., defending the country.

After the mourning period is over, a traditional healer will be called to perform a cleansing ceremony in which mourners will be cleansed from bad-luck and other spirits.

### Marriage and Children

The Swazi custom allows men to legally marry more than one wife at the same time. A long time ago parents arranged marriages for their sons and daughters. Nowadays this custom has changed due to a number of reasons, many involving Christian beliefs and the trends of modern culture. The ever-increasing cost of living has discouraged men from marrying more than one wife at the same time. Only 8% of Swazi men are married to more than one wife today.

If a man marries a woman, he is expected to pay dowry for her to (about 15 head of cattle). This is done as a sign of appreciation to the woman's parents for raising their daughter well. At the same time, the man shows that he values his wife, he will maintain and protect her at all times. The marriage will not be recognized as legal until dowry is paid. In Swazi custom, a man and wife get married because they want to have children. Children are highly valued in this society. A married couple that finds difficulty in having children are of great concern to members of both families. Traditional healers and medical doctors would be asked to help. If the problem is with the woman, her parents may give the younger sister of his wife to marry and raise children on behalf of the infertile wife. In this case a man will have two wives at the same time. If the problem is with the man, he could be asked to help raise children on behalf of his brother.

Children are highly valued and considered important human resources who will lead the country tomorrow. Hence, their health, safety and education is the concern of every member in society. Parents who abuse their children are shunned, punished, even exiled from the society. Children who do not show respect to property and members of the society are also punished.

### Umhlanga (Reed) Dance Ceremony

Young maidens (12-16 years old), are summoned by royal command annually to participate in the cutting of reeds which are used in the building for windbreaks of the royal residence at Lobamba. Knives are used to cut the reeds.

The day of the Reed Dance ceremony is soon after the delivery of the reeds and the day is declared a national public holiday. This ceremony attracts people from all over Swaziland and tourists from neighboring states, especially from the Republic of South Africa. The *Umhlanga* ceremony is held in September, winter in Swaziland.

### Sibhimbi

The *Sibhimbi* celebration can be held at any time of the year to celebrate any important occasion in a community or chiefdom. Women feature prominently in this ceremony, which is characterized by singing and dancing and feasting.

The ladies are colorfully dressed, especially their tops (*mahiya*), which are made of cotton fabric. The black skirts are made of pleated ox-hide. The skirts are perfumed regularly. Also there is white string edging some of the women's hair. The white string is a symbol showing that these women are married. Red is the dominant color because it is considered bold and attractive.



People of Swaziland.



People at work in Swaziland.



**Africa Has Many Climates.** What is "climate?" The kind of weather a place has year after year is called its *climate*. A climate is characterized by how much rain a country receives; how hot or cold it gets during the year. Climate is influenced by its nearness to the equator, altitude above sea level, nearness to bodies of water, and the existence or absence of ocean currents.

Africa has many different climates. Since the equator cuts across the middle of the continent, you would think that much of Africa is very hot. You would be correct—if it were not for the fact that the heat is balanced by the height of the plateau that makes up a large part of Africa. Places near sea level are warmer than those higher up on Africa's many plateaus.

There are five major types of climate in sub-Saharan Africa: (1) Tropical rain forest, (2) Savanna, (3) Semi-arid, (4) Desert, (5) Mediterranean.

**1. Tropical Rain Forest.** This type of climate is characterized by heavy rainfall and high temperatures throughout the year. The air is hot, steamy and damp; the humidity is always high and there is very little wind. It is not a very healthful place to live.

About 15 percent of the continent has a tropical rain forest climate. One part stretches across Africa for 400 miles on both sides of the equator, mainly in the Zaire River basin. A second area is in West Africa, along the coast of Sierra Leone, Liberia and the Ivory Coast. The third area is on the east coast of the Island of Malagasy, formerly called Madagascar.

Rain falls almost every day in this climate. At least 60 inches of rain fall in each year. Sometimes as much as 100 inches a year fall, and there is no period that can be called dry.

This type of climate has produced the great dense equatorial rain forests sometimes called jungles. From an airplane you would see that the trees form a sort of uneven canopy. They tower to a height of 100 to 250 feet, and are so thick that they actually shut out the sunlight. The dense forests and jungles make travel difficult.

**2. Savanna.** The savanna covers about half of the sub-Saharan continent. It lies on both sides of the rain forest in a belt about 600 to 700 miles wide. The northern part, called the Sudan, stretches across Africa from Senegal on the west coast almost to Somalia on the east coast. In the south the savanna extends below the rain forest into the Republic of South Africa.

The savanna is covered with coarse grass, five to 12 feet high, with bushes, shrubs and trees scattered throughout. During the wet season, 35 to 60 inches of rain fall. The grasses grow tall and thick and form a tangled area through which it is difficult to travel. In the dry season, which lasts for about three months, there is little or no rain.

Big game animals abound in the savannas. The lion, antelope, elephant, rhinoceros, giraffe, gnu, zebra and many other large animals roam freely through the savannas. Big game hunters on safari were killing so many animals that the government set aside national parks and game preserves to protect them. Kruger in South Africa, and Tsavo, Lake Nakura, and Serengeti are some of the most famous game preserves.

**3. Semi-Arid Climate.** This is sometimes called a tropical steppe climate. It is like the savanna in many ways with one important difference: the dry season is much longer than in the savanna climate. As a result the grass is much shorter and the trees fewer in number.

Africa has two areas in which this type of climate is found. The northern part is between the Sahara Desert and the savanna; the southern part lies in the Republic of South Africa and Namibia.

**4. Desert.** Africa has two deserts north of the equator: the Sahara and Libyan deserts. Together they make up the largest desert in the world. The Kalahari lies in the southern half of Africa, in Namibia and Botswana.

Here there is almost no rainfall—sometimes less than one inch a year. There are long periods of severe drought. The heat is intense during the day, but the temperature drops rapidly at night. You may find a few clumps of grass and vegetation; in some areas there is almost no plant life.

**5. Mediterranean.** This climate zone covers a small area along the coast in the Republic of South Africa. (There is also a Mediterranean climate on the shores of the Mediterranean Sea, covering the coast of Morocco, Algeria and Tunisia.)

This part of sub-Saharan Africa has a temperate climate. Its summers are warm and its winters are cool. Rainfall is moderate and the rain falls mainly in the winter months. Since this area is south of the equator, its seasons are the reverse of those in the United States. Our summer is their winter, our winter is their summer. The forests are luxuriant but not as tall as in the tropical rain forest.

**Summary.** The five climates described are not good for agriculture. Large areas are too dry or too wet; the contrast is wide. One million square miles of sub-Saharan Africa get an average of 60 or more inches of rain a year; another million square miles get six inches or less. However, most areas do get between 20 and 80 inches of rain.

Temperatures are fairly constant, but rainfall, as we have seen, is not. Africa's irregular rainfall is a major factor holding back its economic development. Much of the vast Sahara and a large part of southwest Africa have only two or three inches of rain a year. Thus, they are almost barren of vegetation or other living things. Elsewhere rainfall is seasonal; when the wet season is delayed the seed dies in the earth.

In many areas where drought is no danger—as in the region between Zaire and Madagascar where there is too much rain—soils quickly lose their fertility. However, proper irrigation and fertilization are now beginning to correct these problems.





ATTACHMENT 3-H

PARAGRAPHS ABOUT WEATHER

1. In this band heavy rainfall and high temperatures are almost every day. The humidity is high and it is damp. 60 to 100 inches of rain can fall in one year. The land is covered with dense forest and jungle.

2. This band cover about half the continent. It lies on both sides of the rain forest in a strip about 600 miles wide. 35 to 60 inches of rain falls in one year. The land is covered course grass bushes and shrubs.

3. This band is sometimes called the steppe climate. 15 to 35 inches of rain falls each year. The land is covered with short grasses and has several months without rainfall.

4. This band is known for intense heat. Almost no rain falls during the year and there are long periods of sever drought. The land has a few clumps of grass but is basically barren.

5. This band is in the north and south in very small amounts It is temperate with summers warm and winters cool. 10 to 20 inches of rain falls each year. The land has luxuriant forests and pleasant fields.

AFRICA: INTO REALITY  
AN INTEGRATED LESSON

LESSON 4 THE DESERT AND A DAY IN THE LIFE OF AFRICAN TEENS

I. PREVIEW

- A. This lesson explores why the desert is expanding, what man can do to reclaim the desert and how teens live in Africa.

II. OBJECTIVES

- A. At the end of this lesson the students will be able to:
1. Describe why the desert is expanding.
  2. Develop concepts to explain how the desert exists.
  3. Develop suggestions on ways to reclaim the desert.
  4. Identify day-to-day responsibilities of African teens.
  5. Compare the roles of African boys and girls.
  6. Compare the daily lives of Americans and African teens.

III. MATERIAL

- A. Desert experiment.
1. Bleach bottle with the bottom cut off.
  2. Small piece of nylon stocking.
  3. Rubber band.
  4. Glass quart jar with 1/4 cup markings up one side.
  5. Three cups of sand.
  6. One cup pete moss.
  7. Three cups water.

B. Handouts:

1. The Sahara Desert (Attachment 4-A).
2. "A Day In The Life Of..." - six readings (Merryfield, 1989) (Attachments 4-B to H).

IV. PROCEDURES

- A. Review the weather band on the large map of Africa.
- B. Ask students to brainstorm "A desert is or has" List answers on board.
- C. Explain the experiment and behavior expectations.
  1. Behavior
    - a. Do not throw anything.
    - b. Use items as discussed.
    - c. Everyone needs to help.
    - d. Talk softly.
  2. Experiment
    - a. Place the nylon stocking over the spout of the bleach bottle and secure with the rubber band.
    - b. Place bleach bottle on glass jar.
    - c. Fill bleach bottle with sand.
    - d. Before pouring water into bleach bottle suggest possible results.
    - e. Pour water into bleach into bleach bottle. Note results.
    - f. Compare suggestion with results.
    - g. Repeat step d to f.
    - h. Place pete moss on top of sand.
    - i. Suggest possible results.
    - j. Pour 2 cups of water over pete moss. Note results.

- k. Compare suggestions with results.
  - 1. Write five sentences about your conclusions including possible causes of how the desert exists and how to reclaim the soil.
- 3. Divide class into groups for experiment.
- D. Discuss conclusions about experiment.
- E. Read The Sahara Desert (Attachment 4-A) and verify conclusions.
- F. List on the board the answers to the following questions:
  - 1. What would life be like in the desert?
  - 2. What about the Savanna or the Rainforest?
  - 3. What do they do in their day?
- G. Compare the lists.
  - 1. What do you learn about someone from looking at their daily life? (activities, values, interests, responsibilities, roles customs)
- H. Instruct students they are to read the handouts and then locate their person in the map. List the responsibilities their person has to do in their day and any similarities and differences between their person's daily life and American teens.
- I. Divide the class into six groups. Give the readings one to a group. Begin with Ahmed and Momodou because they are the longest.
- J. Have students present their person to the class in a role play of the person.
  - 1. This should include an introduction, showing where they live on the map, and a description of their daily life. At the end of the presentation the class may ask questions.
- K. Ask the class to identify how the lives of these six people are different.
  - 1. How are the lives of the girls different from that of the boys?

2. What are the differences between city and rural life?
  3. Is daily life in the U.S. different for boys and girls?
  4. Do city teens have different life-styles than those in the country?
  5. What are the concerns of the Africans?
  6. What do they enjoy?
  7. What is school like?
- L. Close the lesson by having the students sum up the commonalties between African and American teens.
1. What was the most valued by Africans? (success in school exams, religious worship, pleasing one's parents)
  2. What is most valued by Americans?
  3. What does this lesson tell us about culture and values?

#### V. EVALUATION

- A. Scientific notes from experiment.
- B. Conclusions about the desert.
- C. Accurate presentation of African to class.
- D. Summary of commonalties between American and Africans.

#### VI. METHODS USED IN THIS LESSON

- A. There are many methods used in this lessons the following are just a few:
  1. Hands-on, cooperative learning, discussion, role playing, compare and contrast, review, brainstorming.

#### VII. RESOURCES

The Grolier Society, (1951). Land and People. The Grolier Society: N.Y.

Life Nature Library, (1964). The Land and Wildlife of Africa. Time Inc., Morristown: N.Y.

Lye, K. (1987). Today's World-Africa. Glouchester Press: N.Y.

Merryfield, M. (1989). Lessons From Africa. Indiana University: Indiana.

## THE SAHARA DESERT

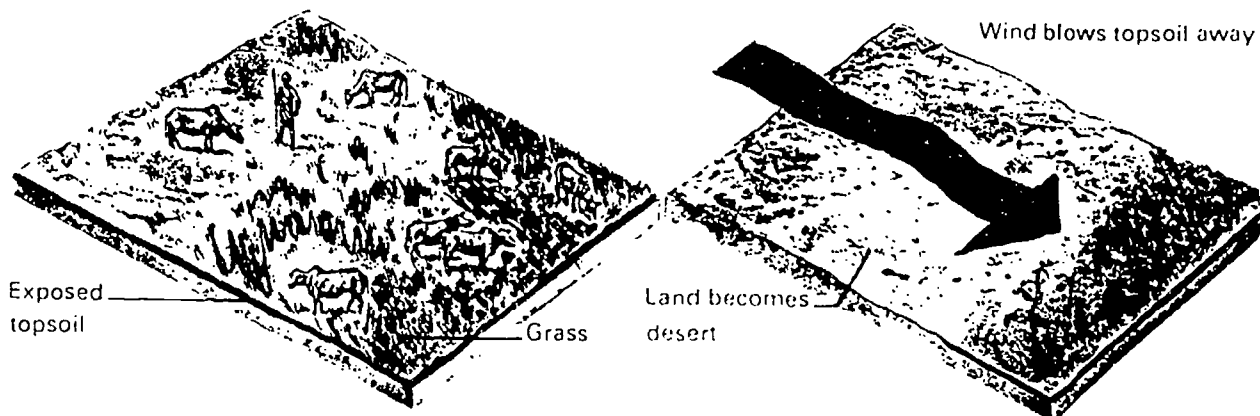
Was the land always this way?

The fact that this area has been waterless for centuries is present in the name the Arabs called it, Sahara means desert in Arabic. Yet centuries ago the Sahara did not cover half of the continent of Africa. In fact pictures by prehistoric man on desert walls show animals eating leaves and grasses in the wetter country than now surrounds these rocks. Also in the desert oases, or watering holes, fresh water fish are found that could have only gotten there by streams long ago since vanished. The whole story of the desert hasn't been worked out yet but history tells us of corridors of greener, more livable land running through and around the desert at various times in the past. Some of these corridors were used as trade route between North and West Africa and only vanished in the recent past.

How did the Sahara become so large?

Perhaps it began much like our Dust Bowl in the 1930's. The wind blew across miles of drought-parched, over-cultivated soil and carried it in a black blizzard that changed the course of the land forever. Once the wind subsided, it left behind a barren landscape of ruined farmland. So complete was the land stripped of it's fertile top layer that the people packed up and moved on. As the wind blew across the loose topsoil not protected by plants, small particles were caught up by the force of the wind and rolled along the surface moving the newly formed desert into new areas. This rolling action is the principal means of the desert advancing.

The wind moves the sand in a creeping movement along the surface. The various sizes of rock too large to be picked up are pushed along at different speeds along irregular paths. It is this movement that causes the small ridges and troughs that form the rippled look of a sand dune.



Sand that is picked up by the wind is not carried by it forever. Whenever the wind speed drops, some of the sand is deposited. Since even the slightest mound on sand will slow the following winds, even more sand will be deposited in the same place by successive winds. Through this process, a dune will be built up with a leeward slope. Sand on the windward slope is blown over the crest, and the dune moves forward.

There are hundreds of square miles of shifting dunes in the Sahara. These have been formed during very long periods of erosion and accumulation of sand.

Is the Sahara still growing?

Between the late 1960's to the 1980's severe drought has occurred in the Sahara. These dry conditions combined with over-grazing and the removal of trees for firewood, laid the soil bare. Winds now move the loose top soil and turn large areas into new desert. In some areas the Sahara advances 31 miles each year.

Is there any thing man can do?

Man cannot control the wind, but he can minimize its effects on the land. History has taught him that he cannot rip away the ground cover, overwork the soil and expect the land to resist the wind.

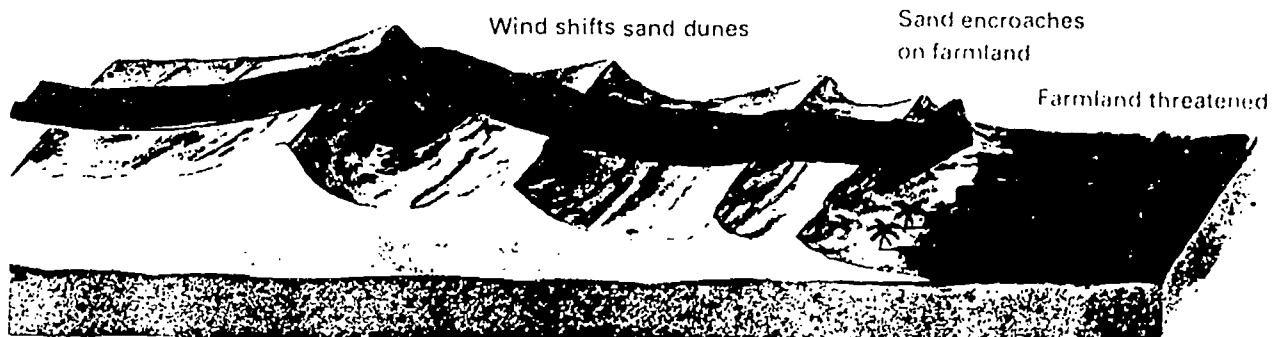
Modern man has developed three main ways to meet the problem of wind erosion:

1. They do not plant all the available land. They leave strips unplanted so that ground cover can grow and help hold the soil together. Sometimes they even plant grasses with root structures that can resist the force of the wind.

2. To cut the speed of the wind, they plant rows of tall trees perpendicular to the wind direction and very close together to form a wall against the wind.

3. They further assist nature by using watering techniques, which allow the free flow of water to the area. With a steady water supply, the soil is held together, ground cover can grow and flourish, and less of the soil will be blown away by the wind.

By using these advances, modern man could reclaim the Sahara desert and recreate the wetter, greener land it once was.





RESOURCES:

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### A DAY IN THE LIFE OF AHMED OF KHARTOUM, SUDAN

Ahmed lives in Khartoum, the capital city of Sudan in East Africa. He lives with his father, mother, two sisters, and two brothers. Ahmed attends a middle school for boys that is within a five-minute walk from home. He is 13-years-old and in the seventh grade. He is very lucky to get a place there because he obtained a high score on the competitive examination of Elementary Schools Certificate for Khartoum District. Not all of the elementary school boys have this chance. Only about 70% of the elementary school sixth graders who obtained the Elementary School Certificate can manage to find places in middle schools. Most of the remaining 30% will stay in sixth grade to have another chance to take the Elementary School Certificate. A few drop out and seek apprenticeship in different jobs, such as carpenters, ironsmith boys, clerks in small shops, etc.

On this day Ahmed got up from bed in the very early morning. Usually most people wake very early because they listen to "Azan" calling "Allahu Akbar" (God is good) on microphones from the mosques. The calls are reminding the people that it is time for their morning prayers. "Azan" is a religious calling used by Muslims to remind the people to pray. It is like the bell calling people to worship in Christian churches.

Ahmed is a Muslim. Muslims are those people who affiliate with the religion of Islam, one of the great religions in the world. Besides the mosques you can also find some churches in Khartoum. Most people of East Africa are either Muslims or Christians, although some continue to believe in their indigenous religions.

After saying his morning prayers at home, Ahmed goes to buy bread for the day from a nearby bakery. This is one of his responsibilities. From this bread his mother or one of his older sisters will prepare his breakfast: a sandwich of java beans, mixed with some cheese and tomatoes. His other brothers and sisters also share home responsibilities under the supervision of their mother, such as cleaning, dishwashing, cooking, or washing clothes.

After taking (drinking) his morning tea, Ahmed gets dressed in his school uniform. This consists of khaki shorts, a white short sleeved shirt, sandals or canvas shoes and stockings. Ahmed's father pays for his school uniform. Some fathers buy ready-made uniforms and some get them tailored. School uniforms are the standard dress for all middle school boys. If a boy is not dressed in that uniform, the principal and teachers will not allow him into the school. All Sudanese schools have uniforms. Each secondary school and elementary school has a uniform of its own. Uniforms are worn in most of the schools in other countries of East Africa, including Kenya, Somalia, and Uganda. Ahmed also checks on his school bag to make sure that all of his textbooks for that day's lessons are there.

Ahmed's friends come to walk with him to school. He walks to school with some others who live nearby. Other students come to school from far places in the city of Khartoum. Some take buses and some ride their bicycles. All students have to be in school at 7:00 a.m.

From 7 to 8 a.m. all students are involved in the morning club activities under the supervision of their teachers. Clubs or "societies" are organized around activities such as Maintenance of School, School Health, School Gardening. By organizing into such clubs, middle school boys help keep the school looking beautiful. It is time for Ahmed's morning time activity with the School Health Club. The club agenda includes cleaning the school and classrooms, providing emergency medications, writing a small newspaper on health, bringing necessary information on health from the Community Health Center and checking out names of school boys who are sick and want to see the doctor. Today Ahmed and some other members sweep and clean their classroom and then clean and fill jars with the day's drinking water.

The first lesson begins at 8 a.m. Every lesson lasts for 45 minutes. As usual, the first lesson is math. Ahmad shows his math homework from yesterday to the teacher. During a five-minute break after the math lesson, Ahmed prepares for the next lesson by taking out his English textbooks and notebook from his class desk. This is his first year in English. Arabic is his language. It is very difficult for him to learn English. He

knows that he must work hard in English in order to go to college.

Besides English and math, Ahmed studies history, geography, Islāmic Studies, Arabic language, and Arabic literature. In geography he studies the USA, Europe, and Australia. In history he studies the civilization of Islam and Sudanese history.

It is 9 o'clock now, time for the breakfast break which lasts for one hour. Students are rushing out of classes to the "buffet" place to buy sandwiches of "foul" (beans) or cheese. Students can buy a Pepsi-Cola or a cup of lemonade. Ahmed is not, however, able to buy himself a drink daily because he does not have enough money. In the courtyard of the school, students sit on the ground and share breakfast with friends.

Ahmed received all his textbooks and notebooks free from the school bookstore at the beginning of the school. Books are published and distributed by the government and the people pay taxes to get free education for their children. His books are paperbacks and often get torn. Ahmed tries to return his books in good shape because otherwise he will be penalized.

Ahmed's classroom is rectangular in shape with 50 to 60 student desks facing one side of the class. It has two doors and five big windows. In the front there are two blackboards, the teacher's desk and some wall maps of Sudan and the world. Some posters of English grammar, fine arts drawings and math charts hang on the other sides of the classroom.

Teachers can hardly find ample space to move in between the rows. Khartoum schools are very crowded. This is not the case in the villages. Many people migrate and live in Khartoum and send their children to urban schools. This migration makes Khartoum schools very crowded.

The school day breaks at 1:30 p.m. All students go home for lunch. It is very hot at this time of day. Temperatures usually reach up to 33 degrees centigrade in winter (over 100 degrees Fahrenheit) and can go up to 45 degrees in the summer. All market places and other workplaces will close at this time of the day because of the heat.

At lunch time Ahmed helps in arranging the men's lunch table for the afternoon meal. He and the men take their lunch in a separate room in the house. Usually women don't eat with men. It is an accepted custom of the Sudanese way of life that different sexes eat separately.

After saying his afternoon prayers Ahmed is ready to return for the afternoon session. In this session, which lasts for two hours (between 4 and 6), Ahmed will play some sports. Sports are coached by teachers. They include soccer, volleyball, basketball, and table tennis. Being the captain of the school soccer team, he has to leave early for school so he can organize his team members in the game.

At sunset "Azan" for "Maghri" prayer is heard. Students stop playing and go and wash to be ready for group prayers.

Classes start again after sunset. Ahmed will go to class for revision (review) of today's lessons in preparation for the next day's lessons. Two to three teachers will be on duty to help the students with their studies.

At 8:30 p.m. Ahmed finishes a long busy day in the school. He walks back home with some of his friends. When he arrives at home, he can hardly find time to watch TV before he goes to bed. However, his family does not encourage him to watch TV very often. They always urge him to go to bed early so that he will be rested and alert for tomorrow's work.

## A DAY IN THE LIFE OF MOMODOU OF BAKAU, THE GAMBIA

Momodou is a twelve-year-old boy who lives in Bakau, a small town located on the Atlantic coast near Banjul, the capital of The Gambia. Serin, Momodou's father, is a fisherman. Momodou goes to school in a local primary school in Bakau. He has just sat (taken) the Common Entrance Examination. If he passes, he will go to the Gambia High School, the most prestigious high school in The Gambia. Momodou is an intelligent boy, and he is likely to pass this exam with high marks. Last year he did very well in school as he came in first in the class's final exam.

The day is Thursday and Momodou has awakened at 6 a.m. It is quite early for him, but he has to be in school by 8:30 a.m. His mother, Awa, has been out of the house where she was heating water for Momodou and his father to bathe with. Momodou and his family live in a compound (house and grounds) which does not have a standpipe running water. Their house is well built, but does not have a bathroom and a kitchen in it. Every morning, Momodou has to go to a separate building outside of their house to bathe. That is the bathroom which was built several years ago when Momodou was not even born.

Momodou's father is a Muslim who insists on the family praying together at least twice during the day. Usually in the morning, a few visitors go through Momodou's family compound on their way to the nearby mosque. Earlier in the morning there have been calls from the mosque through a loudspeaker to call people to pray. Every morning Momodou hears a Muezzin, or prayer caller, using the mosque's loudspeaker to call people to prayer. This morning, Momodou is late and he quickly rushes to the house where his father is waiting for him. He puts on his kaftan, the long dress he always wears for prayer, and follows his father to the mosque. As the prayer is just about to begin, Momodou and his father are there just in time. The prayer is not so long, and Momodou enjoys every bit of it. He sees some of his friends who also go to the mosque with their fathers. Momodou's mother, Awa, prefers to pray at home. She is a very busy woman in the mornings. She has to pray quickly so that she can prepare breakfast for Momodou and his father. They come back home from the mosque just in time for breakfast.

On returning to the house, Momodou says, "Good morning," first of all to his father and then to his mother. Both of them reply back sweetly. Awa then gets a big bowl full of porridge for Momodou and his father. When they are about to start eating their breakfast, cousin Buba arrives, and he gladly joins them for breakfast. The breakfast bowl is big and round and the porridge is made out of coos (coos, a type of cereal, brown in color and grown in West Africa). The coos is usually pounded, then the pounded floury coos is made into small balls and cooked. Sugar and sour milk are added to the final product. Some bread and butter is also served. The breakfast was really delicious and Momodou eats plenty.

It is now time for him to leave for school. The school is just about 15 minutes away from their home. Momodou walks to school every morning. Just as he was putting on his uniform, (all students in The Gambia wear uniforms to school) which had been cleaned the previous night by his mother, his friend Dudu comes around on his way to school. The two of them share the same desk at school. They leave for school together and walk fast. Momodou remembers the day when he was severely caned by the headmaster for coming to school late. To cane one is to beat with a stick called a cane. He was so severely caned that he was ill for a few days and could not go to school. It was soon after that incident that the Director of Education made a law forbidding teachers to cane students in school. It is only the headmaster who can cane students, and he is not allowed to cane them severely. Dudu was also once caned for arriving late in school. This was because Dudu told his teacher that he had accompanied his elder brothers to an all-night vigil commemorating a Muslim feast. The teacher thought that Dudu should always go to sleep by 8 p.m.

The two boys arrive in school just on time and go to stand in a general assembly with all the rest of the students. The headmaster, a big man, comes forward and leads a prayer in English. Although Momodou is a Muslim and had earlier gone to the mosque with his father to pray, he has to pray again in school, this time with the Christian Bible as a guide. This is because Momodou's school is a Christian school run by Catholics. For Momodou and his other friends who are Muslim this is acceptable as they enjoy hearing the stories in the Old and New Testaments of the Bible. On weekends and on certain days during the week, Momodou

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attends a local Koranic school where the Arabic language and the Koran are taught. The Koran is the Holy Book of the Muslims.

Momodou likes his school very much. He admires his teacher, Mrs. Secka. Mrs. Secka is a very good teacher and she encourages Momodou to do well in school. The class has already sat to (taken) the Common Entrance Examination, and so there is not much to do. The Common Entrance Examination is sat at the end of the last grade of elementary school in The Gambia. This examination determines whether or not a student will enter into secondary school. There are two types of secondary schools in The Gambia. These are the Secondary Technical Schools and the Secondary High Schools. The Secondary High Schools are very prestigious. A student who wants to enter a Secondary High School will need to score a mark of about 300 or higher in the Common Entrance Exam, whereas those who will be going to Secondary Technical Schools will need to score at least 200. Those who score below this are completely disqualified from entering secondary school. They either repeat the exam or drop out of school altogether.

It is however, going to be a short day. School is to close at noon instead of at 2 p.m. because the following day is going to be a public holiday, and the headmaster thought that school should close earlier. It is going to be All Saints' Day, a Christian Feast. Mrs. Secka decided that she should teach only social studies. The class is going to study about a sacred pond in Bakau called *Katchikali*. The class is going to visit this place. *Katchikali* is a small pond which has a lot of shrubs and bushes inside it. It is the home of several crocodiles and it is believed to be the most sacred place in Bakau. People visit the place to worship the crocodiles. It is believed that if one prays to the crocodiles, one would one day achieve his or her lifelong wishes. Many people go there to pray in order to become rich or to attain high status. Momodou is certainly going to enjoy this visit. He is particularly interested in seeing the crocodiles. He has never seen crocodiles before and, although he has always lived in Bakau, he has never visited *Katchikali* before.

The class walks together to *Katchikali* and looks at two big crocodiles lying on the banks of the pond. They are still and have their mouths wide open. Momodou is not afraid and even wants to go near them. He is quickly stopped by Mrs. Secka who thinks it is very dangerous for anyone to try to get near those creatures. The crocodiles, however, appear to be harmless.

The end of the visit coincides with the school's breaktime which is 10:30 a.m. At break, Momodou and his friends are going to share their lunches. There are a lot of women who sell different types of foodstuffs in the school yard (boiled cassava, rice, pounded cassava known as *fufu*, yams, bananas and plantains, bread and soup). What a variety there is! Momodou was given some money earlier that day and he decides to buy some boiled cassava (similar to potatoes) and palm oil soup. His friends also buy bread and other dishes. It tastes really good! They have a good meal and everyone is happy. The break lasts for 30 minutes.

Back in class, Momodou and his colleagues are asked by Mrs. Secka to write a short composition describing their visit to *Katchikali*. Momodou writes an account of what he saw in *Katchikali* and draws a big crocodile in his exercise book. Mrs. Secka was very pleased with him and called him a good boy.

At last school ends at midday and Momodou goes home. He seems to be tired, even though it has been a rather short day at school for him. The visit to *Katchikali* overshadowed every other activity so far that day. At home, Momodou's mother is still in the kitchen preparing lunch for the family. His father is not at home and Momodou is not sure where he is. However, Momodou expects him to be home by 2 o'clock, lunchtime. Momodou would not eat lunch alone. He has to share the same bowl with his father, plus another male family member or friend. Usually the male members of a family eat from the same plate or bowl, and it is the same custom for the females to eat together.

Meanwhile, Momodou tries to help his mother in the kitchen. He washes a few dishes and watches his mother prepare jollof rice. If his father was around at that time he would probably not be in the kitchen. His father wouldn't want to see him there, since a boy is never expected to work in the kitchen. The kitchen is only for girls! Momodou's father soon returns home. He had indeed been selling fish in the market. The previous night, he caught so much fish they could not all be sold at once. He was able to sell all of the



finally. On returning home, the first thing he asks Momodou is to be told what went on at school. Momodou tells him about *Katchikali*. Serin is very impressed at the way Momodou vividly describes what he saw. He saw a crocodile for the first time in his life and was not afraid. Serin is certainly proud of his son and thinks he will grow up to be a brave man. He is very pleased that Momodou is able to describe so much of what he has learned in school that he decides that Momodou should go with him in the canoe that evening for fishing. It will be the third time that Momodou has been allowed to go out fishing with his father. He is not afraid of the sea. He learned how to swim when he was six years old.

It is time for afternoon prayers and soon the prayer caller's voice is heard from the mosque. Momodou and his father are soon ready and go to the mosque. When they return to the house it is time for lunch. As usual, Momodou eats from the same bowl as his father. The food is put outside the house in the middle of the compound and everyone eats to their satisfaction. It is jollof rice, and it tastes very good. Momodou thanks his mother for preparing the meal and thanks his father, too.

Serin usually rests on his bed after lunch and this time he asks Momodou to go out and fetch a new net that he has bought from a friend's house. When Momodou comes back, it is time to go out fishing. He is very excited indeed. Normally, he would at this time go to the home of Mrs. Secka for private tutoring. Since he has already sat the Common Entrance Examination, his father feels that there is no more need for private tutoring.

On the beach there are lots of other fishermen with their canoes of different sizes and shapes. Momodou's canoe is one of the largest and there are twelve other men in it who work for Serin. They are all pleased to see Momodou, and six of them give him some money.

Fishing today is a most interesting activity. The canoe has a powerful engine that is able to drive it very swiftly and very far into the ocean. It is all very marvelous for Momodou. As the canoe is moving, Momodou's father and the other men are throwing their nets into the water. The nets range in size from 10 feet to 40 by 40 feet. Momodou is also given a small net which he put in the water. From time to time the men pull back their nets into the boat filled with fish. For a long time, Momodou's net does not catch a single fish. He suddenly begins to feel that there is something inside his net. He pulls it back and of course it is a big fish--a catfish--the biggest fish caught that day.

At last the fishing is over, and the canoe returns to the beach with many fish, in fact, far too many for Momodou to imagine. After going to pray at the mosque with his father, Momodou goes home, eats peanut butter soup and rice for supper with his father and goes to bed at 9 p.m. What a nice day for Momodou.



Momodou on his way to the mosque.

## A DAY IN THE LIFE OF GEDI, A NOMAD OF NORTHERN SOMALIA

My name is Gedi. I am a 13-year-old Somali boy. I live in a semi-desert area of northern Somalia in East Africa. We are now grazing our camels near Bukan.

I live with my parents and I have a sister and a brother. We have fifty camels which my family uses to earn our living. We get milk and meat from camels for our food. We also use camels for transportation, and we sell them for money.

In my home I have many responsibilities. I usually wake up very early in the morning, 6:00 a.m. Today, which is Tuesday, for some reason which I can't explain to you, I overslept and my mother woke me up at last when she rushed into my room and called me loudly, "Gedi wake up! It is time to milk the camels." I woke up and put on my clothes. I washed my hands and face and went to milk the camels. I did the milking as quickly as possible. After finishing the milking my mother took the milk and put it in a container called in Somali *Haan*. I then ate my breakfast of fresh camel milk and corn bread.

After finishing my breakfast, I was now ready to go and take our camels for grazing. I took my herding stick, my spear, and my axe. I collected our camels and started the journey to the grazing area which, on this day, is about five miles away from home. This is the best season for pasture, as it is spring. It is the rainy season. Flowers grow everywhere, and vines are in blossom.

When I finally reached the place of grazing, I met three of my friends who were also looking after their families' camels. My camels joined the other camels which were already there. While the camels were grazing, we started playing, sometimes wrestling or shooting arrows or throwing spears.

Around noon we felt hungry. We needed to milk, since we didn't bring any milk from home. We got two camels and milked them. When we had enough milk, we drank it.

As soon as we drank the milk, we resumed playing until it was time to collect our camels and take them home. When I had gathered our camels together, I noticed that one of them was missing. It was a she-camel called *Maandeeq* which I like very much. I immediately started to look for her where the camels had been grazing. After looking a bit, I heard the sound of a camel bell, called in Somali *koor*. It is a bell made of wood and ties on the neck of the camel. I found the camel and I took her to the other camels and started the journey home. I felt happy because I had found the lost camel.

I reached home at sunset and put the camels in their place. I rested for a while and then joined my parents and my sister for dinner. As soon as we finished eating, my father told me that he had decided to give three of our camels to my uncle Ahmed, who is my father's younger brother. He wants to marry and needs the three camels to add to another 12 camels he has to pay for the brideprice or *yarad*. As soon as my father finished the story, I asked him which of the camels he was going to give my uncle. He told me that the three camels included one which I like best, "Maandeeq."

I was unhappy and upset when I heard this news, but I couldn't do anything. So I decided to go to bed. But unfortunately I couldn't sleep that night because I was thinking about how I will miss "Maandeeq" and her milk.





Gedi, his family, and camels in the northern part of Somalia.

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## A DAY IN THE LIFE OF ISATOU OF BANJUL, THE GAMBIA

The loud sound of the horns of cars going along Hagan Street wakes Isatou up. It is 6:30 a.m. on Saturday morning. Isatou sits on the edge of the bed and thinks of all the things she has to do. She places a pillow in front of her two-year-old sister, Ida, who continues to sleep in their bed. Her older sister, Awa, knocks on her door to see if she is up. She washes her face and brushes her teeth. Isatou puts on one of her house dresses, a western-style dress (see illustration).

Her first duty in the morning is to sweep, dust, and tidy up the sitting room, her parents' room, and her own room. She completes this task about 8:00 a.m.

She peeps into the kitchen to see if breakfast is ready. Her elder sister, Awa, sends her to Mr. Facl's shop across the street to buy bread, butter, and tea for breakfast. After the meal she dashes to the bathroom, takes a shower and gets ready to go to the market. At the market, Isatou buys the following for the day's lunch: one pound of meat, one pint of oil, a half a pound of potatoes, one fourth of a pound of onions, one fourth of a pound of tomatoes, one dime's worth of hot peppers, one dime's worth of tomato puree, and a small tin (can) of tomato paste, one dime's worth of garlic, and some black pepper. On her return, she helps Awa prepare the meal. She fetches water from the stand pipe (a water tap used by several families), peels and slices the onions, and pounds the pepper and the garlic. Isatou watches Awa prepare the stew. In two or three-years' time it will be her responsibility to cook for the family. The stew is ready to be served. In the meantime, Isatou takes the responsibility of cooking the rice. After lunch she plays with her little sister and carries her on her back when she cries.

At five o'clock, Isatou collects all the dishes, washes and packs them in their proper places in the kitchen. She then helps Awa to prepare the evening meal, jollof rice. Then Isatou does her homework.

Isatou attends St. Joseph's High School in Banjul. Her homework includes a composition entitled *My First Day in School*; math exercises on fractions; and a general science lesson--drawing and identifying the teeth of animals.

After supper she relaxes in the sitting room and watches television with the rest of the family. Since Gambia does not have its own TV stations, it relies on broadcasts from Senegal. Thus programs are mostly in French, the major language of Senegal. There is also half an hour of news in English. There are a variety of local programs and also news in local languages, such as Wolof, Mandinka, Fula, and Tukolor. These languages are spoken in Senegal and The Gambia.

Before she goes to sleep she writes to her cousin, Cundo, who lives in the village of Karantaba on the River Gambia. Isatou visited her cousin and their grandparents during the last school holidays. Isatou thinks that Cundo works very hard. Cundo helps her mother cultivate rice. Sometimes she takes care of her younger brothers and sisters when all the father's wives are harvesting rice. When she was there, Isatou helped Cundo fetch water from the village well and firewood from the forest. She is glad she is growing up in the city where there is electricity and running water and television. Isatou hopes Cundo can visit her during the next school holidays.



In the Gambia, women dress in both Western (left) and traditional styles.

## A DAY IN THE LIFE OF RUDO OF GOKWE, ZIMBABWE

Gokwe School  
P.O. Box 7  
Gokwe, Zimbabwe  
August 15, 1987

Dear John,

My name is Rudo. I am a girl of thirteen. I live in Gokwe, a village of about 600 people about 220 kilometers west of Harare, our capitol city. It is in one of Zimbabwe's rural districts.

A teacher, Mrs. Johnson, from Indiana has just been to our school. She gave me your name and address and told me that you were interested in a pen pal from my country--Zimbabwe. I have decided to write you and tell you something about my life. We are on a holiday from school this week.

Every morning at dawn I hear a sound on the door--go-go-go. It's Mother knocking. "Rudo, Rudo," she calls. "Wake up!" I wake up and make my way to the kitchen (a round single-roomed building made of brick and thatch). My day has begun. I start a fire using wood that Mum and I collected two days ago. Mum heats water on the fire for members of the family to wash with. Meanwhile, I sweep the kitchen. I use a simple broom. This broom is made of grass, tied with a rope at one end. It is about a foot long. Then I clean the pots and utensils.

Dad comes out of his house (a three-bedroomed, brick building roofed with corrugated iron sheets). I kneel or sit down and greet him. "Good morning, Dad." By custom I have to sit or kneel when talking to elders. It is considered rude to talk to them while one is standing. Either Mum or I take water in a dish to Father for him to wash his face and rinse his mouth. My brothers are up, too. Occasionally they help me sweep the yard around the house. They resent doing this job which they regard as a woman's job. I also use a broom to clean our house.

I have finished the yard and the house. I now prepare tea and maize (corn) porridge for breakfast. Breakfast is ready. All members of the family are gathered in the kitchen where we have our breakfast. Elders have the privilege of talking as much as they want. Children are discouraged from talking during meal times.

After breakfast I clean all the utensils and dry them. I use a towel or leave them to dry in the sun outside. Marwei, my eight-year-old sister, sometimes helps in any way she can, such as placing plates on shelves.

It is not time to rest yet. The firewood we use is almost finished. I and my friend, Sekai, go to the forest, some five or so kilometers away, to look for firewood. Sometimes we climb up the trees to reach for dry branches. Sometimes we simply pick the dry wood on the ground. I tie the wood together into a bundle about four feet long. I place it on my head and go home. The bundles are heavy so Sekai and I rest on the way. We use the firewood for cooking, heating water, and so forth.

It is about midday and once I am at home I prepare maize meal and a sauce of vegetables for lunch. After lunch I wash all the pots and plates. It is time for me to rest now. My friends and I go to the growth-point for fun. (Growth point--an area in rural districts which is earmarked to grow into a small town). Here we may play records of pop music or traditional music. Sometimes we gather in the village to play games or tell stories. Towards sunset I have to be back home to resume my household chores. I have to fetch water from the well which is a kilometer away. I use a twenty-litre tin for this purpose. I make a fire in the kitchen to prepare vegetables, meat and *sadza* (a thick porridge made from maize) for our evening meal. Marwei, my younger sister, may not have to travel the long distances to the forest to get firewood or water from the well as our Government has already set aside funds to bring piped water and electricity to our village. She may

not have to bother with making fire from wood, too. We are told the project to supply water and electricity may take five years to complete.

After supper I wash all the plates and pots. Father and mother talk about the serious business of the home and the village, for example, the proposed electrification project. My brothers and I will chat about things that interest us, such as pop music.

When it is about half-past eight in the evening, I retire to bed. I will tell you more about my country in my next letter. Please tell me "what a day is like" for you.

Yours sincerely,

Rudo Marimo

## A DAY IN THE LIFE OF TENDAI OF HARARE, ZIMBABWE

70 Deacon Drive  
Borrowdale  
Harare, Zimbabwe

Dear Linda,

My name is Tendai. I am a girl of thirteen years of age. I live in Harare. It is Zimbabwe's capital city. It has a population of about one million people.

A teacher, Mrs. Harvey, from Indiana has been to our home. She gave me your address and told me that you were interested in a pen pal from my country, Zimbabwe. I am writing you this letter to tell you something about my life.

It is about half-past six this Saturday morning. Tafara, our live-in housekeeper, is already up, cleaning the house. She is using a vacuum cleaner on the carpet. Mum and Dad are dressing. They are preparing to drive to work, some eight kilometers away in the city. We live in a suburb of Harare. Meanwhile I go to the kitchen to make breakfast for them. Father likes fried eggs, bacon or sausage, and maize (corn) meal porridge. Mother likes boiled eggs, orange juice, and some fruit, such as apples. I use our electric stove so the preparation does not take much time at all. Once my parents are having their breakfast, I join Tafara in cleaning the house. Soon this is over. I get back to the kitchen once more to prepare breakfast for the rest of the family. I like it in the kitchen, as I put into practice some recipes that I learned in school in our cookery class.

After breakfast Tafara and I clean the plates, cups, forks and knives. Our washing machine broke down last week so Tafara washes clothes for the family in a basin outside the house. She prefers to use warm water although Mother is against this idea. Meanwhile, I will help iron the clothes that she washed yesterday. It is noon. Tafara and I have prepared lunch and we are all sitting around the table in the dining room enjoying our dishes of grilled steak, rice, and vegetables, including cabbage, tomatoes, and carrots.

In the afternoon I relax by reading a novel that I brought from school. Sometimes I read a comic "Mukadota" that Chido, my friend, borrowed from the public library. Soon my friends call on me to go watch a movie, "Lace II," and go window-shopping in town. Chido is very particular about her hair, so she uses the money she has at the hair salon and misses the movie.

Towards sunset we catch the bus and go home. Again I help Tafara with the household chores. After dinner I usually watch TV together with the rest of the family. My favorite shows are Dynasty, Dallas, and Falcon Crest. When my favorite shows are over, I go to my bedroom to play my music tapes or listen to the radio. I like one of our disc jockeys. His choice of music is just what I like. He mixes pop, reggae, and the local beat called "Chimunenga" here.

It is about 10:30 in the evening. I am feeling sleepy so I must retire now. Till I hear from you.

Sincerely yours,

Tendai Maraidza

AFRICA: INTO REALITY  
AN INTEGRATED LESSON

LESSON 5 THE PYRAMIDS AND RELIGIONS OF AFRICA

I. PREVIEW

- A. This lesson explores the religions of Africa and how it effects the people.

II. OBJECTIVES

- A. At the end of the lesson the student will be able to:
1. Create a building plan for a pyramid.
  2. Build a model of a pyramid.
  3. Compare and contrast the religions of Africa.
  4. Identify what part of Africa the pyramids belong in.

III. MATERIALS

- A. Handouts entitled:
1. The Builder of Pyramids (Green, 1963) (Attachment 5-A).
  2. African Religious Beliefs (Graff, 1980) (Attachment 5-B).
- B. Building Materials
1. Blocks or Legos.
  2. 4" cloth squares.
  3. Popsicle sticks.
  4. String.
- C. Film strip entitled "Religion and Culture" (Educational Enrichment Material, 1980).
- D. Projector.

IV. PROCEDURES

- A. Review where each country discussed so far is located on the map and in what weather band.

1. Kenya, Liberia, Swaziland, Batswana, Niger, Morocco, Sudan, Gambia, Zimbabwe.
- B. Introduce the topic by putting on the board "A pyramid is or has". List on board.
- C. Mini-lecture on pyramids.

1. "The Great Pyramid of Giza is the sole survivor of the "Seven Wonders of the World". It lies in the fertile valley of the Nile which includes most of the cultivated land of Egypt. It is full of interest because of the daily scenes of its cities and villages and to any one who likes the things men did in past ages. It is one of the most attractive places in the world. Here, we can glimpse how man lived thousands of years ago and wonder at the tombs, temples and sculptures they left behind." (Feinstein, 1988)

The Ancient Egyptians believed that their kings were descendants of a god and half god themselves. They also believed in an immortal soul. The Great Pyramids were a place for the Kings to wait with all their possessions until his immortal soul should return to earth. The shape of the pyramid is believed to have directed the soul of the king to a place of rest. These pyramids were not hollow but built of solid rock and the burial chambers were cut out and refinished to suit the desires of the King.

- D. Read the article The Pyramid Builders (Attachment 5-A) as shared reading.
- E. The class is to make believe that they are now Seti, an Architect, who has been called before the Pharaoh because the King wants them to build a tomb worthy of his greatness. You must submit a rough description of how you and your team will build his pyramid and a model of what it will look like.
  1. Remember to included the answer to such questions as -
    - a. How you will get the stones to the top of the pyramid?
    - b. Why are you building it?
    - c. What will it be used to hold?
    - d. How many slave will you need for the job?
    - e. What material will you build it from?



- F. Divide class into groups and handout building material.
- G. Show film strip "Religion and Culture".  
Or read African Religious Beliefs (Attachment 5-B).
- H. Compare and contrast the religions of the Pharaohs, Animism, Christianity, and Islam.
- I. Close the lesson by having the students brainstorm adjectives that describe the religions of Africa.

V. EVALUATION

- A. Presentations as Seti, the architect.
- B. Adjectives about religions.

VI. METHODS USED IN THIS LESSON.

- A. This lesson uses many methods the following are just a few:
  - 1. Cooperative learning, hands-on, discussion, lecture, audio-visual, brainstorming and review.

VII. RESOURCES

Education Enrichment Materials, (1976). Africa: Portrait of a Continent. The New York Times, Bedford Falls: N.Y.

Graff, E. (1980). Africa. Cambridge Book Co.: N.Y.

The Grolier Society, (1951). Lands and People. The Grolier Society: N.Y.

## ATTACHMENT 5-A

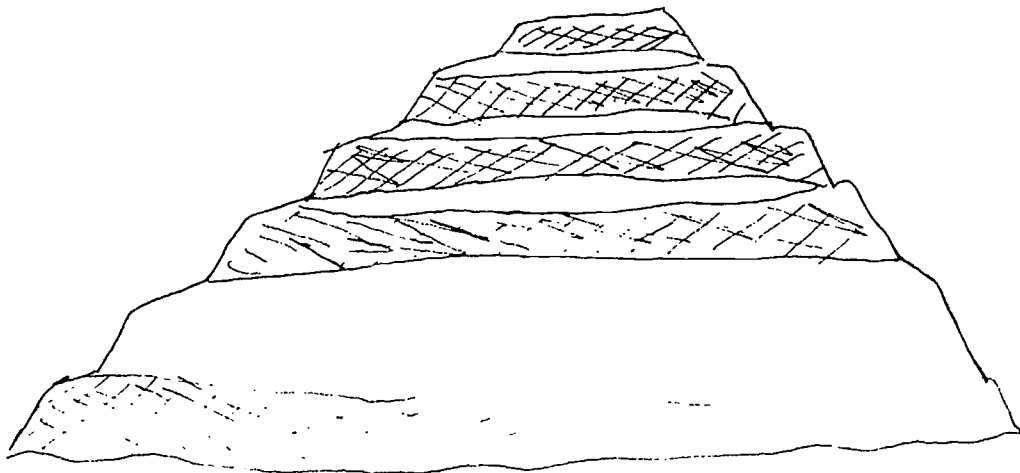
### THE BUILDERS OF PYRAMIDS

Most of what we know about ancient Egypt comes from the tombs they left behind. The Egyptian believed in a life after death from the very beginning and these tombs were to help them take what they had here on earth with them into the after life. And the fact that the life after death went on much longer than the life on earth they built their homes and palaces just as strongly as they knew how.

The tombs of the earlier dynasties or family name were modeled after the home they lived in and were built out of bricks in the same manner as building a house. These tombs were long and low, with flat roofs and look much like a park bench. In fact they look so much like benches that the Arabs that were helping to excavate these first sights called them mastabas which is the Arabic name for bench.

The first famous architect was also an inventor. His name was Imhotep and his invention was to build the tombs out of hewn stones. This method began to be used in the previous dynasty for doorways mostly but Imhotep wanted to build larger mastabas and he knew this method was the way to go. He cut slabs of limestone for the outer layer and filled the inside with local solid stone cut into rough squares.

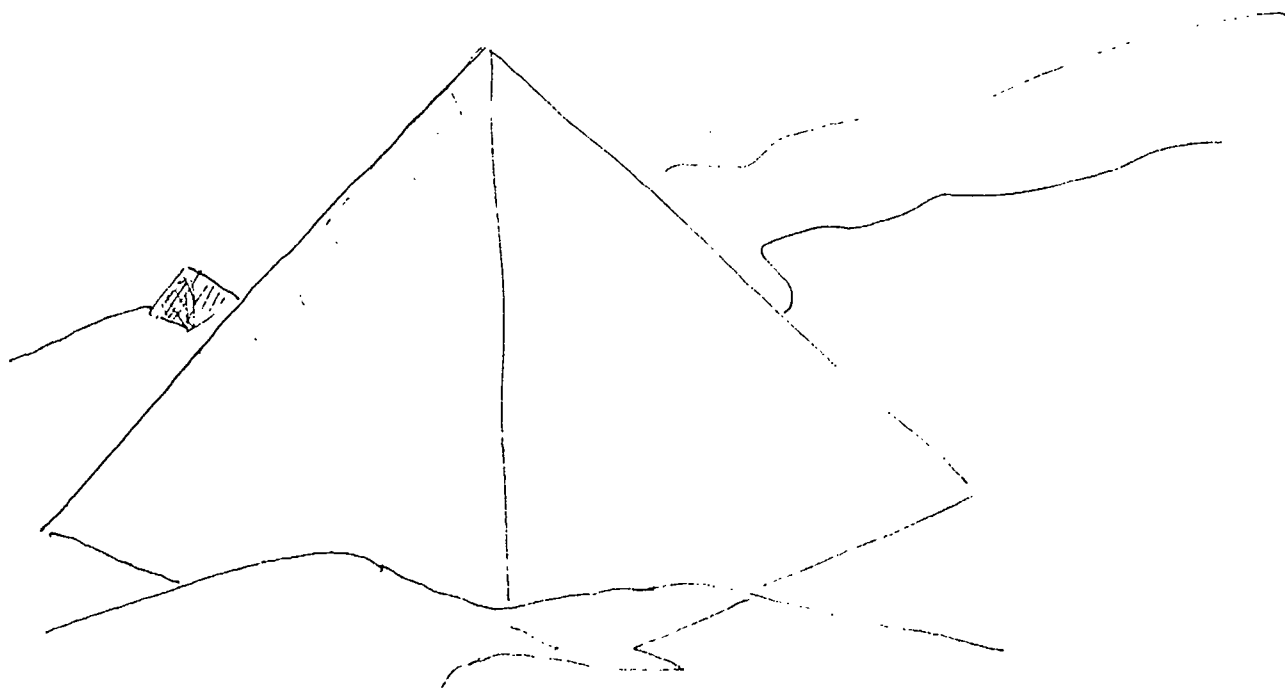
As his method became more accepted he grew more adventurous, and enlarged the size of the mastabas and then put a smaller one on top of it. He continued this idea until there were six layers in all. The result is now known as the Step Pyramid. It is about 200 feet high with a base of 400 feet by 360 feet. This Step Pyramid is the oldest surviving stone building in the world.



The next great architect to come along was named Hermon. He built the tomb of Pharaoh Khufu. This monument stand at the edge of the Giza desert just a few miles upstream from modern Cairo. It stand with two other pyramids and form the Seventh Wonder of the World. The figures are staggering and do little to capture to the size of the pyramid. It is built of 2,300,000 separate stones each averaging in weight about two and a half tons. The largest stone weighted as much as fifteen tons the weight of two large elephant. Each side is 755 feet, the length of over seven football fields. It's height is 481 feet and it covers 13 acres of ground. If it were cut up into 12 inch cubes and laid side-by-side they would go two-third of the way around the world at the equator.

Upon it's completion it was covered with limestone and had a sharp point at the top covered with gold. It was to be a "ladder to heaven" for the soul of the pharaoh and the sun must have seemed to stream down from above as it reflected off the sides of the polished limestone.

The people who worked on this pyramid did so willingly and eagerly for they felt it was a great and holy task to be helping to prepare their king and half-god a heavenly palace to rest in. They felt it was an act of worship much like the building of the English Medieval Cathedrals.



## ATTACHMENT 5-B

### AFRICAN RELIGIONS

Religion plays a very important part in the development of African society. Religious beliefs-not necessarily the kind we are familiar with- are strong in most Africans. Many Europeans regarded Africa's sometime primitive religious beliefs as superstitions and witchcraft. This, however, is not wholly true.

More than 100 million Africans practice **animism**, a belief that a soul or spirit exists in any material or physical organism. These beliefs have been passed on for generations through elders, priest, prophets, and shamans (who are said to control spirits).

People use myths, legends, folktales, and riddles to understand and explain the world, the tribe and its origins, life and death, the nature of society, and relationships. Their beliefs also include a creator/god who regulates the balance between this world and that of the spirits. To offend him is to go against the whole world in its oneness.

In dances and songs the spirits are asked to protect the members of the tribe. Good spirits bring good crops and keep disease and other disasters away from the tribe. The shaman-who is quite different from the movie version of a medicine man-is an influential person. He is both priest and doctor, he predicts the future, supplies charms as protection against the enemy, he tells how to cure sickness, and bring rain. Such men possess both special skill and the qualities of leadership.

Both the Arabs and the European brought many changes. Africans began to incorporate scientific knowledge into the medicine of the shaman. Belief in magic is giving way as social customs change under the influence of Western education and ideas. The chief's son or the shaman's son frequently attended Western schools and come home with modern scientific explanations of the world.

The other three religions are:

1. **ISLAM.** This faith was founded by Mohammed in the 7th century. It is the major religion in all the North African countries. As it's followers moved south to teach and to trade so did the faith. Many converts were made in West Africa, the Sudan and in Central Africa. Islam spread faster than Christianity "because it promised a kind of equality with very little demand from the Africans who adapted" it. (Graff, 1980). Islam is practiced by 1/4 of the African population.

2. CHRISTIANITY. "The Coptic Church of Egypt and Ethiopian sent missionaries to Africa More than 1,500 years ago." (Graff, 1980). It took much longer for the Europeans to send missionaries to Africa as they did not come until the Europeans came to colonize the area. They brought with them intellectual and cultural changes and contacts with the Western world. Christianity is practiced by 1/4 of the people in Africa.

3 HINDUISM. The hindus are mostly Asians that have come to Africa. They make up the business and working class of the nation and live mostly in eastern and southern Africa. About one million people practice Hinduism in Africa.

RESOURCES:

Graff, E. (1980) Africa. Cambridge Book Co: N.Y.

Lorimer, L. (1991). Lands and People. Groiler Inc.: N.Y.

AFRICA: INTO REALITY  
AN INTEGRATED LESSON

LESSON 6 THE RAINFOREST AND AFRICAN CUISINE AND ETIQUETTE

I. PREVIEW

- A. This lesson looks at the tropical rain forest, staple foods and how we eat.

II. OBJECTIVES

- A. At the end of this lesson the students will be able to:
1. Describe the layers of life in the rain forest.
  2. Identify items used in their daily life that come from the rain forest.
  3. Identify rainforest on map.
  4. Demonstrate correct etiquette for eating in African society.
  5. Infer cultural norms for customs related to eating.
  6. Demonstrate a positive attitude toward African culture by eating an African meal.

III. MATERIALS

A. Handouts:

1. The Rainforest in your Pantry (National Wildlife Federation) (Attachment 6-B).
2. Three handouts on cuisine and etiquette (Merryfield, 1989) ( Attachments 6-C to 6-E).
3. Seven recipes of African dishes (Merryfield, 1989) (Attachment 6-F).

B. Mural

1. Layers of life (National Wildlife Federation, 1991) (Attachment 6-A).
2. Tape.
3. Scissors.

4. Poster board.
  5. Construction Paper.
- C. Six blank transparencies.
  - D. Transparency pens.
  - E. Overhead Projector.

#### IV. PROCEDURES

- A. Review the five weather bands on the map.
- B. Answer any questions on pyramids or religions in Africa.
- C. Introduce the lesson by writing on the board "A rainforest is or has". Have each student give a response. Locate rainforest on map.
- D. Explain to the students that they will be reading an article on the Rainforest and depicting the layers of life in a mural.
  1. Each person will create a layer of the rain forest and put it on the mural for the group.
  2. Each person will write five sentences about the layer they created and combine it with the other members of the group.
- E. Divide the students into groups and handout mural material.
- F. Have the groups share what they made and if they wish what they wrote.
- G. Discuss the layers of the rainforest.
- H. Explain to the students that on the worksheet they are to mark off the items they have used or seen.
- I. Handout Rainforest in Your Pantry (Attachment 6-B) and let the students work on it for five minutes. Discuss the results.
- J. Explain that as long as the pantry list is it not a list of "staple foods". These are carbohydrate that is eaten every day and is a major source of calories. Examples in Africa are rice in the west, maize (corn) in the

east and south, and matoke (ma-tok-a) (cooking bananas) for Uganda.

1. Ask the students to identify the staple foods of other countries (potatoes for Ireland, rice for Japan, maize for Mexico).

2. What is our staple food? (hamburger and fries are not staple foods).

K. Ask students to describe proper table manners.

1. Who eats together?

2. What do you do before eating?

3. What are rules about your hands or the way you sit?

4. What can't you do while eating?

5. What do you do at the end of the meal?

6. Why do we have such rules?

7. Who does the cooking in the family?

8. Do most cultures have customs about how people eat and who should cook?

L. Explain to the students that they will be looking at "etiquette" and "food" from three African countries, Sierra Leone, Uganda, and Zambia.

1. Point out the location of each country and give min-lecture on each.

- a. Uganda, like Kenya, was colonized by the British who declared a protectorate over it in 1895. The British superimposed a European bureaucracy on a federation of kingdoms and tribes that had existed for centuries before the British arrived. The British system worked well until the independence movement of the 1950's. After much experimentation, a federal constitution was formed in 1962. A series of presidents who misused the power of their office ended in 1978 when the country went bankrupt. This once thriving nation, had become an economic disaster, with inflation 200 percent, no consumer goods, few jobs, thievery rampant, famine in the north, and no effective government. Antigovernment guerrillas staged a coup that overthrew the constitutional government in 1985. Currently the country is ruled by the National Resistance Army leader. British influence can still be seen, however, in the educational



system, law and religion. English and Swalili are the national languages. (Dickey, 1991).

b. Sierra Leone was purchased from local chiefs by the British as a colony in 1787 to provide a home for slaves rescued from slave ships. The British set up a protectorate in 1896. Independence was granted in 1961. The army staged a coup in 1967 only to be overthrown the following year. Sierra Leone was declared a free and independent republic in 1971 and an international trade agreement was soon signed in Europe. This helped set up the Economic Community of West Africa. The government operates with a one-party system. The president serves a seven year term and is assisted by two Vice-Presidents and a cabinet. British influence can be seen in law and religion. The official language is Kiro, a mixture of English and various African Languages. (Dickey, 1991).

c. Zambia was first explored by the Portuguese but the man who had the first great impact was a missionary explorer named David Livingstone. At the time of his death, in 1873, he had explored most of the country and discovered Victoria Falls. He had also established missions that he hoped would stop the raids on the natives by the Arabs looking for slaves.

In 1889, Cecil Rhodes signed an agreement with the local chiefs for mineral rights in the country. To explore the country the British King granted him a charter for the British South Africa Company and gave him full economic control of the country and the right to establish a government. Rhodes persuaded Lewanika, the leading chief of the area to place his kingdom under British protection thus establishing control and changing the name to Rhodesia. Rhodes made a fortune from the diamonds he found in the country but missed the gold hidden there.

In 1924 the British government established a protectorate over the country. In 1953 the African majority opposed the domination of white rule and by 1964 the nation had a new government and held elections.

The nation is a one-party democracy with a president and a single legislative chamber. The constitution provides for elections every five years but the first President Kenneth Kaunda amended the constitution so that only he could be nominated for president. The press remains free to criticize just about anything except Kaunda's exercise over the presidency.

The country is now bankrupt because of events that Kaunda had no control over. The country's economy was based on copper but the price fell on the international market.

British influence can be seen in education and law. The official language is English and various other African languages.

- M. Explain to the students that they will be divide into two groups a food group and an

etiquette group.

1. The etiquette group is to draw up a list of rules for eating including the role of men, women, children, proper behavior before, during, and after the meal, and what not to do while eating. Write the answers on the transparency.
  2. The food group is to go through the "cuisine and etiquette" handout and list all the foods described beginning with the staple foods. Then look through the recipes and pick out the foods from their country by matching the ingredients to their list.
    - a. Sierra Leone - groundnut or peanut.
    - b. Uganda - matoke and pumpkin leaves.
    - c. Zambia - nsima and delete.
    - d. Fried plantains can be found in each country.
- N. Divide the class into three countries then each country group into a large group for etiquette and a smaller group for foods. Handout attachments 6-C to F.
- O. Have groups report on their findings. Compare across the three countries.
1. What are the similarities and differences in etiquette and foods eaten?
  2. What can we learn about cultural norms from these lesson etiquette?
- P. Close lesson by having students write a paragraph on commonalties between African and American etiquette and cuisine.
- Q. African Meal
1. Ask students if they would like to simulate an African meal. Responsibilities for preparation should be divided among the class members. They could try only dish or perhaps several. The easiest African dish to prepare is the fried plantains. Groundnut stew is another relatively easy dish that Americans usually enjoy.

2. Once the dish or dishes are chosen have the students fill out the food lab plan (Attachment 6-G). This lab plan will help organize the students cooking and help keep them on the task.
3. If the students wish the meal it will be done in the last day of the unit giving the students time to collect the needed items. However, during the meal the rules outlined should be followed as closely as possible.
4. Following the meal, debrief the class by asking them to react to eating African style.

#### V. EVALUATION

- A. The posters of the layers of life on the rainforest.
- B. Rainforest pantry list.
- C. Food and etiquette findings.
- D. Paragraph on commonalities in etiquette and cuisine.

#### VI. METHODS USED IN THIS LESSON

- A. There are several methods used in this lesson the following are just a few:
  1. Hands-on, cooperative learning, lecture, discussion, review, question and answer, brainstorming, shared-reading.

#### VII. RESOURCES

- Dickey, N. (1991). Funk and Wagnalls New Encyclopedia. Funk and Wagnalls, Inc.: N.Y. 23, 415-416, and 26, 113-114.
- Merryfield, M. (1989). Lessons form Africa. Indiana University: Indiana.

## LAYERS OF LIFE

The trees, shrubs, vines, ferns, and other plants that grow in rain forests form a complex system of layers. Although the layering system varies from area to area and the boundaries between layers are often not distinct, a generalized cross section would look something like the diagram in the margin. Here's more about each layer, starting at the top and working down.

**The Emergents—Giants of the Jungle:** Towering above all the other plants in the forest are the giant trees called *emergents*. Although most emergents are about 115 to 150 feet tall, some grow to heights of over 250 feet. There are usually only one or two of these jungle giants per acre, and characteristically they have relatively small leaves, umbrella-shaped crowns, and tall, slender trunks. Emergents stick out from the crowd and must endure high and often changing temperatures, low humidity, and strong winds.

Many of these jungle giants have unique structures. Some species have thick, ridged *butteresses*. Others have long, round *stilt roots* that surround the base of the trunk. Although no one is sure what purpose the butteresses and stilt roots serve, some scientists think they might help support trees with shallow root systems. (See page 29 for an illustration of butteresses and stilt roots.)

**The Canopy—Treetops of Life:** Like a thick green carpet, the main *canopy* layer of the rain forest is formed by flat-crowned trees that are often between 65 and 100 feet above the ground. Like the emergents, trees in the canopy are subjected to changing temperature and humidity. The canopy trees, along with the emergents, form a continuous covering over the forest. And like emergents, many canopy trees are supported by butteresses and stilt roots.

The canopy acts like a giant sun and rain umbrella. It catches most of the sun's rays, allowing only about 2 to 5 percent to slip through to the forest floor. The canopy also absorbs much of the impact of the rain that falls on the forest. But the rain doesn't accumulate on the leaves. That's because the leaves of many kinds of canopy trees are pointed, causing water that hits each leaf to run off. These "drip tips" help keep leaf surfaces dry, which discourages the growth of mold, lichens, and small plants.

The canopy is filled with life. The umbrella of leaves and branches provides a home for many treetop creatures, as well as for orchids, vines, bromeliads, and a host of other plants. (See "Canopy Critters" on page 24 for more about life in the canopy.)

**The Understory—Life in the Shadows:** Below the canopy there are small trees that usually don't grow to heights of more than 15 feet or so, and a shorter shrub layer of very young canopy trees and miniature woody plants. Together, these plants make up the *understory*. Some of these understory plants will eventually grow tall enough to become part of the canopy. But others will always remain in the shadow of the canopy giants. Unlike flat-topped canopy trees, many of these understory trees have elongated crowns that are shaped like candle flames. Many also have large leaves, which scientists think help the plants absorb as much sunlight as they can in the dim understory.

**The Forest Floor—Life at the Bottom:** On the *forest floor*, often more than 65 feet below the canopy, the conditions are very different from those at the top. The canopy is subjected to strong sun and plenty of wind, causing considerable daily fluctuations in humidity and temperature. But on the sheltered floor, the air is very still, humidity is almost always above 70 percent, and the temperature remains relatively constant.

Although seedlings, herbs, and ferns grow on the forest floor, the vegetation is fairly sparse—mainly because of lack of sunlight. And although many people think the rain forest floor is littered with decaying logs and thick layers of dead leaves, the floor is actually quite open.





# The rainforest in your pantry

Spices from the rainforest are on your kitchen shelf, and forest plants are on the windowsill. Use the list to explore your pantry to see just what's there.

## WOODS

- Balsam
- Mahogany
- Rosewood
- Sandalwood
- Teak

## CANES & FIBERS

- Bamboo (crafts)
- Jute (rope, twine)
- Kapok (stuffing)
- Ramie (knit materials)
- Rattan (furniture)

## FRUITS & VEGETABLES

- Avocado
- Banana
- Grapefruit
- Guava
- Heart of Palm
- Lemon
- Lime
- Mango
- Orange
- Papaya
- Passion Fruit
- Pepper
- Pineapple
- Plantain
- Potato
- Sweet Potato
- Tangerine
- Tomato
- Yam

## SPICES & FLAVORS

- Allspice
- Black Pepper
- Cardamom
- Cayenne
- Chili Pepper
- Chocolate or Cocoa
- Cinnamon
- Cloves
- Ginger
- Mace
- Nutmeg
- Paprika
- Turmeric
- Vanilla

## OTHER FOODS

- Brazil Nuts
- Cashew Nuts
- Coconut
- Coffee
- Cola
- Corn
- Macadamia Nuts
- Peanuts
- Rice
- Sesame Seeds
- Sugar
- Tapioca
- Tea

National Wildlife Federation,  
1400 16th St., NW,  
Washington, D.C. 20036-2206

## PLANTS

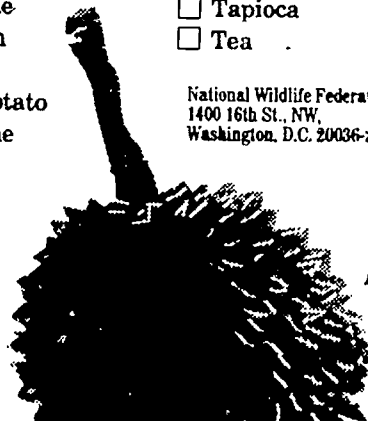
- African Violet
- Aluminum Plant
- Begonia
- Bird's Nest Fern
- Bomeliads
- Christmas Cactus
- Croton
- Dracaena
- Dieffenbachia
- Fiddle-Leaf Fig
- Kentia Palm
- Orchids
- Philodendron
- Prayer Plant
- Rubber Plant
- Snake Plant
- Spathe Lily
- Swiss-Cheese Plant
- Umbrella Tree
- Zebra Plant

## OILS

- Bay Camphor
- Coconut
- Lime
- Palm
- Patchouli
- Rosewood
- Sandalwood

## GUMS & RESINS

- Chicle
- Copal
- Dammar
- Rubber



Durian



Illwill

## CUISINE AND ETIQUETTE IN SIERRA LEONE

In Sierra Leone, the staple food is rice. "If I haven't had my rice, I haven't eaten today," is a popular saying. Sierra Leoneans eat rice at least twice a day. Only women and girls prepare the food. They usually cook in big pots on a 3-stone stove (three big rocks which support the pots). Firewood or charcoal is the main fuel except for some city-dwellers who use gas or electricity.

If you visit a Sierra Leonean friend, he or she will almost always invite you to stay and eat. Traditionally, men and boys eat together separately from the women and girls. Everyone washes their hands before they eat and then they gather around in a circle with a huge dish of food placed in the middle. Sharing is an important part of life in Sierra Leone, and each person eats from the part of the communal dish in front of him/her. It is very bad manners to reach across the dish! Only the right hand is used for eating, as the left hand is considered unclean (it is used for washing after going to the toilet).

When you are eating, you usually don't talk. Talking shows a lack of respect for the food. Also try not to lean on your left hand. People usually drink water after a meal is over.

The oldest males get the choicest food, usually the best pieces of meat or fish. Then the young males get the next best pieces and then finally the women and girls get any meat or fish that is left. Sometimes the women and girls wait until the men and boys have had all they want before they eat.

Rice is eaten with the hands by squeezing or rolling it into a ball, dipping it into the sauce and popping it into the mouth. If rice falls from your fingers or mouth, you don't put it back in the dish. When everyone finishes eating, they wash their hands and thank the cook.

Many ingredients go into sauces or stews to go with rice. The most popular sauces are made of greens, especially cassava leaves or potato leaves. Other common ingredients include palm oil, onions, tomatoes, cassava yams and red peppers. Sometimes groundnut (peanut) oil or coconut oil are used. Other sources of protein that go into the sauces include groundnuts (peanuts) and beans, as well as fish, chickens, goats, cows, sheep, or pigs, and seafood such as oysters, lobster, and crab. Most of the calories, however, come from rice, which is eaten in large quantities. Fruits in Sierra Leone include oranges, bananas, paw-paws (papaya), lemons, avocados, guava, watermelon, mangoes, and pineapples. They are usually eaten as snacks. Plantains are often sliced and fried as chips for another snack. Tea and coffee are drunk in some parts of the country for breakfast. Cokes and beer are popular with many people who can afford them. Sierra Leone produces both coffee and cocoa, the main ingredient in chocolate.





A market woman in Sierra Leone.

## CUISINE AND ETIQUETTE IN UGANDA

In Uganda, the areas bordering Lake Victoria and the rest of the Central Region up to the Ruwenzori Mountains (the Mountains of the Moon), the staple food is *matooke* (cooking bananas). Other food crops include cassava (manioc), sweet potatoes, Irish potatoes, yams, beans, peas, groundnuts (peanuts), cabbages, onions, pumpkins, and tomatoes.

Some fruits, such as oranges, pawpaws, lemons, and pineapples, are also grown.

Most people, except for a few who live in the city centers, produce their own food. The responsibility of preparing the family's meals belongs solely to women and girls in the home. Men and boys of age 12 and above are not even expected to sit in the kitchen, which is detached from the main house. Cooking is done on an open fire using wood. Today, there is a firewood crisis, agriculture expands and there are increased government laws on forest conservation. Even people who live in cities are affected because they use charcoal for cooking.

The majority of families eat two meals a day. The two meals are lunch and supper. Breakfast is just a cup of tea or a bowl of porridge.

When a meal is ready, all members of the household wash their hands and sit down on mats. Hands have to be washed before and after the meal since everyone eats with their hands except in some urban homes where members of the family sit at a table and eat with knives and forks.

At meal time everybody is welcome; visitors and neighbors who drop in are expected to join the family at a meal.

Food is served by women. They cut it up into small pieces for each member of the family. They go on doing this until one says he has had enough. However, the women do this while they are eating. Sauce, which is usually a stew with vegetables, beans, butter, salt, and curry powder, is served to each individual on a plate. Occasionally fish or beef stew is served.

Normally a short prayer is said before the family starts eating. During the meal children talk only when asked a question. It is bad manners to reach for salt or a spoon. One should instead ask someone sitting close to it to pass it. It is also bad manners to leave the room while others are still eating. Everyone respects the meal by remaining seated until the meal is over. Leaning on the left hand or stretching one's legs while at a meal is a sign of disrespect and is not tolerated.

People usually drink water at the end of the meal. It is considered odd to drink water while eating, except when choking.

When the meal is finished, everyone in turn expresses a compliment to the mother by saying, "*webale kufumba nnyabo*" (thank you for preparing the meal, madam). No desert is served after the meal. Fruits like pawpaw, pineapple, or sweet bananas are normally eaten as a snack between meal times. Adults prefer pineapples to other fruits, but children eat a lot of pawpaws, sugar cane, and mangoes.





Banana trees are abundant in Uganda.

## CUISINE AND ETIQUETTE IN ZAMBIA

Zambia's staple food is maize (corn), and Zambians eat maize in several ways. When the corn is ripe but still green, it can be roasted or boiled. When it is dry and hard, it can be fried or boiled. It can also be pounded slightly to remove the top layer and boiled either by itself or mixed with beans or groundnuts (peanuts). At times the maize is ground to a size a little bigger than rice and is cooked as rice. Finally, we have the fine (corn) meal, which in Zambia is called mealie-meal. This is used for making *nsima*, the most popular meal. *Nsima* is steamed (corn) meal.

Meat from cows, goats, sheep, and fish are used in sauces over *nsima*. There are also a lot of vegetables put in sauces, such as leaves from beans, okra, cow peas, pumpkins, cassava, etc. Other vegetables eaten almost daily include onions and tomatoes.

All the cooking is done by the wife. *Nsima* is usually prepared for lunch and dinner and not for breakfast. In a traditional setting, the man eats with grown up boys from ages of about seven years and upwards. The mother eats with the girls and the small boys. Some of the reasons for the separation are 1) all the kids below the age of seven are almost under the complete guidance of their mother and since learning was through all the daily activities, the mother, who was in charge of the kids' learning, had to take care of their learning at meal time; 2) since the father was not competent to handle small children, he would not be able to handle a situation in which a child soiled himself while eating. However, the situation is changing, particularly in towns and cities. The trend now is that members of the family all eat together.

Before eating, everybody washes hands in order of the status of the members of the family: father first, then mother and others following according to their ages. Where necessary, one of the younger ones, whether boy or girl, lifts the dish where the water is and passes it around for others to wash their hands. This is usually done by the youngest child who is able to do it. Should a respected visitor happen to share meals with the family, he is accorded the honor of washing first. It is, however, a sign of good breeding for the visitor to show semblance of not being willing to wash his hands first. After washing of hands, the wife may dish out food onto the side plate, but usually she does this for children, and the elders dish out for themselves. It is regarded as bad manners to talk very much or loudly while eating. After eating, the washing of hands is again done in the same order. The wife and the young ones clear the table. Belching after a meal used to be a compliment, but not nowadays.

RECIPES (Each Recipe Serves Four People)

**Groundnut Stew**

- 1 lb. of peanut butter
- 1/4 lb. onions
- 1 tin of tomato puree
- 1 cup of milk

- 1 lb. of chicken or meat
- 1/4 lb. tomatoes
- salt and pepper
- red pepper (optional)

Wash meat (chicken), cut into pieces and season with salt. Fry meat, then add other ingredients (onion, tomato, pepper). Allow to cook for 1/2 hour, or until done. Then add peanut butter. Simmer until sauce is really thick. Serve with rice.

**Jollof Rice**

- 1 lb. of chicken or meat
- 4 cups of cooked rice
- 1/4 lb. onions
- garlic
- 1 small cabbage
- black pepper

- 1/2 c. palm oil (peanut oil can be substituted)
- 1/4 lb. tomatoes
- 1 tin of tomato puree
- 1/4 lb. carrots
- red pepper to taste

Cut up meat, wash, season with salt and pepper. Slice onion, tomatoes and garlic. Fry meat (chicken) in oil until golden brown, add onion and fry until brown. Add tomatoes, garlic and allow to cook for 10-15 minutes. Add cooked rice. Add cabbage and peeled carrots, a pinch of salt, black pepper, tomato puree. Allow these to simmer for 10 minutes. Dish out rice and arrange meat (chicken) and vegetables on top for serving.

**Fried Plantains**

- 4 plantains (or green bananas)
- peanut oil

- 2 Tbsp. lemon juice
- black pepper (optional)

Cut bananas into slices and cover with lemon juice for a few minutes. Cook quickly in very hot peanut oil until crisp. Bananas may be sprinkled with pepper, or in an American version, with cinnamon and sugar.

**Nsima**

- 4 c. water (more or less according to amount of nsima required)

- 2-3 cups corn meal (here again, to how much is required)

Boil water in a saucepan. Make a paste using some of the meal with a cup of cold water and add to hot water. Stir with a wooden spoon until thickened like porridge. Cover saucepan and simmer for some time (about 15 minutes). Lower heat a little. Remove lid and gradually add corn meal, stirring constantly and flattening any lumps that may form. Continue to add meal and stir until nsima thickens to required consistency (some people like it thinner and others prefer it thick). Cover and reduce heat to very low. Leave for few minutes to allow further cooking. Stir nsima once again and serve in a slightly wet serving dish. Cover to keep it warm. Serve with meat, poultry, fish, vegetables, or *delele* (below).



**Delele**

2 c. okra (*delele*)  
 2 med. sized tomatoes, cut up  
 1 level tsp. cooking soda  
 1/2 tsp. salt

3/4 c. flour or peanut butter  
 2 onions, cut up  
 water

Remove any leaves that remain on the okra (*delele*) and chop the tomato and onion. Add 3/4 of the soda to a cup of water and bring to a boil. Add the *delele* to the boiling water and cover the pot. Uncover pot when mixture is just about to boil over. Stir quickly at the top so the liquid does not overflow. Add more water when necessary until the *delele* is soft. Add the chopped onion and tomato. Mix the flour (or peanut butter) with water and the remaining cooking soda to a soft paste and add to the pot, stirring gently. Serve with *nsima*.

**Matoke**

10-20 *matoke* (green cooking bananas - plantains may be used)  
 1 to 1 1/2 litre of water, depending on quantity desired and size of pot

Peel bananas and wash in cold water. Put into pot and add water and cover. Boil for 10 minutes, then reduce heat and continue to cook. Mixture will turn yellow when well-cooked. Drain water. Mash with wooden ladle. Wrap the mashed food in foil and place in small sized pot. Place small pot in a larger pot. Put some water (1/2 litre) in the larger pot but not in the pot containing the food. Put on low heat and steam for another 20 minutes. Serve while hot with pumpkin leaves sauce.

**Pumpkin Leaves Sauce\***

250g pumpkin leaves  
 1 or 2 large, sliced tomatoes  
 salt and curry powder

1 cup water  
 1 or 2 sliced onions  
 2 Tbsp. vegetable oil, butter or peanut butter

Strip threads from pumpkin leaves. Cut leaves into thin strips. Slice tomato. Boil water in open pan, add vegetable oil, butter or peanut butter to boiling water. Add washed leaves, tomato and onion, cover and cook for 10 minutes. Add salt and a little curry powder. Mix well and simmer for 5 minutes. Serve hot over *matoke*.

\*any green leaf can be substituted.

AFRICA: INTO REALITY  
AN INTEGRATED LESSON

LESSON 7 THE SAVANNA AND ITS EFFECTS ON PEOPLE

I. PREVIEW

- A. This lesson looks at the Savanna, the food chain, and how the people of the area have adapted to the environment.

II. OBJECTIVES

- A. At the end of this lesson the students will be able to:
1. Summarize the basic structure of the food chain.
  2. Display knowledge of the Savanna in a mural.
  3. Alphabetize the animals of the zone.

III. MATERIALS

- A. Handout entitled:
1. Alphabetizing Savanna Animals (Attachment 7-A).
- B. Slides of the Savanna.
1. Slides.
  2. Slide projector.
  3. Narrative (Attachment 7-B).
- C. Mural
1. Mural paper.
  2. Crayons.
  3. Markers.
- D. Reference books on animals of Africa.

IV. PROCEDURE

- A. Review the concept of staple foods, Africa's topography, weather bands, why the desert exists, and layers of the rain-forest.

- B. Introduce the topic by putting on the board "A Savanna is or has...". List on the board.
- C. Explain attachment 7-A.
  - 1. The students are to alphabetize the animals on the worksheet and describe at least three names that are stated.
- D. Go over some of the more exotic names and show as many pictures as possible.
- E. Explain to the students they will be making a mural of the Savannalands. Stress there are ideas in the slide show for the mural.
- F. Show slides of the Savanna.
- G. Divide class in groups to depict sections of life in the Savannalands. Children, women, men, elders, transportation, housing, and protection are areas to consider for the mural.
- H. Discuss and display the mural as one unit
- I. Close the lesson by having students suggest adjectives and phrases about life in the Savanna.

#### V. EVALUATION

- A. Alphabetized animal list.
- B. Mural on Savanna life.
- C. Accuracy of adjectives and phrases.

#### VI. METHODS USED IN THIS LESSON

- A. There are several methods used in this lesson the following are just a few:
  - 1. Cooperative learning, review, slides, hands-on, brainstorming and lecture.

#### VII. RESOURCES

Educational Enrichment Materials. (1976).  
Africa: Portrait of a Continent. New York  
 Times: Bedford Falls, N.Y.

## ALPHABETIZING SAVANNA ANIMALS

The following are animals that can be seen in the Savannalands. Put them in alphabetical order. Try to guess if they eat meat, fish, or plants.

___ Stork	___ Lion	___ Puku	___ Zebra
___ Kudu	___ Cattle	___ Eland	___ Cape Buffalo
___ Impala	___ Rabbit	___ Sloth	___ Crocodile
___ Gorilla	___ Weavers	___ Oribi	___ Hartebeest
___ Leopard	___ Mandrill	___ Camel	___ Hippopotamus
___ Jaguar	___ Cheetah	___ Egrets	___ Rhinoceros
___ Bush Pig	___ Giraffe	___ Roan	___ Chimpanzee
___ Hyena	___ Monkey	___ Antelope	___ Wildebeest
___ Gazelle	___ Warthog	___ Oryx	___ Elephant
___ Sea Lion	___ Geese	___ Reedback	___ Bulldog bat
___ Waterbuck	___ Nyala	___ Bango	___ Topi

If you have extra time look up one of these animals and share what you find out with the class.

## Slide narration for the Savanna

The Savanna covers about half of the continent. It is covered with coarse grass, five to twelve feet high with bushes, shrubs and trees scattered throughout.

The grasses grow tall and thick and form dense tangled areas.

One of the most remarkable features of the Savanna's of Africa are the deep depressions on the earth called the Great Rift Valley.

This deep gash in the earth's surface - about four thousand miles long - was formed years ago when the land sank as the mountains and rocks split apart.

It runs from Mozambique through Tanzania, Kenya and the Ethiopian highlands under the Indian Ocean and into Asia Minor.

In some places the Rift is thirty miles across and about two thousand feet deep.

There are many deep, narrow, and long lakes in the Rift. Lake Tanganyika is an example. It's bottom is 2,200 feet below sea level but it's surface is 2,500 feet above sea level. It is 360 miles long and only 15 to 50 miles wide.

Most of Africa's volcanic activity has been concentrated along this immense 4,000 mile-long crack in the earth's surface.

Several mountains have been formed. Mt. Kilimanjaro, Africa's highest mountain is an inactive volcano in Tanzania...

and Mt. Kenya, a active volcanic peak in Kenya. These are the most famous and

although these are on the Equator they are so tall that they are always covered with ice and snow.

The Savanna is home to big game animals - elephant

Zebra

Rhino

Buffaloe

Giraffe



Antelope

Lion

These and many other large animals roam freely through the Savanna on preserves set aside by the government.

The animals who live here are not a chance mixture thrown together on a plain...it is a biological community in which all sorts of interactions take place between plants, herbivores (plant eaters) and carnivores (meat-eaters).

The plants and animals fit together for life in the community as a whole. When zebras and wildebeests occur in the same area they take advantage of each other's strengths.

Yet the fact that each can manage pretty well without the other simply shows that the ties can be broken without harm to either animal.

Scientists are just now beginning to understand the big-game landscape. The biological community exists because of the food-chain. The food-chain is primarily an exchange of energy, through the processes of eating and being eaten.

The energy begins with the plants converting sunlight into chlorophyll which is harvested by plant eaters.

They in turn are killed and eaten by predators.

The predators kill only what they need and when they finish eating a host of scavengers pick every scrap of meat from the carcass. Even the hunted benefit from the system, for without predators they would multiply until the food was exhausted, and all would starve.

Yet when you come upon a scrape of dried gazella it is no easy take to figure out the killer. More than two dozen different kinds of carnivorous mammals could have done the job. These include the lion, cheetah, jackal, honey badger, and large birds.

The basic chain of events is when a predator is hungry it kills an animal. When the predator leaves the first to eat are the hyenas and the quick jackal, who dart in and out avoiding the crushing jaws of the hyenas,

Then the vultures move in, ripping every bit of meat that is left from the bones. As disgusting as these may seem, scavengers help keep the plains free of disease.

The Savanna Africa is a great deal more than animals to be shot and meat to be eaten.

The meat-producing capacity of African Savannalands is greater than that of any other natural area of the world. This may be what will help save it in the changing times ahead.

The Savanna is a place of fragile interrelationships that man can help preserve or help destroy. What can you do to help save the Savanna? How Can you help?

Slides can be obtained for \$10.95 by writing:

Charlee B. Hedley  
RR#1 Box 4009  
Hyde Park, Vt. 05655

#### RESOURCES

Carr, A. (1964). The Land and Wildlife of Africa. Time-Life Books: N.Y. 61-88.

Chiasson, J. (1987). African Journey. Bradbury Press: N.Y. 15-22.

Educational Enrichment Materials. (1976). Africa: Portrait of a Continent. The New York Times: N.Y. 3-5.

AFRICA: INTO REALITY  
AN INTEGRATED LESSON

LESSON 8 EXPORTS AND HOW IT EFFECTS THE PEOPLE

I. PREVIEW

- A. This lesson looks at the exports by zone and how it effects the people who live there.

II. OBJECTIVES

- A. At the end of this lesson the students will be able to:
1. Summerize the process of how a diamond is made.
  2. Reconstruct the process of diamond making in playdo.
  3. Chart the exports of five African zone on a map.
  4. Compare the exports of each zone.
  5. Infer the effects of exports on the people of the zone.

III. MATERIALS

A. Handouts

1. Five reading on economy (Lye, 1987) (attachments 8-A to E).
2. Five regional maps (Lye, 1987) (attachments 8-F to J).
3. Export Chart (attachment 8-K).

B. Diamonds

1. Diamonds in the Making (Attachment 8-L).
2. Playdo or clay. (Attachment 8-M).
3. Paint.
4. Brushes.
5. Paper.

- C. Mural
  - 1. Paper.
  - 2. Crayons.
  - 3. Markers.

#### IV. PROCEDURES

- A. Review Savannalands and clarify any questions.
- B. Introduce the topic by putting on the board "An export is...". List on board.
- C. Explain that the students will be reading articles about the exports of different zones in Africa and putting this information on a map.
- D. Divide the class into five groups. Handout the readings on economy (Attachments 8-A to E) and the regional maps (Attachments 8-F to J).
  - 1. The students are to read the article and place the export in the right country.
- E. Create new groups of five so the one member from each zone is represented. Handout the Export Chart for the students to tabulate the results onto. Discuss the results.
- F. Have the students read Diamonds in the Making (Attachment 8-M). Summarize the process into steps that are to be written on the board.
- G. Handout playdo and as the class goes through the summary again have them reconstruct the process with the playdo. The end product should resemble a diamond. If desired the class could paint them and display them about the classroom.
- H. Ask the students how they think having diamonds to export is helpful to the people living in the zone. What about the other exports of Africa? List on board.
- I. Divide the class into two groups and have them create a mural of what they think Africa would look like if it could utilize all of its resources.
- J. Close the class by discussing the murals.

V. EVALUATION

- A. Diamonds in playdo.
- B. Export maps and charts.
- C. Murals.

VI. METHODS USED IN THIS LESSON

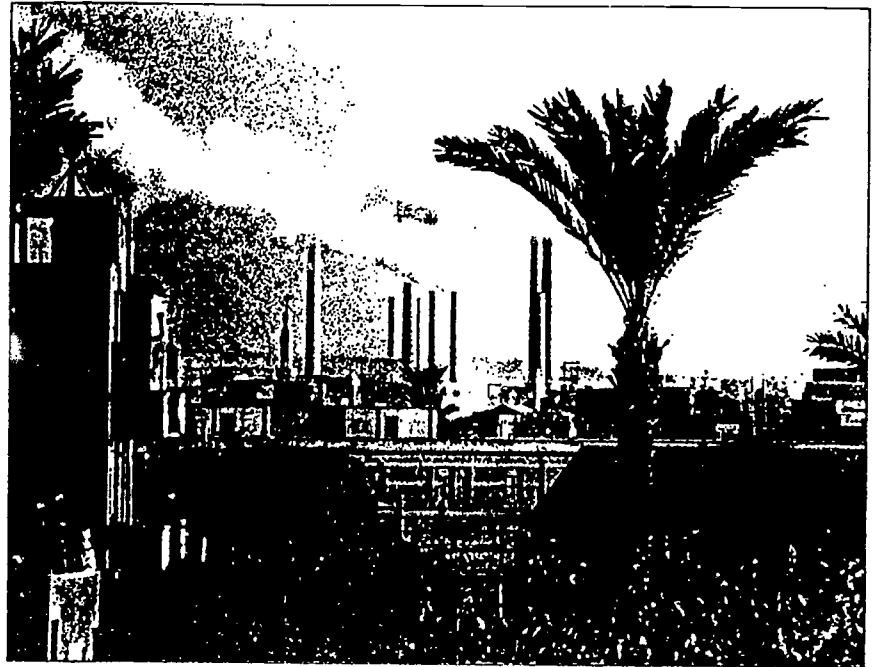
- A. There are many methods used in this lesson the following are just a few:
  - 1. Hands-on, brainstorming, review, discussion, jigsaw group teaching, reenactment, and summarization.

VII. RESOURCES

Lye, K. (1987). Today's World - Africa. Gloucester Press: N.Y.

Egypt is Africa's second most industrialized nation, after South Africa. Egypt gets cheap electricity from the Aswan hydroelectric power stations, and it produces enough oil for its needs. Major products include cement, iron and steel, fertilizers and processed foods. In Algeria and Libya, income from oil and gas sales is being used to develop industries, especially petrochemicals and steel. Manufacturing is also steadily increasing in Morocco, while tourism is the mainstay of Tunisia's economy. In Mauritania, Mali, Niger, Chad and Sudan, farming employs 78 per cent of the workforce, compared with 41 per cent in the northern five countries of North Africa.

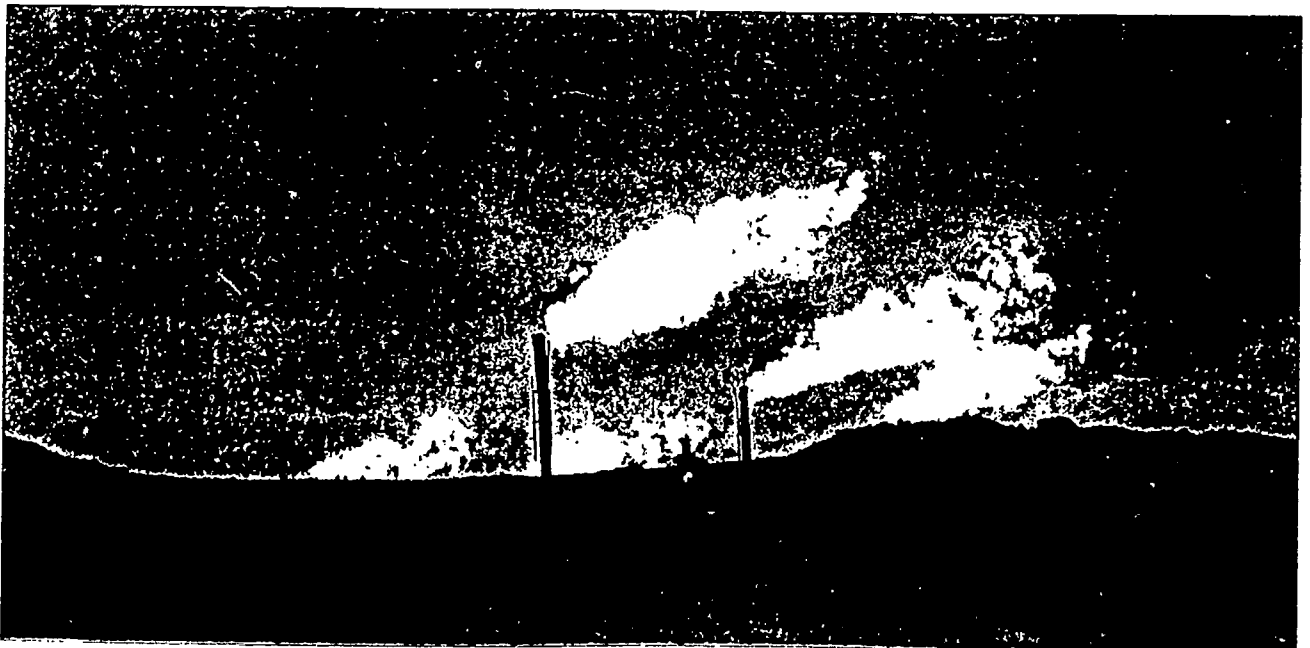
Libya and Algeria are major oil and natural gas producers and exporters, and this makes them the most prosperous countries in North Africa. Tunisia and Egypt produce some oil and phosphates. Morocco is the world's



Steel is one of Egypt's major industries

third largest producer of phosphates, after the United States and the Soviet Union. One of Morocco's richest deposits is in Western Sahara. Mauritania is Africa's third leading producer of iron ore, and Niger's leading ex-

port is uranium. Mining is less important in Mali, Chad and Sudan. Sudan has some oil, but its development has been delayed because the oilfield lies in the southern area, which has been the scene of civil war.

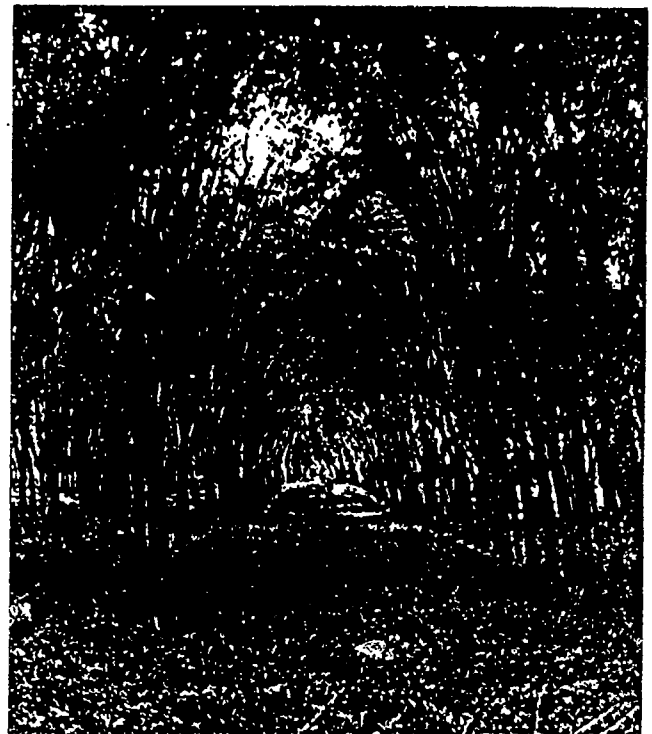


Waste gas being burned off at oil wells in the Algerian desert

Lye, K. (1987). *Today's Africa - Africa*. Gloucester Press: N.Y.



Nigeria is a major producer of oil and natural gas



Rubber is grown on plantations in Liberia

West Africa has important natural resources. Nigeria is Africa's chief oil producer. Guinea produces bauxite (aluminum ore); Liberia, iron ore; Sierra Leone, diamonds; Togo and Senegal, phosphates; and Ghana, gold and diamonds. Most manufacturing is small scale, with factories processing farm products or making things such as clothes and footwear. Farming employs 69 per cent of the workforce. Food crops include cassava, rice, sweet potatoes and yams in wet areas, and corn and millet in savanna regions. Huge numbers of cattle, goats and sheep graze on the savanna. The chief export crops are cocoa, coffee, cotton, palm products, peanuts and rubber. Several countries depend on one or two of these crops or resources. When world prices fall or crops fail, the countries have severe economic problems.



Iron ore being loaded onto railroad cars

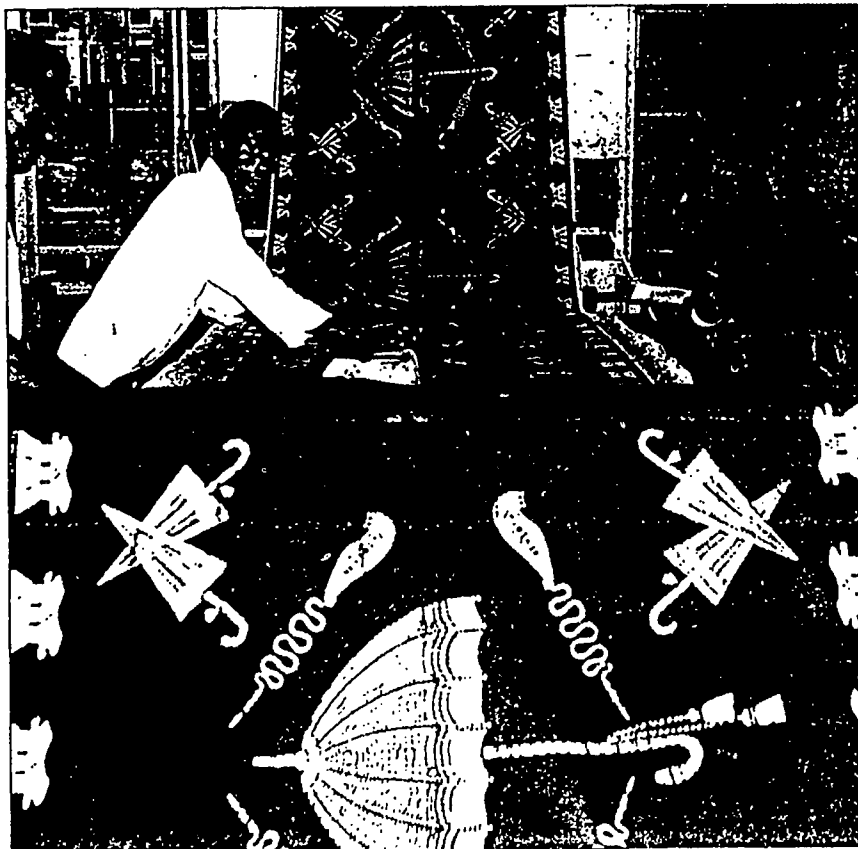


## EQUATORIAL

Farming, fishing and forestry employ 71 per cent of the working people of Central Africa. Many farmers use a type of cultivation called shifting agriculture. This involves clearing a patch of forest or grassland, growing crops for a few years, and then moving on when the soil begins to lose its fertility. Using simple hand tools, many farmers produce little more than they need to feed their families. Major food crops include cassava, corn, millet, plantains (a kind of green banana), sweet potatoes and yams. Crops grown for export are produced mostly on large plantations. They include cocoa, cotton and palm products. Forestry is also important in areas where logs can be floated down the rivers.



Copper ore is a major mineral product of Zaire



Zaire is famous for its elaborate textile patterns

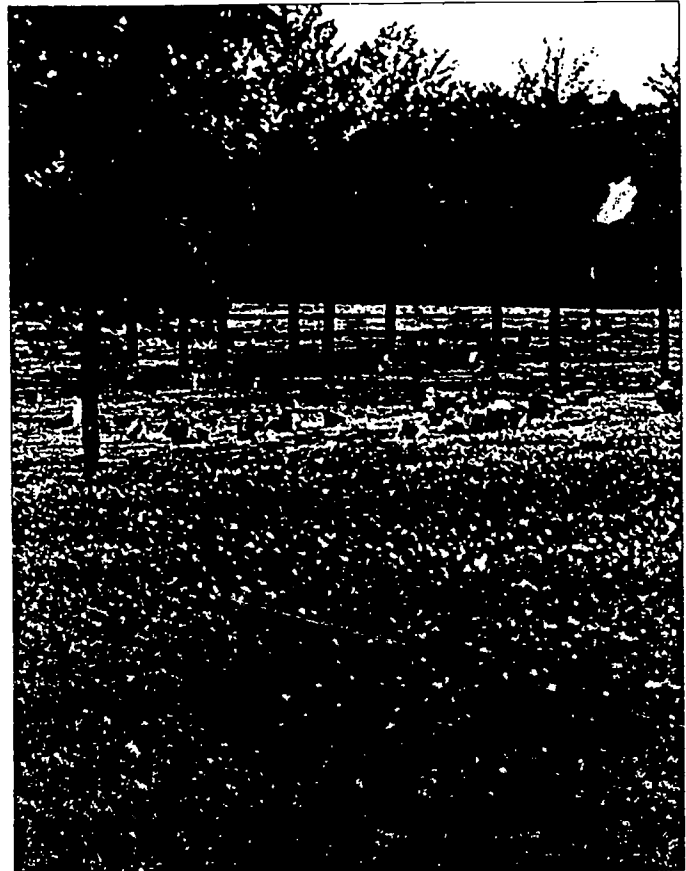
Central Africa is a poor region, but it does have valuable natural resources. Although mining is unimportant in Equatorial Guinea, Zaire is rich in minerals, including copper, diamonds and cobalt. Oil makes up more than four-fifths of the exports of Congo and Gabon, and oil is important in the economy of Cameroon. Gabon also produces manganese and uranium, and it has large, untapped iron ore reserves. The Central African Republic produces diamonds, and cocoa makes up 90 per cent of the exports of São Tomé and Príncipe. Most countries export their ores, because they lack industries to process them and to make metal and other products. The cities have small factories to process foods and sawmills for the timber. There are also many factories that make everyday items, such as cigarettes, clothing and soap.



East Africa has a lower per capita GNP than any other African region. Farming employs 74 per cent of the work force and many farmers are extremely poor. The poverty of most people is shown in the low average life expectancy. For example, Ethiopians live, on average, 44 years, whereas Kenyans live to an average age of 55. By comparison, the average life expectancy in Western countries is more than 70 years.

One major food crop in East Africa is corn. It is dried, ground into flour, cooked and often eaten with beans. Other food crops include various grains, cassava, rice and sweet potatoes.

Coffee, which originated in Ethiopia and still grows wild there, is a major export, together with bananas, copra, cotton and tea. The Comoros produce vanilla; Mauritius, sugar; and the Seychelles, copra and cinnamon. Livestock are grazed in the savanna regions, although tsetse flies, which carry disease, make large areas unsuitable for cattle. Mining is generally unimportant, although Rwanda produces tin and Tanzania has diamonds, while Uganda has reserves of copper and phosphates. Manufacturing is mostly confined to processing farm products and making ordinary household goods, including clothes.

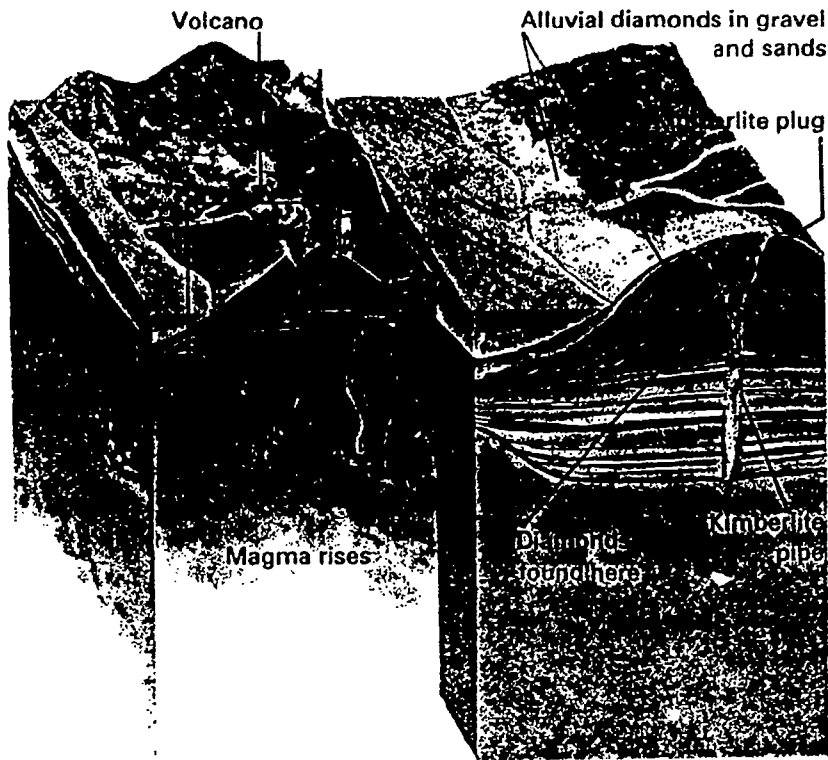


Workers on a tea plantation



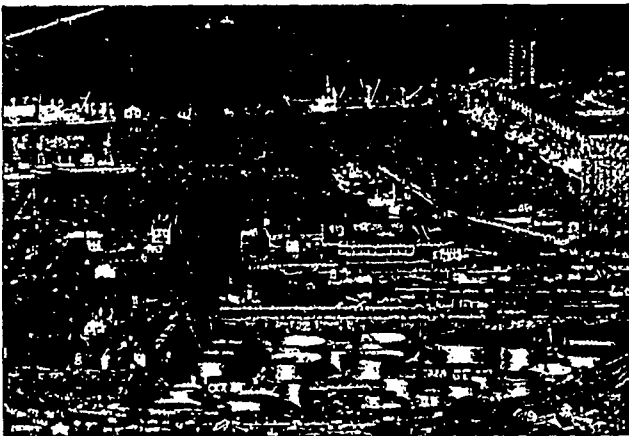
Cattle are a chief source of milk, meat and hides in Madagascar

## ECONOMY



How diamonds are formed

South Africa and Namibia are among the world's top producers of gem-quality diamonds. Other African diamond producers include Botswana, Angola and Lesotho. Diamond, which is chemically a pure form of carbon, is the hardest natural substance. Diamonds are formed under great pressure deep inside the Earth. They are found in rock formations called kimberlite pipes. These rocks are of volcanic origin and have been forced up to the surface through fissures (openings) in the overlying rocks. Some kimberlite pipes are mined, but some diamonds are also found in the sand and gravel on river beds. These alluvial diamonds have been worn away from the kimberlite pipes and washed into the streams by rain.



Cape Town, South Africa, is a busy port



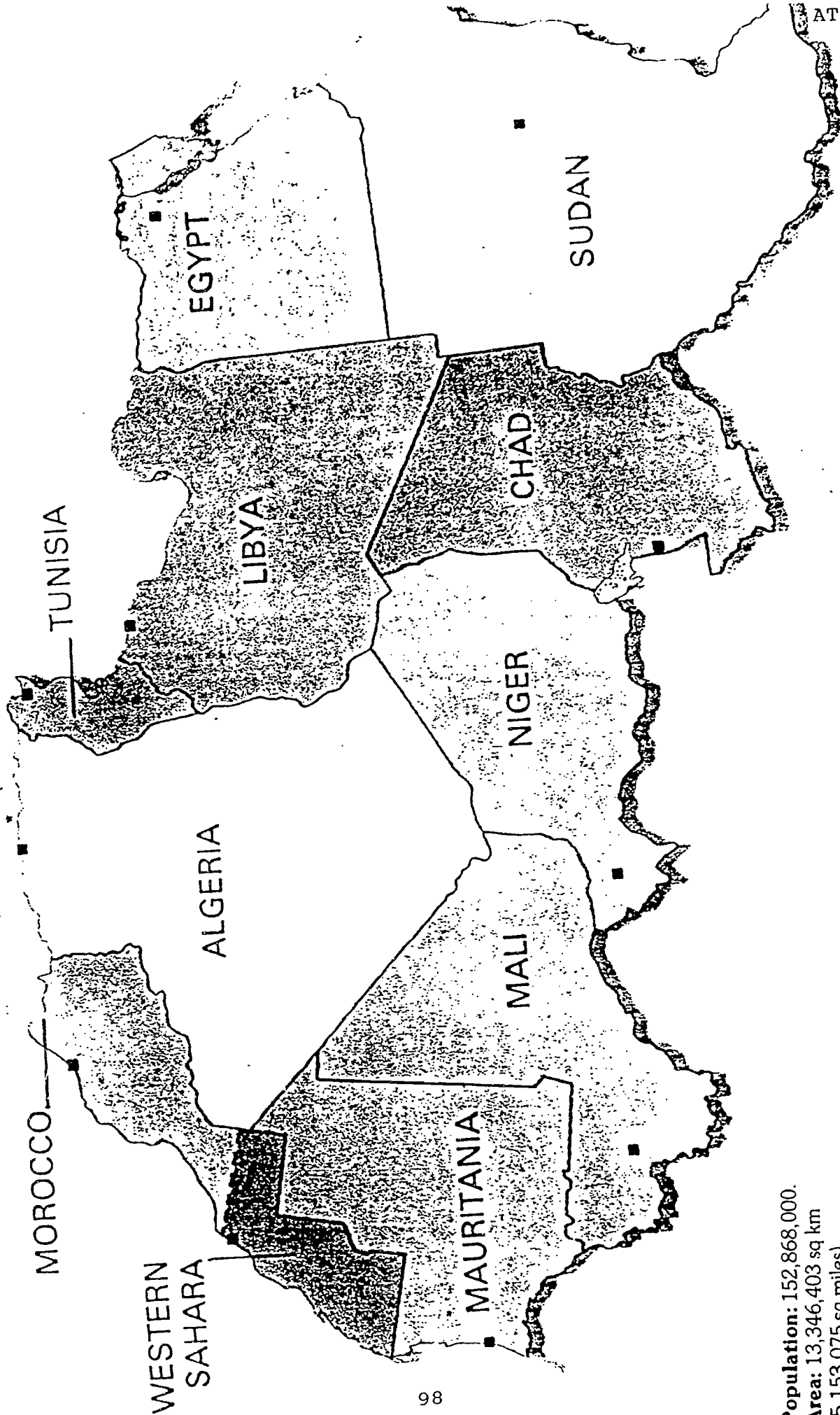
Zambia has the world's biggest copper refinery

Southern Africa has many other natural resources besides diamonds. Namibia exports lead, tin, uranium and zinc. South Africa is the world's leading producer of gold and chromite and is also Africa's top producer of asbestos, coal, iron ore, manganese, nickel, silver, uranium and zinc. Most manufacturing is small scale, except in Zimbabwe and, especially, South Africa. Manufacturing in

South Africa includes cars, fertilizers, steel and other metals, machinery and textiles. Industrial areas include the Witwatersrand (the region around Johannesburg), and South Africa's main ports. With its highly efficient farms, its many natural resources and its industries, South Africa is the continent's leading economic power.

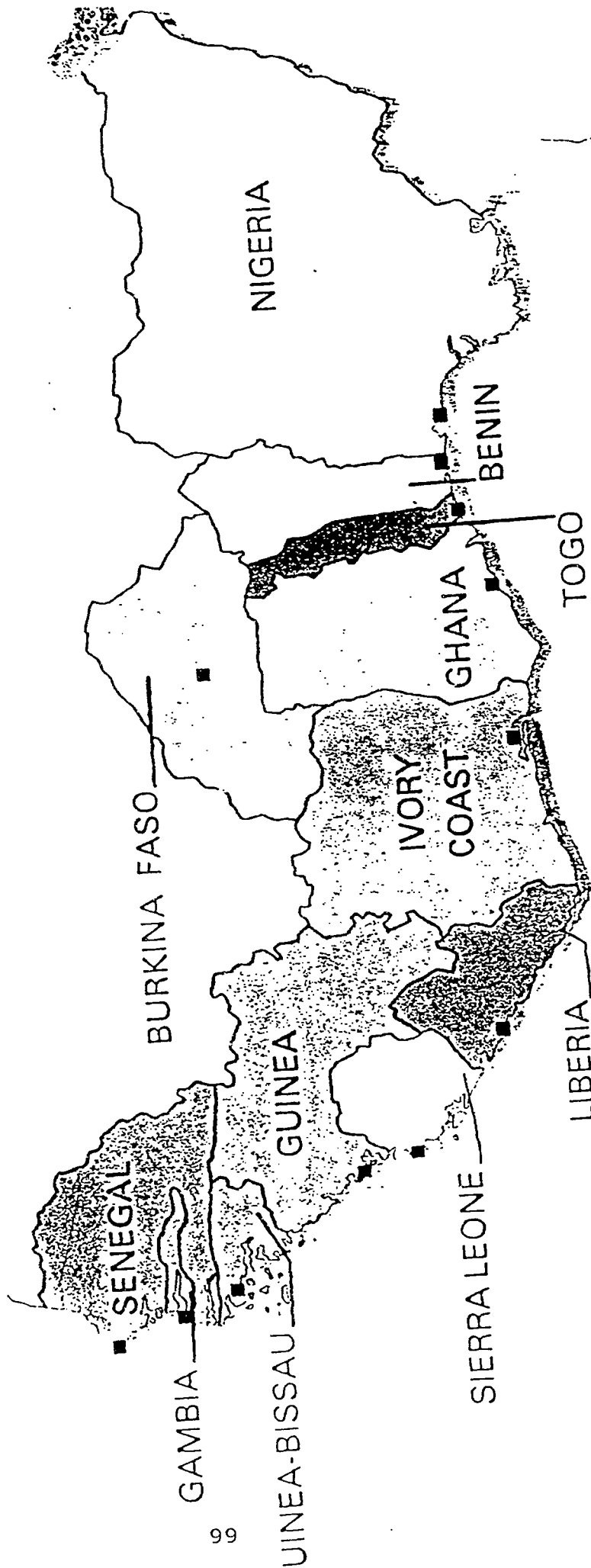
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# NORTH AFRICA



**Population:** 152,868,000.  
**Area:** 13,346,403 sq km  
(5,153,075 sq miles).  
**Population density:** 11 per  
sq km (30 per sq mile).  
**Economy:** The average per  
capita gross national product  
(1984) was \$1,050; Libya's  
was the highest at \$8,230.

# WEST AFRICA



**Population:** 164,828,000.

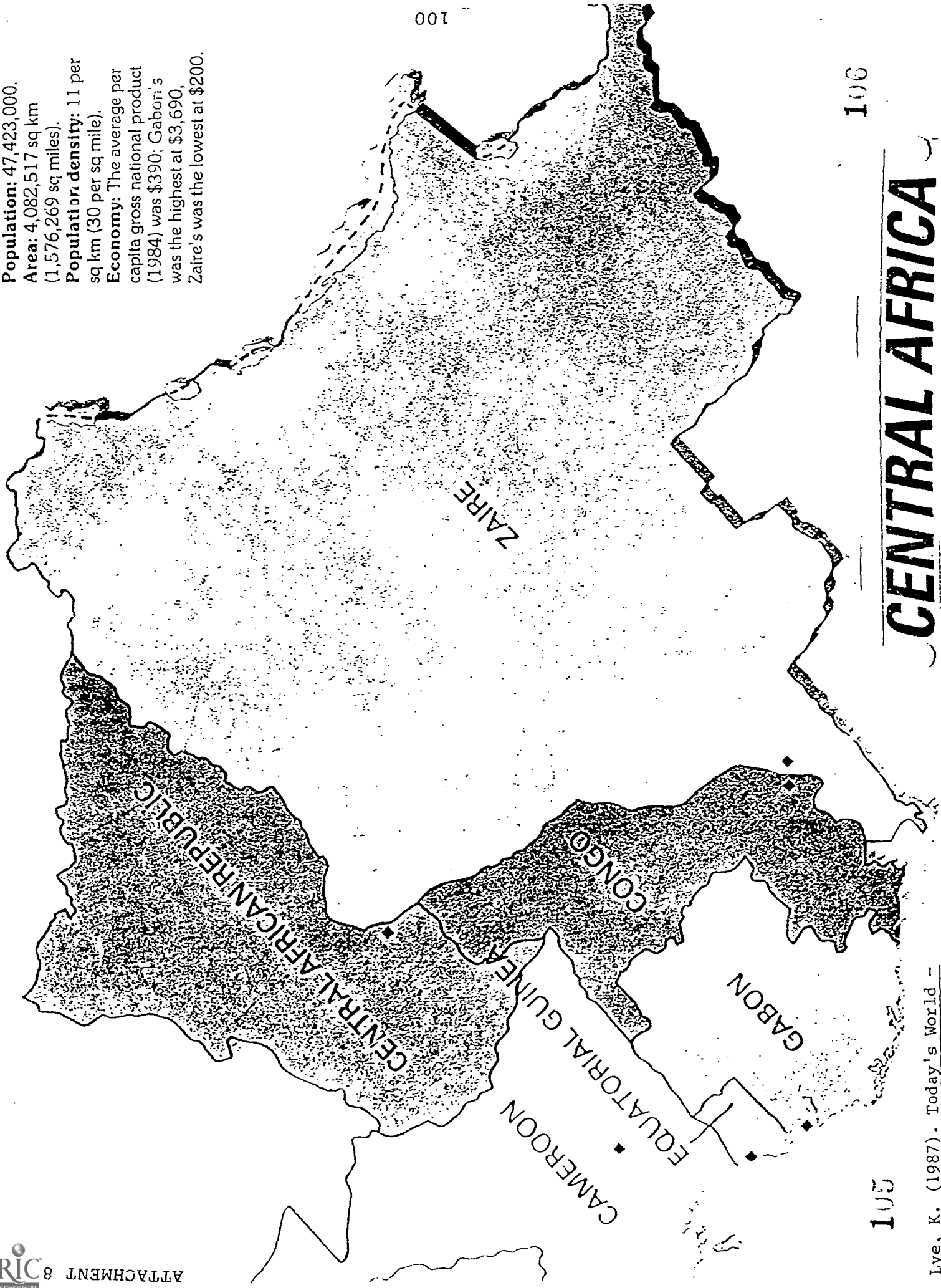
**Area:** 2,604,986 sq km (1,005,792 sq miles).

**Population density:** 63 per sq km (164 per sq mile).

**Economy:** The average per capita gross national product (1984) was \$600; Nigeria's was highest at \$770, Burkina Faso's was the lowest at \$160.



**Population:** 47,423,000.  
**Area:** 4,082,517 sq km  
 (1,576,269 sq miles).  
**Population density:** 11 per  
 sq km (30 per sq mile).  
**Economy:** The average per  
 capita gross national product  
 (1984) was \$390; Gabon's  
 was the highest at \$3,690,  
 Zaire's was the lowest at \$200.



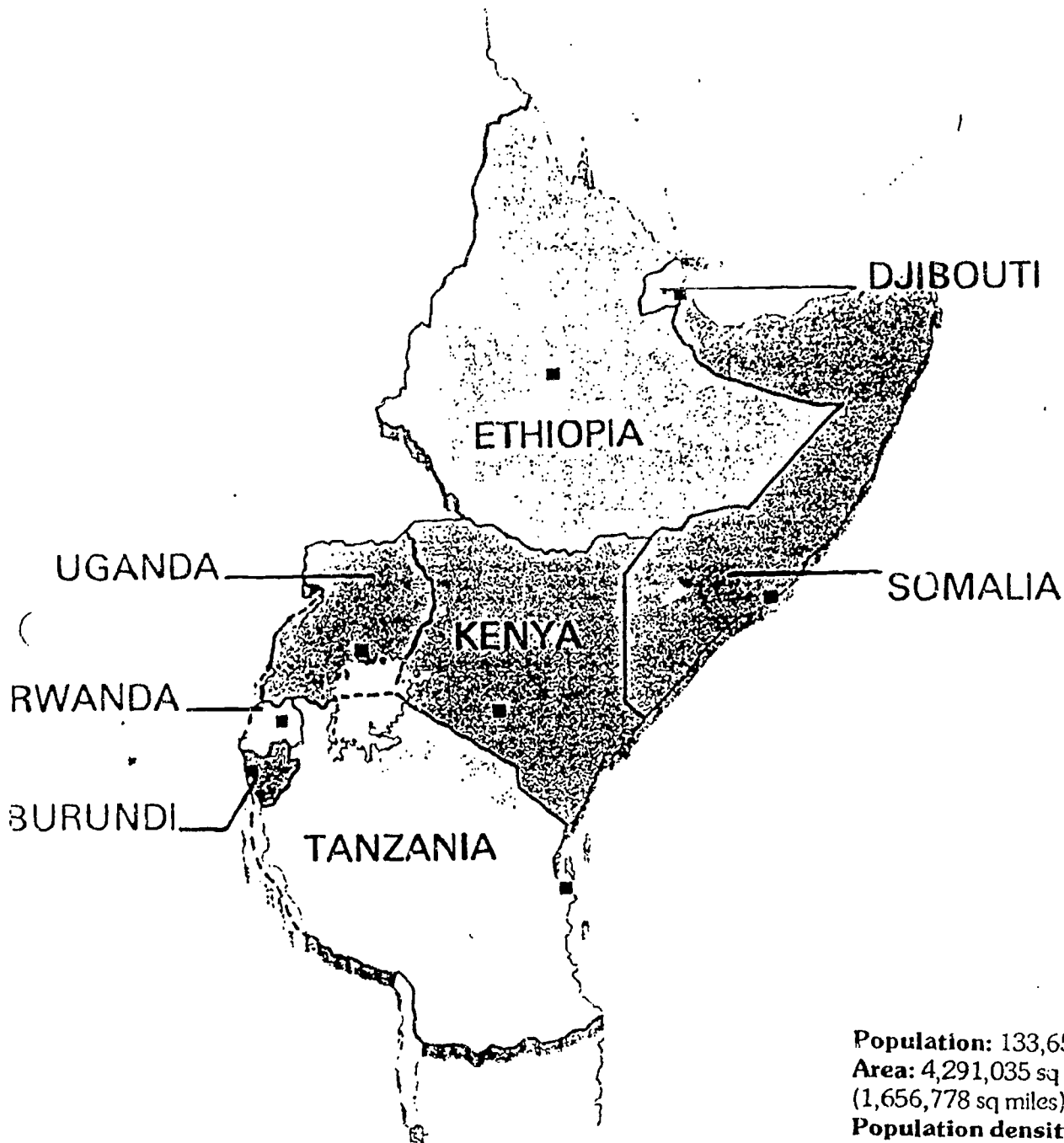
106

# CENTRAL AFRICA

105

Lye, K. (1987). *Today's World - Africa*. Gloucester Press: N.Y.

# EAST AFRICA



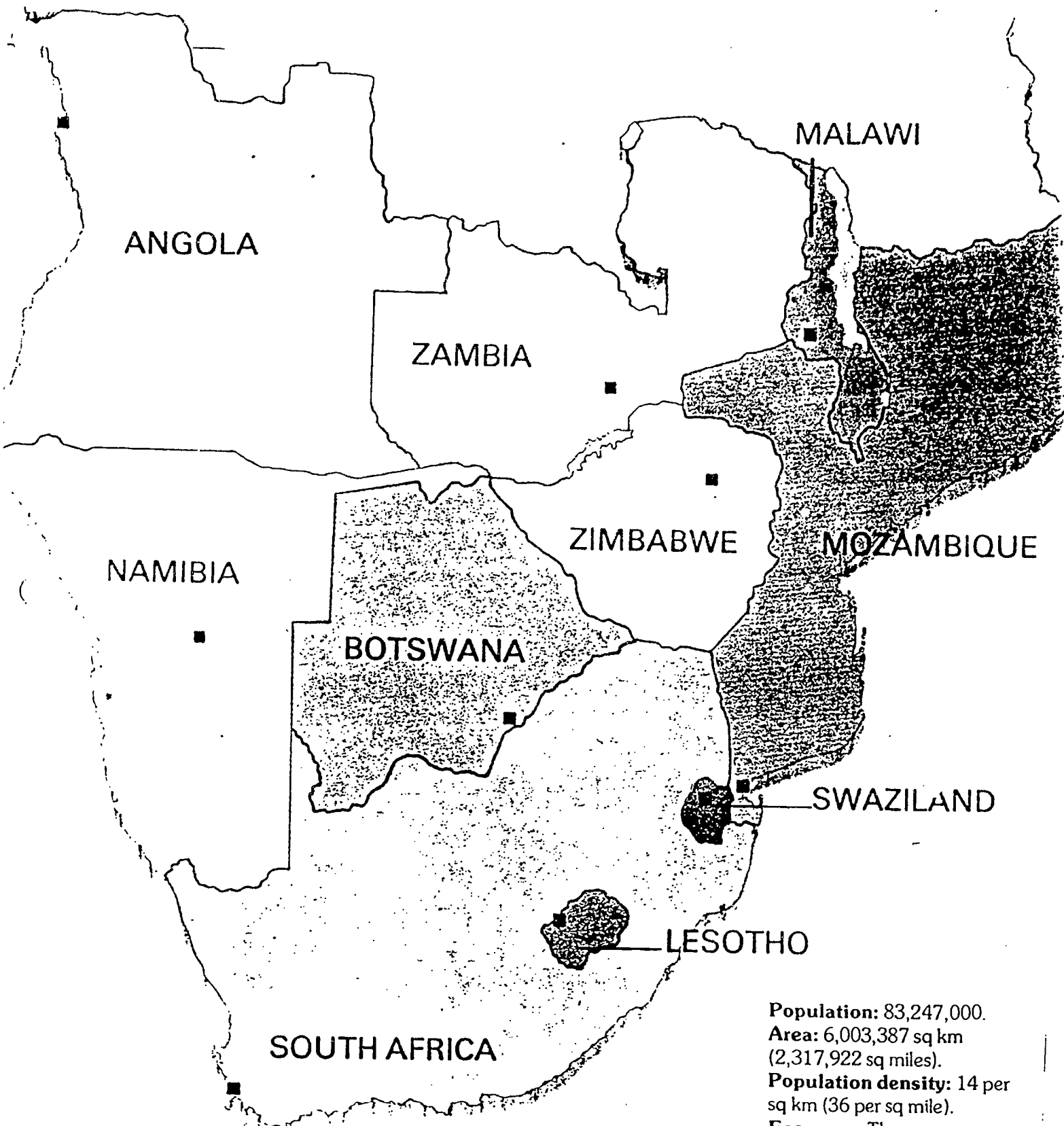
**Population:** 133,658,000.

**Area:** 4,291,035 sq km  
(1,656,778 sq miles).

**Population density:** 31 per  
sq km (81 per sq mile).

**Economy:** The average per  
capita gross national product  
(1984) was \$210; Seychelles  
had the highest at \$2,300, and  
Ethiopia the lowest at \$110.

# SOUTHERN AFRICA



**Population:** 83,247,000.  
**Area:** 6,003,387 sq km (2,317,922 sq miles).  
**Population density:** 14 per sq km (36 per sq mile).  
**Economy:** The average per capita gross national product (1984) was \$1,170. South Africa had the highest at \$2,500 and Mozambique had the lowest at \$150.

# PLAY DOUGH RECIPES

## YOU NEED:

- 1 Cup flour
- $\frac{1}{3}$  Cup salt
- $\frac{1}{3}$  to  $\frac{1}{2}$  Cup water
- a few drops of liquid detergent or vegetable oil
- food coloring (optional)



## YOU DO:

1. Mix the flour and salt together in a bowl, using a spoon or your hands.
2. **SLOWLY** add the water, mixed with food coloring and oil (or detergent).
3. **KNEAD** the dough well and shape it into a ball. (For different colors, make several balls of plain dough and knead in the coloring.)

Put the remaining dough in a tightly closed container or plastic bag, and keep it in the refrigerator to be used again another day.

If it becomes too sticky, add more flour.

## NOW YOU HAVE YOUR OWN PLAY DOUGH!

Enjoy rolling it, poking and pounding it, making it into people, animals, bowls, "cookies," "cakes," balls, holiday ornaments or other objects.

FOR ADDED FUN, use a rolling pin, a round block, a popsicle stick, cookie cutters, a plastic spoon or knife, bottle caps, a spool, etc. for rolling, cutting and decorating the dough.

Remember:  
Cardboard  
string



ATTACHMENT 8-L

EXPORT CHART

Below is a list of twelve common exports from Africa. Across the top are fifteen nations. Check the nation you feel is the biggest producer of the export. There is more than one correct answer.

	Algeria	Cameroon	Egypt	Ghana	Ivory Coast	Kenya	Libya	Madagascar	Nigeria	Senegal	South Africa	Sudan	Tanzania	Zaire
cocoa														
coffee														
copper														
cotton														
diamonds														
gold														
hydro-electric														
oil														
palm oil														
peanuts														
phosphates														
uranium														

## DIAMONDS IN THE MAKING

Diamonds have long been the world's favorite jewel. It sparkles and sends off the colors of the rainbow that can catch the attention of anyone near. The oldest diamonds dates back to 600 A.D. While some of the most famous are the Star of Africa and the Hope.

It is the hardest natural substance on the earth. Many a man regrets the attempt he made to prove this for even these clear, transparent stones have their braking points.

Diamonds can be found on all continents. But most of the famous ones are mined in African countries. They all have come from the deep mantle of the earth and are surprisingly surrounded by the same things, iron and magnesium.

These stones were probably formed millions of years ago in molten lava and came to the surface when volcanic explosions brought the diamond-bearing rocks up to the surface through a crack or some pipe like structure. As the lava flowed to the surface in these pipes, it cooled and became solid "blue rock", called Kimberlite. Once at the surface the Kimberlite mixed with the surface material and settled into craters. These craters and pipes are called diamond pipes, even though it take 20 tons of Kimberlite to reveal one diamond.

Diamonds can be found in two types of deposits. The first is the diamond pipe in which molten rock once raised from the deep mantle of the earth. The other is a placer deposit. These are diamond pipes that have eroded and placed their diamonds in water, such as a stream or ocean, or in the sand dunes blown by the wind.

South Africa is the leading producer of diamonds on the world market. In fact it all began with two children finding a large fragment of glass in 1867. It turned out to be a 22 carat diamond. One year later a shepherd boy found another diamond of about the same size and the rush for diamonds was on.

These first diamond hunters went to the streams and panned for diamonds much the same way miners panned for gold in our California Gold Rush. You see diamonds are heavier than most other material and will sink to the bottom of the pan so the miner can sift through it with their hands to find the stones that are there.

Today the mining operation is done in two ways, open-pit and underground. The open-pit operation takes material from the pit and crushes the material into small rocks. They then move on to be washed clean of grit, clay and sand. This washed material in then put into a tank and using the same process as panning the heavier diamond material is allowed to sink to the bottom and collected to be sifted through by hand. Of course even the lighter material is treated and searched to get the small chips.

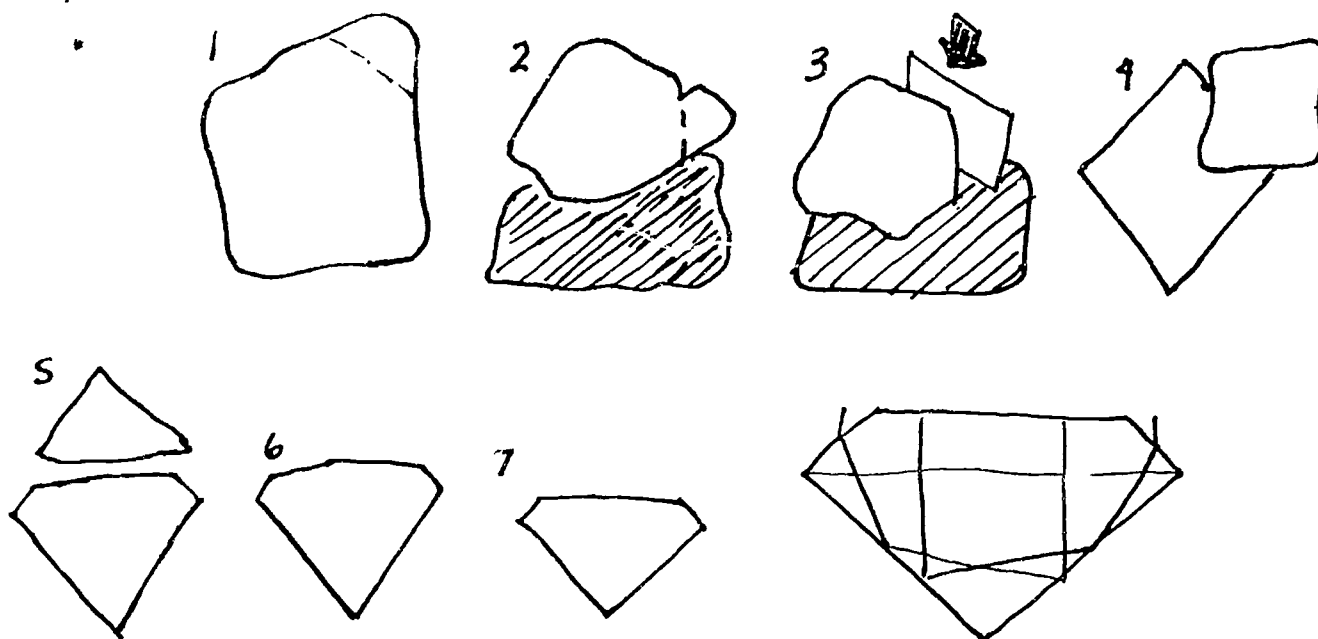
The underground operation begins by placing a shaft some distance from a blue rock pipe. Elevators take the Kimberlite to the surface where it then begins the same process as the open-pit operation.

The recovered diamonds are referred to as rough. The brilliance and fire of the jewels comes from the hands of expert diamonds cutters. They are able to find the shape that will allow the stone to reflect, refract and disperse light so the diamond will sparkle. The sparkle comes from the light beam bouncing off the bottom facet, or surface, upward through the top facet.

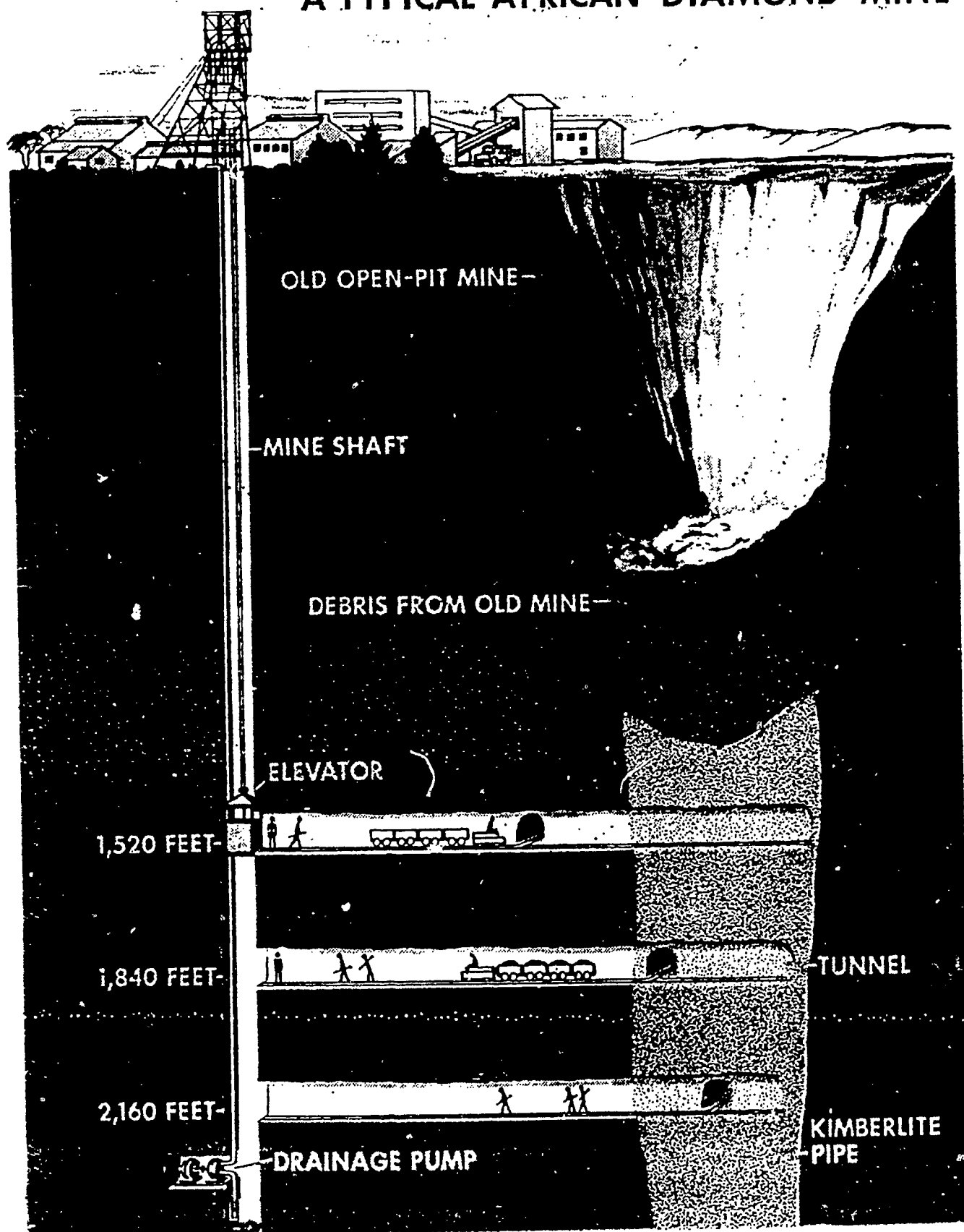
Most diamonds have a hint of color, If the color is intense it is prized and called "fancy". Blue and pink are the most valuable while a red tint is the most rare. The clear, white diamonds are called the diamonds of the first wash because they have no color just like the first load of wash from the old wash tubs.

Cutting a diamond can make it famous or destroy it forever. Much time and thought is put into the planning before a cleaving iron splits the stone. But once split the stone is then shaped on a grinding lathe that has been coated with olive oil and diamond dust. The most popular shapes are the emerald, brilliant, oval, pear, heart, and marquise.

Diamonds may now be called "a girl's best friend" but their fire and brilliance will long outlive any mortal love.



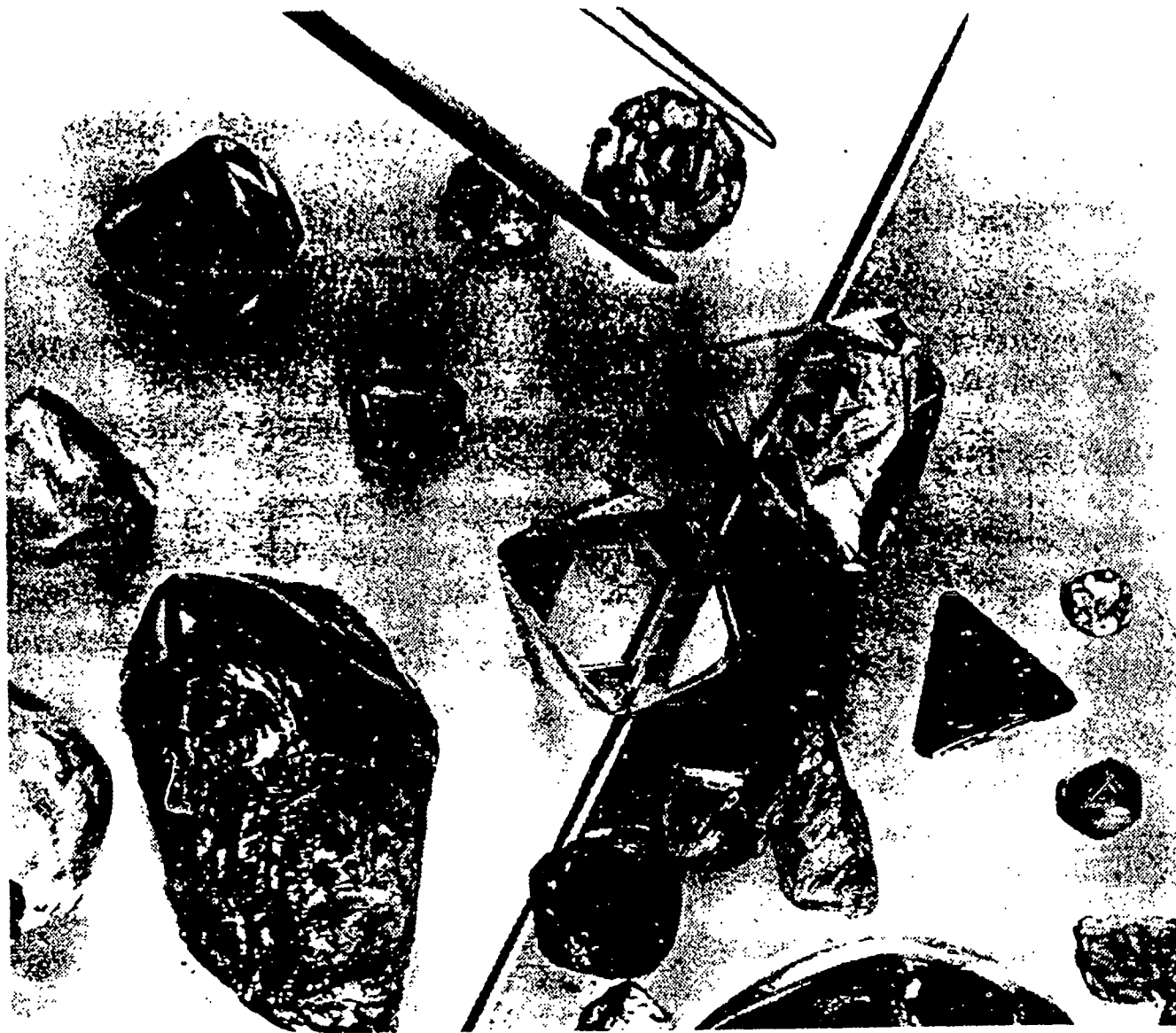
# A TYPICAL AFRICAN DIAMOND MINE



Diamond-bearing kimberlite is often found in the vents, or pipes, of old volcanoes. After it has been blasted loose by dyna-

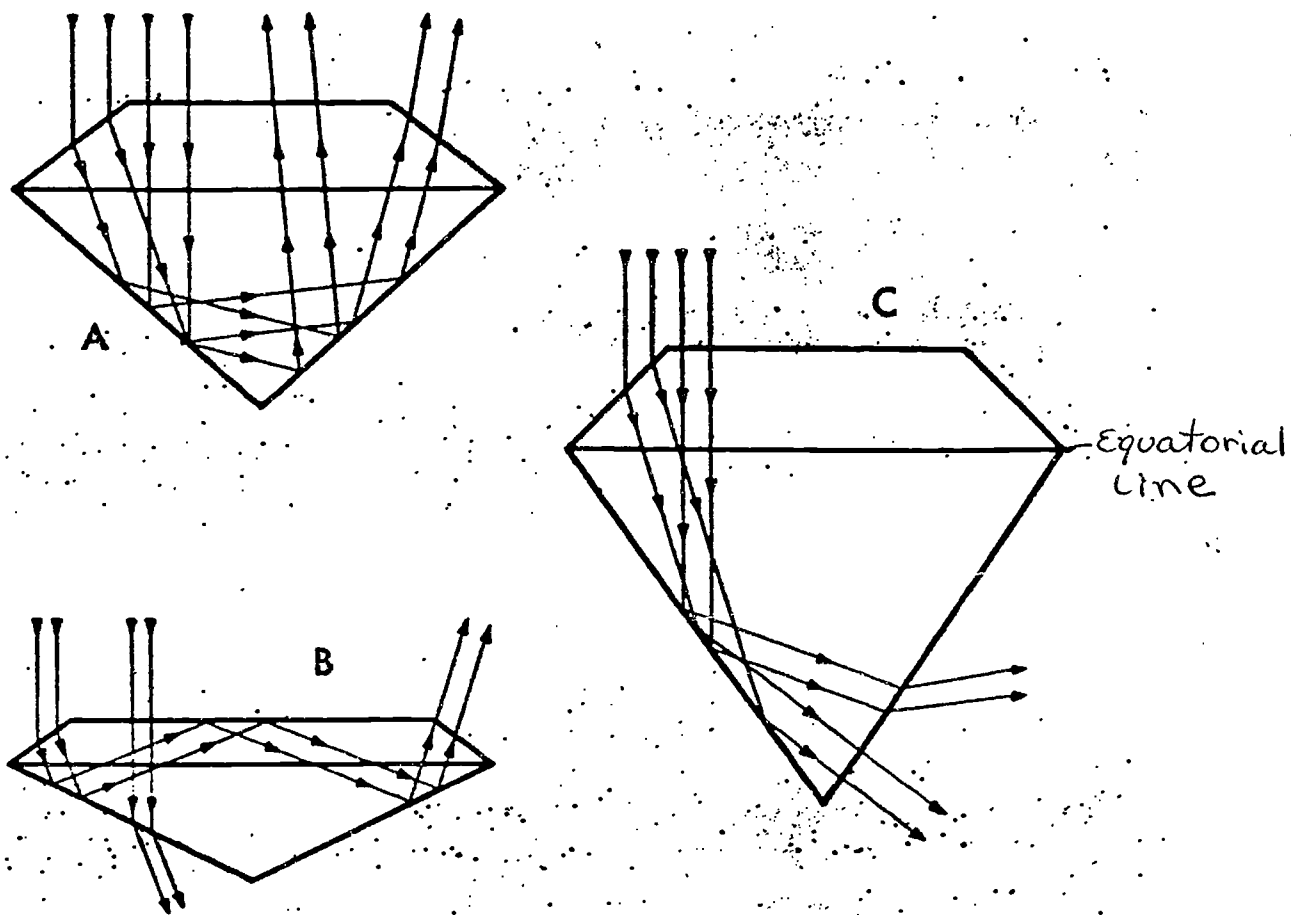
mite it is carried to the elevator in ore cars. Then it is taken to the surface and processed to eliminate waste materials.

ROUGH DIAMONDS



N. W. AYER AND SON

## PROPORTIONS OF A CUT DIAMOND



In a properly cut diamond (A), the light that enters it is reflected back through the top. If it is cut too shallow (B), some light passes through the gem; if it is cut too deep (C), much light leaks out the sides.

FINISHED CUT DIAMONDS



EMERALD

BRILLIANT

OVAL

PEAR

MARQUISE

HEART

N. W. AYER AND SON, INC.

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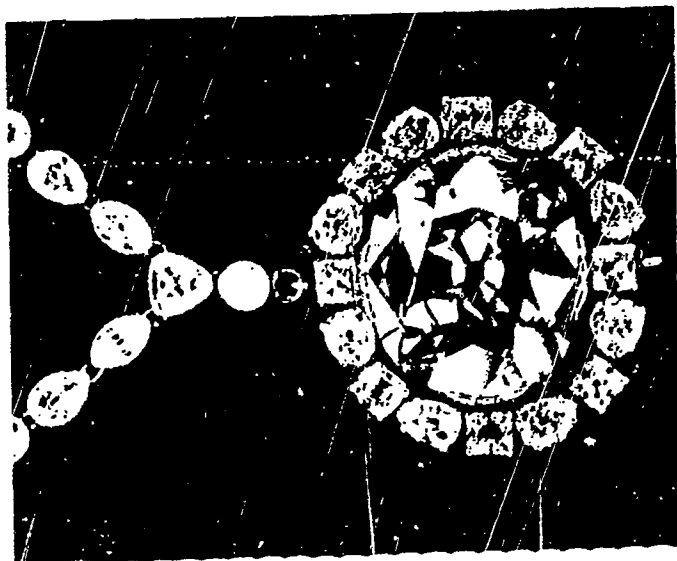
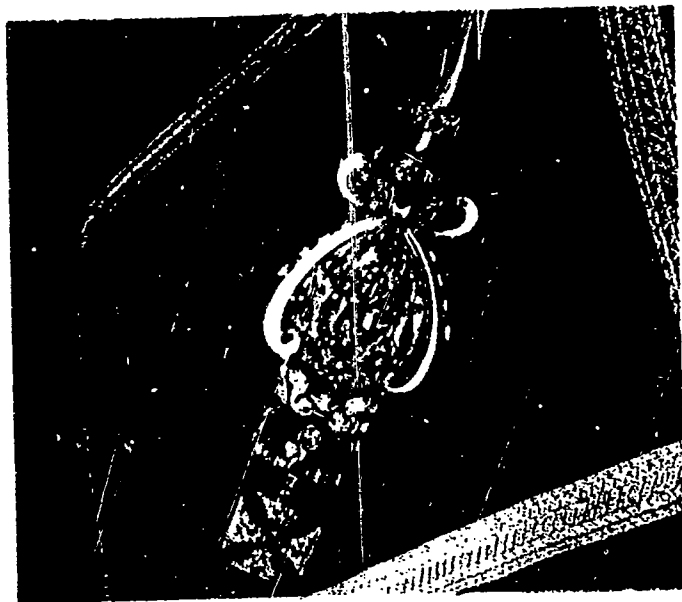
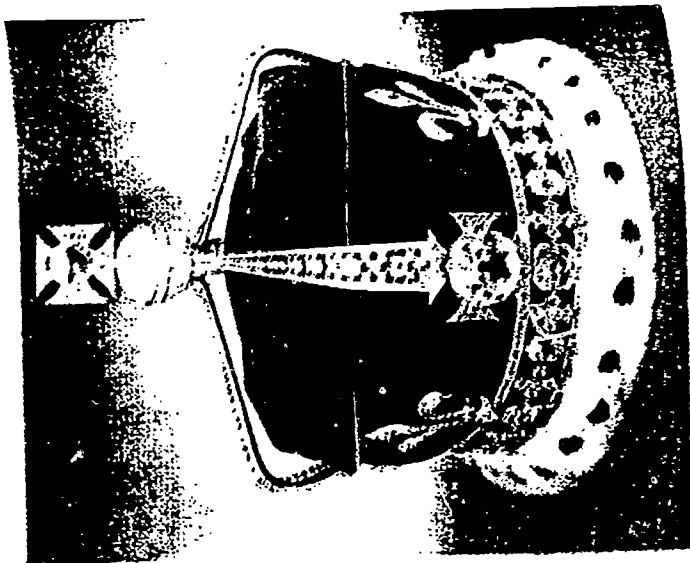
Lorimar, L. (1991). Encyclopedia Americana. Golier, Inc.: Danbury, Conn.



ENGLISH CROWN JEWELS

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The 44.5-carat blue Hope diamond (left) is in the Smithsonian Institution. The 530-carat Star of Africa (center), which adorns the British royal scepter, is the world's largest cut diamond. The 109-carat Koh-i-Noor diamond (right) is set in a British crown.



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Good, D. (1987). Compton's Encyclopedia. Compton's Learning Co.: Chicago.

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AFRICA: INTO REALITY  
AN INTEGRATED LESSON

LESSON 9 AN AFRICAN MEAL

I. PREVIEW

- A. This lesson allows the students to enjoy and prepare an African meal.

II. OBJECTIVES

- A. At the end of the lesson the students will be able to:
1. Demonstrate a positive attitude towards African culture by eating an African meal.
  2. Demonstrate correct etiquette for eating in African culture.
  3. Use their knowledge of Africa in preparing the meal.
  4. Use proper safety procedures as needed and as discussed.
  5. Demonstrate respect for the speaker by listening quietly.

III. MATERIALS

- A. Food needed for the recipes they selected and any other items for preparation and consumption of the meal.
1. Completed food plans.
    - a. Lab work sheet completed (Attachment 9-A).
    - b. Analyzed recipe (Attachment 9-B).
- B. Recipes form lesson six (Attachment 6-F).
- C. Speaker or film.
1. A speaker from a nearby University could be invited to the class to speak and answer questions.
  2. The film "Cheetahs" by Disney is a good idea. It involved two high school students in Kenya for the summer and the baby cheetah they find, raise and rescue.

### III. PROCEDURE

- A. Gather food and preparations tools needed for the meal.
- B. Set up eating area.
- C. Prepare food.
- D. Go over etiquette rules from lesson 6.
- E. Serve and eat meal by African custom described in lesson 6.
- F. Clean up meal and preparation tools.
- G. Write a paragraph about the meal, speaker, or film.

### V. EVALUATION

- A. Visual assessment of correct etiquette rules during the meal.
- B. Respect for the speaker.
- C. Written paragraph about the day.

### VI. METHODS USED DURING THIS LESSON

- A. There are many methods used in this lesson the following are just a few:
  - 1. Hands-on, analysis, lecture, review, audio-visual, and demonstration.

### VII. RESOURCES

Merryfield, M. (1989). Lessons from Africa. Indiana University: Indiana.

FOOD WORK SHEET

Recipe \_\_\_\_\_

Names \_\_\_\_\_

Ingredients needed

\_\_\_\_\_  
\_\_\_\_\_

Utensils needed

Order of Work	Person Responsible
Personal preparation	
Get utensils	
Get & measure ingredients	
Serve & eat	
Clean up	
Evaluate	

## FOOD LAB PLAN

School foods labs all begin with a written Lab Plan. Plans help students to understand the recipe, manage time, share the tasks, and complete projects successfully. Follow the steps below to complete a Foods Lab Plan Work Sheet for the attached recipe. Do steps in order and check when completed.

- \_\_\_ 1. Analyze the recipe by reading it and underlining all recipe terms.
- \_\_\_ 2. Write the name of the recipe on the recipe line at the top of the worksheet.
- \_\_\_ 3. List group member names at the top of the worksheet.
- \_\_\_ 4. List all ingredients and amounts needed to prepare the recipe under Ingredients Needed on worksheet.
- \_\_\_ 5. Now to determine the needed utensils look at each ingredient and under Utensils Needed list all the equipment needed to measure.
- \_\_\_ 6. To determine the rest of the Utensils Needed look at each underlined recipe term and list what equipment will be needed to do it.
- \_\_\_ 7. The next section to complete is the Order of Work. Always begin the order of work with these same three steps:

- \* Personal preparation
- \* Get utensils
- \* Get and measure ingredients

Write these steps on the first three lines.

- \_\_\_ 8. The next part of Order of Work is for the recipe terms in the order they should be completed. Begin with terms that are included in the list of ingredients. Then continue listing the terms, in order, that are included in the directions. (Begin each step with the action word or term.)
- \_\_\_ 9. The last four steps are always the same for each classroom foods lab plan. They are:
  - \* Show teacher
  - \* Serve & eat
  - \* Clean up
  - \* Evaluate
- \_\_\_ 10. Complete the plan with Persons Responsible. Personal preparation, serve & eat, clean up, and evaluate should be assigned to "all". Now divide the remaining tasks so that all members share responsibility.

AFRICA: INTO REALITY  
AN INTEGRATED LESSON

LESSON 10 WRITTEN EXAM AND FUN WITH AFRICA

I. PREVIEW

- A. This lesson begins with a written exam and a look at Africa games, proverbs and the Swahili language.

II. OBJECTIVES

- A. At the end of this lesson the students will be able to:
1. Demonstrate their knowledge of Africa in written form.
  2. Explore the Swahili language.
  3. Create their own proverbs.
  4. Play mankala.

III. MATERIAL

- A. Written Exam (See 10-A).
- B. Handouts entitled:
1. Mankala (Blake-Alston, 1991) (See 10-B).
  2. Swahili Picture Words (Bacak, 1982) (See 10-C).
  3. Swahili Math (Bacak, 1982) (See 10-D).
  4. African Proverbs (Bacak, 1982, and Blake-Alston, 1991) (See 10-E).
  5. Pondering Proverbs (Blake-Alston, 1991) (See 10-F).
- C. Paper cups.
- D. Egg carton.
- E. Dried beans.
- F. Paper.

#### IV. PROCEDURE

1. Clarify any questions on unit.
2. Explain expectations and behavior for test.
  - A. This is a cooperative test. They may chose to take the test alone or in groups of no more than three. Each member of the group will receive the same grade - good or bad.
  - B. During the test the students may talk quietly but if the volume gets too loud the test will stop and be graded as is.
3. As time will be left over from the test, the following are self explaining activities that relate to the unit.
  - A. Pondering proverbs (10-F).
  - B. African Proverbs (10-E).
  - C. Swahili Math (10-D).
  - D. Swahili Picture Words (10-C).
  - E. Mankala (10-B).

#### V. EVALUATION

- A. Written test.
- B. Visual Assessment of interest level of activities.

#### VI. METHODS USED IN THIS LESSON

- A. The methods used in this lesson are:
  1. Lecture, demonstration, audio-visual.

#### VII. RESOURCES

- Bacak, C. (1982, Nov/Dec). "Teaching About Africa". Social Education. pg.498-529.
- Blacke-Alston, C. (1991, Feb). "Thank You Africa". Learning 91. pg. 31-40.

## Written Exam on Africa

In our study of Africa we have corrected many incorrect ideas. Below you will find statements that need to be corrected to reflect the truth about Africa. Rewrite the statements to reflect this truth.

## Example:

The only language spoken in Africa is African.

CORRECTION: The people of Africa speak many different languages.

1. All the people live in small houses beside the road.

CORRECTION: \_\_\_\_\_

2. There is only one tribe in Africa.

CORRECTION: \_\_\_\_\_

3. Africa is one large jungle.

CORRECTION: \_\_\_\_\_

4. Africa is one large country.

CORRECTION: \_\_\_\_\_

5. Africa looks the same no matter where you go in it.

CORRECTION: \_\_\_\_\_

6. Tarzan movies show the way Africa really is.

CORRECTION: \_\_\_\_\_

7. Everyone in Africa wears the same thing.

CORRECTION: \_\_\_\_\_

8. The Moslem religion is the only one in Africa.

CORRECTION: \_\_\_\_\_

9. Most African are educated in Europe.

CORRECTION: \_\_\_\_\_

10. All of Africa is hot and dry.

CORRECTION: \_\_\_\_\_

11. All Africans do the same jobs.

CORRECTION: \_\_\_\_\_

12. Family life is just like that of the U.S.

KEY WORDS AND PHRASES

Give the meaning of the following words and phrases.

Savanna

Rainforest

Smooth coastline

Desert

Animsim

FACT QUESTIONS

What factors influence climate and weather in Africa?

Why dose southern Africa have the reverse of our seasons?

What are some rules for eating a meal in Africa?

What are some stereotypes Africans have of Americans?

What were the pyramids and what were some of the problems building them?



What is one of the customs of Swaziland and how did they dress for it?

What are some ways Africans teens and American teens are alike?

THE MAJOR CLIMATES OF AFRICA



Label the major climate bands of Africa on the map above using the key below.

- A. Desert areas
- B. Savanna Grasslands
- C. Tropical rain forest
- D. Temperate zones

Name \_\_\_\_\_

# MANKALA

**STUDENT  
PAGE**

With 40 playing pieces (buttons or dried beans), two paper cups, and a cardboard egg carton, you and a friend can play this popular African game. Just follow these steps:

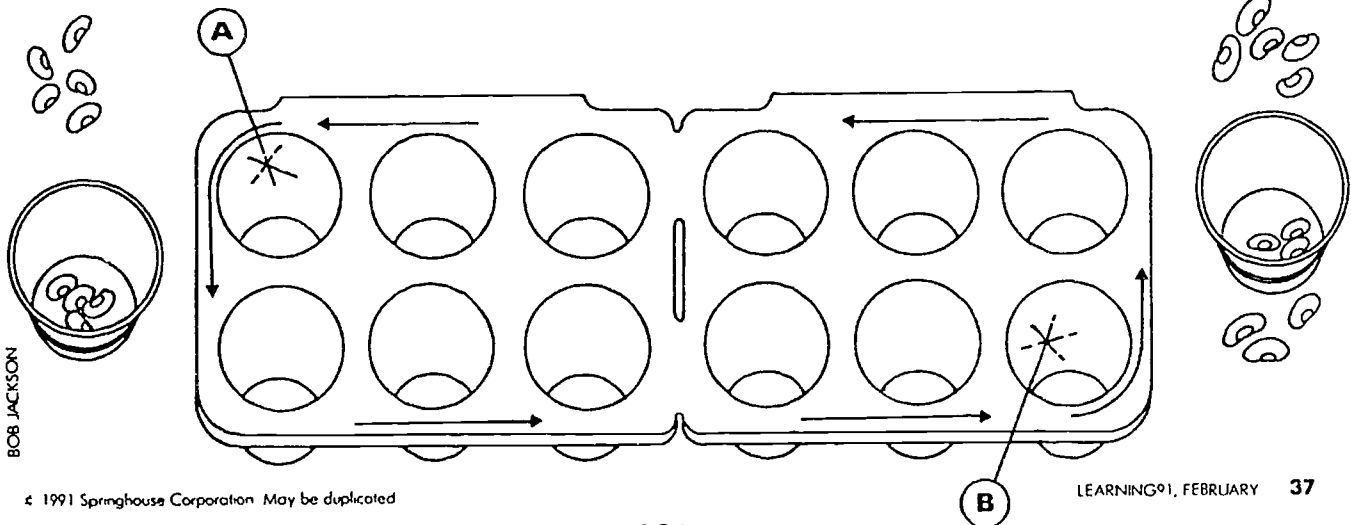
1. Before you begin: Remove and discard the top of the carton. In each of the 12 holes of the bottom section, place two to five playing pieces. Use all the pieces.

2. To start: Decide who will be Player A and who will be Player B.

3. Player A: Remove all the pieces from your starting hole and drop one piece at a time into each successive hole to the right. After you drop your last piece, look carefully at that hole. If it contains two or four pieces, you win all the pieces from the *opposite* hole. Put them into your paper cup. Then remove all the pieces from your last hole and continue around the board, dropping one piece in each hole. Remember, each time there are two or four pieces in the last hole, you win whatever is in the opposite hole. You lose your turn when you drop your last piece into an *empty* hole.

4. Player B: Now it's your turn. Remove all the pieces from your starting hole and follow the rules above. Keep all your winnings in your paper cup.

5. Note: Begin each turn with your starting hole. If it's empty, start at the first hole to the right that has pieces. Keep playing until there are only a few pieces left that no one can win. The player whose paper cup contains the most pieces wins.

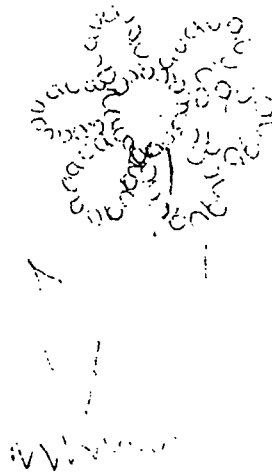


## SWAHILI PICTURE WORDS

## DIRECTIONS:

Look at the picture word below and then use one of the Swahili words to design your own picture words:

ua - flower



## Words:

Mountain - mlima

Kite - tiara

Banana - ndizi

## SWAHILI MATH

## ATTACHMENT 10-D

moja = one

mbili = two

tatu = three

nne = four

tano = five

sita = six

saba = seven

nane = eight

tisa = nine

knmi = ten

## DIRECTIONS:

Use the Swahili numbers to help you answer these math problems. Give your answer in Swahili.

1. moja + tano =

2. saba + mbili =

3. tatu + nne =

4. kumi + saba =

5. saba - sita =

6. tatu - moja =

7. saba - tatu =

8. kumi - moja =

9. tisa - nane =

10. kumi - saba =

Name \_\_\_\_\_

**STUDENT  
PAGE**

# AFRICAN PROVERBS

A proverb is a simple saying packed with wisdom about life. Here are some proverbs from several African countries. Do they sound like any sayings you know? Read the first proverb and its meaning. Then read the others and try to explain them.



**Rwanda and Burundi:** If you are building a house and a nail breaks, do you stop building or do you change the nail?

**Meaning:** Don't let little problems stop you from finishing what you started.

**Cameroon:** By trying often, the monkey learns to jump from the tree.

**Meaning:** \_\_\_\_\_

**Ethiopia:** Unless you call out, who will open the door?

**Meaning:** \_\_\_\_\_

**Kenya:** He who does not know one thing knows another.

**Meaning:** \_\_\_\_\_

Now, create your own proverb and ask a friend to explain it.

**My proverb:** \_\_\_\_\_

**Meaning:** \_\_\_\_\_

## DIRECTIONS:

All cultures have proverbs or "wise sayings". Below are some Swahili proverbs from East Africa. Read the proverbs and think about them. Then explain the proverb in your own words.

## SWAHILI PROVERBS

1. He who does not listen to an elder's advice comes to grief.
2. One volunteer is better than ten forced men.
3. Everyone should contribute when a collection is being made.
4. A bad brother is far better than no brother.
5. To stumble is not to fall down but to go forward.
6. It is better to make friends with your enemy than to go without water.

## RESOURCES

The books or magazines that have a star are books that will be available to the students during the unit.

- Bacak, C. (1982). "Teaching about Tanzania". Social Education. Nov/Dec, 498-501.
- \* Cadlwell, J. and Caldwell E. (1972). Our Neighbors in Africa. John Day Co.: N.Y.
- \* Chaisson, J. (1987). African Journey. Bradbury Press: N.Y.
- Crane, L. (1982). "African Arts and the Social Science" Social Science, Nov/Dec, 502-507.
- Educational Enrichment Materials. (1976). Africa: Portrait of a Continent. The New York Times: Bedford Falls, N.Y.
- Educational Enrichment Materials. (1980). African Religion and Culture. Film. The New York Times: Bradford Falls, N.Y.
- \* Feinstein, S. (1988). Egypt in Pictures. Lerner Publishing Co.: Minneapolis, Minn.
- \* Fisher, L. (1988). Pyramid of the sun, Pyramid of the Moon. MacMillian Publishing Co.: N.Y.
- \* Good, D. (1991). Compton's Encyclopedia. Compton's Learning Co.: Chicago.
- \* Graff, E. (1980). Africa. Cambridge Book Co.: N.Y.
- \* Josepy, A. (1971). The Horizon History of Africa. American Heritage Publishing Co., Inc.: N.Y.
- \* Life Nature Library, (1964). The Land and the Wildlife of Africa. Time Life Books: N.Y.
- \* Lorimar, L. (1991). Encyclopedia Americana. Grolier Inc.: Danbury, Conn.
- \* Lorimar, L. (1991). The Student's Encyclopedia. Grolier Inc.: Danbury, Conn.
- \* Lye, K. (1987). Today's World - Africa. Gloucester Press: N.Y.

- \* MacQuitty, W. (1978). Tutankhamun - The Last Journey. Crown Publishing Co.: N.Y.
- \* Mattheissen, P. (1972). The Tree Where Man Was Born. E.P. Dutton and Co., Inc: N.Y.
- Merreyfield, M. (1989). Lessons from Africa. Indiana University: Indiana.
- \* Murray, J. (1985). The Cultural Atlas of Africa. Facts on File Publishing Co.: N.Y.
- \* National Wildlife Federation. (1992). The Rainforest. National Wildlife Federation: Washington, D.C.
- Nolen, B. (1979). Africa is People. E.P. Dutton and Co., Inc.: N.Y.
- \* O'Toole, T. (1989). Visual Geography Series. Minneapolis: Minn.
- \* Porter, E. (1972). The African Experience. E.P. Dutton and Co., N.Y.
- Sewell, B. (1968). Egypt Under The Pharaohs. George Rainbird Ltd.: N.Y.
- Sullivan, J. (1982). "Recent Trends in African History" Social Education, Nov/Dec, 508-514.
- \* Unger, S. (1985). Africa. Simon and Schuster: N.Y.
- Universal Education and Visual Arts. (1973). Earth and Man. Filmstrip. Universal City Studios, Inc.: N.Y.
- Wiley, M. (1982). "Africa in Social Studies Textbooks". Social Education, Nov/Dec, 492-497.

A copy of this letter was sent to the following companies:

The John Day Co. of New York	The New York Times of N.Y.
Lerner Publishing of Minn.	The MacMillian Publishing of N.Y
Compton's Learning Co. of Chicago	Cambridge Book Co.of N.Y.
Grolier Inc. of Conn.	Gloucester Press of N.Y.
National Wildlife Federation in Washington, D.C.	E.P. Dutton and Co. of N.Y.
Simon and Schuster of N.Y.	

(Date)

(Inside Address)

Dear Sirs:

I am a student at Johnson State College. Currently I am taking an Teacher Preparation course that requires me to create and integrated lesson plan in Science and Social Studies. I would like your permission to copy and include in this lesson plan pages \_\_\_\_\_ from the book entitled \_\_\_\_\_ by \_\_\_\_\_ published \_\_\_\_\_.

Thank you for your help in this matter. I look forward to hearing from you.

Sincerely,

*Charlee B Hedley*

Charlee B. Hedley