Main Idea

Interaction with Environment: African peoples developed diverse societies as they adapted to varied environments.

Why It Matters Now

Differences among modern societies are also based on people's interactions with their environments.

Terms & Names

- Sahara
- Sahel
- savanna
- animism
- griot
- Nok
- Djenné-Djeno

Setting the Stage

Africa spreads across the equator. It includes a broad range of Earth's environments—from steamy coastal plains to snow-capped mountain peaks. Some parts of Africa suffer from constant drought, while others receive over 200 inches of rain a year. Vegetation varies from sand dunes and rocky wastes to dense green rain forests. Interaction with the African environment has created unique cultures and societies. Each group found ways to adapt to the land and the resources it offers.

A Land of Geographic Contrasts

Africa is the second largest continent in the world. It stretches 4,600 miles from east to west and 5,000 miles from north to south. With a total of 11.7 million square miles, it occupies about one-fifth of Earth's land surface. Narrow coastlines (50 to 100 miles) lie on either side of a central plateau. Waterfalls and rapids often form as rivers drop down to the coast from the plateau, making navigation impossible to or from the coast. Africa's coastline has few harbors, ports, or inlets. Because of this, the coastline is actually shorter than that of Europe, a land one-third Africa's size.

Challenging Environments

Each African environment offers its own challenges. The deserts are largely unsuitable for human life and also hamper people's movement to more welcoming climates. The largest deserts are the Sahara in the north and the Kalahari (kahl•uh•HAAHR•ee) in the south.

Stretching from the Atlantic Ocean to the Red Sea, the Sahara covers an area roughly the size of the United States. Only a small part of the Sahara consists of sand dunes. The rest is mostly a flat, gray wasteland of scattered rocks and gravel. Each year the desert takes over more and more of the land at the southern edge of the Sahara Desert, the Sahel (suh•HAYL).

Another very different—but also partly uninhabitable—African environment is the rain forest. Sometimes called “nature's greenhouse,” it produces mahogany and teak trees up to 150 feet tall. Their leaves and branches form a dense canopy that keeps sunlight from reaching the forest floor. The tsetse (TSET•see) fly is found in the rain forest. Its presence prevented Africans from using cattle, donkeys, and horses to farm near the rain forests. This deadly insect also prevented invaders—especially Europeans—from colonizing fly-infested territories.

Taking Notes

Outlining
Organize ideas and details about Africa.

Africa

1. A Land of Geographic Contrasts
   A. Sahara
   B. Sahel
2. Early Humans Adapt to Their Environments
1. The deadliest creature lurking in rain forests is a small fly called the tsetse fly. Tsetse flies carry a disease that is deadly to livestock and can cause fatal sleeping sickness in humans.

2. Sahel means "coastline" in Arabic. African people may have named it this because the Sahara seemed like a vast ocean of sand.

3. The dense trees and lack of edible vegetation in the humid rain forest make it an unwelcoming environment for most people.

4. The savannas are home to herds of animals such as giraffes, wildebeest, and antelope. They also support grain crops of millet, wheat, and maize (corn).

GEOGRAPHY SKILLBUILDER: Interpreting Maps
1. Place: About what percent of Africa is desert? savanna?
2. Region: If you were to fold a map of Africa in half along the equator, what do you notice about the similar vegetation zones above and below the fold?
Welcoming Lands  The northern coast and the southern tip of Africa have welcoming Mediterranean-type climates and fertile soil. Because these coastal areas are so fertile, they are densely populated with farmers and herders.

Most people in Africa live on the savannas, or grassy plains. Africa's savannas are not just endless plains. They include mountainous highlands and swampy tropical stretches. Covered with tall grasses and dotted with trees, the savannas cover over 40 percent of the continent. Dry seasons alternate with rainy seasons—often, two of each a year. Unfortunately, the topsoil throughout Africa is thin, and heavy rains strip away minerals. In most years, however, the savannas support abundant agricultural production.

Early Humans Adapt to Their Environments

The first humans appeared in the Great Rift Valley, a deep gash in Earth's crust that runs through the floor of the Red Sea and across eastern Africa. As you learned earlier, people moved outward from this area in the world's first migration. They developed technologies that helped them survive in—and then alter—their surroundings.

Nomadic Lifestyle  Africa's earliest peoples were nomadic hunter-gatherers. Today, some of the San of the Kalahari Desert and the BaMbuti (bah•uhm•BOO•tee) of the rain forests of Congo are still hunter-gatherers. The San, for example, travel in small bands of a few related families. The men hunt with spears and bows and arrows, and the women and children gather roots and berries.

Other early Africans eventually learned to domesticate and raise a variety of animals for food. Called herders, or pastoralists, these people kept cattle, goats, or sheep. They were nomads who drove their animals to find water and good pastures for grazing during the dry season. Millions of modern Africans are pastoral herders as well. The Masai (mah•SEYE) of Tanzania and southern Kenya, for example, still measure their wealth by the size of their herds.

Transition to a Settled Lifestyle  Experts believe that agriculture in Africa probably began by 6000 B.C. Between 8000 and 6000 B.C., the Sahara received increased rainfall and turned into a savanna. But about 6000 B.C., the Sahara began to dry up again. To survive, many early farmers moved east into the Nile Valley and south into West Africa. Some settled on the savannas, which had the best agricultural land. Grain grew well in the savannas. In addition to growing grain, Africans began to raise cattle. In areas where the tsetse fly was found, it was not possible to keep cattle. However, south and east of the rain forests, cattle raising became an important part of agricultural life. Other Africans learned to farm in the rain forest, where they planted root crops, such as yams, that needed little sun.

Agriculture drastically changed the way Africans lived. Growing their own food enabled them to build permanent shelters in one location. Settlements expanded because reliable food supplies led to longer, healthier lives and an increased birthrate. The increased food supply also freed

INTERNET ACTIVITY  Create a photographic report outlining African clean water problems and solutions. Go to classzone.com for your research.
some members of the community to practice activities such as working metal, making pottery, and crafting jewelry.

These increasingly complex settlements of people required more organization than smaller communities. Various types of governing bodies developed to fill this need. Some governments consisted of a village chief and a council of the leaders of individual family groups. As strong groups moved to extend their land and conquered weaker settlements, they centralized their power and their governments. Some of these societies eventually developed into great kingdoms.

Early Societies in Africa

The societies south of the Sahara—like all human cultures—shared common elements. One of these elements was the importance of the basic social unit, the family. Besides parents and children, this primary group often included grandparents, aunts, uncles, and cousins in an extended family. Families that shared common ancestors sometimes formed groups known as clans.

Local Religions

African peoples organized themselves into family groups. They also developed belief systems that helped them understand and organize information about their world. Nearly all of these local religions involved a belief in one creator, or god. They generally also included elements of animism, a religion in which spirits play an important role in regulating daily life. Animists believe that spirits are present in animals, plants, and other natural forces, and also take the form of the souls of their ancestors.

Keeping a History

Few African societies had written languages. Instead, storytellers shared orally the history and literature of a culture. In West Africa, for example, these storytellers, or griots (gree•OHZ), kept this history alive, passing it from parent to child:

**PRIMARY SOURCE**

I am a griot . . . master in the art of eloquence . . . . We are vessels of speech, we are the repositories [storehouses] which harbor secrets many centuries old . . . . Without us the names of kings would vanish . . . . We are the memory of mankind; by the spoken word we bring to life the deeds . . . . of kings for younger generations . . . . For the world is old, but the future springs from the past.

**DJELEI MAMOUDOU KOUYATE,** from *Sundjata, an Epic of Old Mali*

**MAIN IDEA**

Analyzing Primary Sources

Why were griots important to African societies?
Recent discoveries in West Africa have proved how old and extensive the history of this part of Africa is. Archaeologists believe that early peoples from the north moved into West Africa as desertification forced them south to find better farmland. Discoveries in the areas of modern Mali and Nigeria reveal that West Africans developed advanced societies and cities long before outsiders came to the continent.

**West African Iron Age**

Archaeologists’ main source of information about early West African cultures has been from artifacts such as pottery, charcoal, and slag—a waste product of iron smelting. By dating these artifacts, scientists can piece together a picture of life in West Africa as early as 500 B.C.

Unlike cultures to the north, the peoples of Africa south of the Sahara seem to have skipped the Copper and Bronze Ages and moved directly into the Iron Age. Evidence of iron production dating to around 500 B.C. has been found in the area just north of the Niger and Benue rivers. The ability to smelt iron was a major technological achievement of the ancient Nok of sub-Saharan Africa.

**The Nok Culture**  West Africa’s earliest known culture was that of the Nok people. They lived in what is now Nigeria between 500 B.C. and A.D. 200. Their name came from the village where the first artifacts from their culture were discovered. Nok artifacts have been found in an area stretching for 300 miles between the Niger and Benue rivers. They were the first West African people known to smelt iron. The iron was fashioned into tools for farming and weapons for hunting. Some of the tools and weapons made their way into overland trade routes.

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**Nok Sculpture**

Nok artifacts show evidence of a sophisticated culture. Their sculptures are made of terracotta, a reddish-brown baked clay. Sculptures include animals as well as people. This Nok figure features a classical look called “elongated” style.

Most Nok figurines have these characteristics:

- distinctive features such as bulging eyes, flaring nostrils, and protruding lips
- an elongated style, especially used for the head
- the hand or chin on the knee in some figures
- hairstyle still common in Nigeria

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**SKILLBUILDER: Interpreting Visual Sources**

Formulating Historical Questions What questions would you ask if you could speak with the creator of this sculpture?
African Ironworking

Refining metal was an important technological advance in every civilization. Africa was no exception. Iron tools were stronger than copper or bronze tools, so iron tools and the technology to produce them were very valuable.

Producing iron began by mining the iron ore. The iron itself was bound up with other minerals in rocks. The trick was separating the iron from the unwanted minerals. That was the function of the furnace shown below. This process is known as smelting.

1. Layers of iron ore were alternated with layers of charcoal fuel inside the furnace. Temperatures inside the furnace would reach about 2000º F.

2. A tuyère (twee-YAIR) was a clay pipe that allowed air to flow through the furnace.

3. The bellows—usually made out of an animal skin with a wooden plunger attached—increased air flow in the furnace, thus raising the temperature.

4. The intense heat would cause a chemical reaction, separating the iron from the impurities.

5. The iron would collect and form what is called a bloom. After cooling, the bloom was removed. An ironsmith then worked the bloom into the desired tool or weapon.

RESEARCH LINKS For more information on ironworking, go to classzone.com
Djenné-Djeno In the region south of the Sahel, most Africans lived in small villages. However, cities began to develop sometime between 600 B.C. and 200 B.C. Usually they were in areas along rivers or at an oasis. One of these cities was Djenné-Djeno.

Djenné-Djeno (jeh•NAY jeh•NOH), or ancient Djenné, was uncovered by archaeologists in 1977. Djenné-Djeno is located on a tributary of the Niger River in West Africa. There, scientists discovered hundreds of thousands of artifacts. These objects included pottery, copper hair ornaments, clay toys, glass beads, stone bracelets, and iron knives.

The oldest objects found there dated from 250 B.C., making Djenné-Djeno the oldest known city in Africa south of the Sahara. The city was abandoned sometime after A.D. 1400.

At its height, Djenné-Djeno had some 50,000 residents. They lived in round reed huts plastered with mud. Later, they built enclosed houses made of mud bricks. They fished in the Niger River, herded cattle, and raised rice on the river’s fertile floodplains. By the third century B.C., they had learned how to smelt iron. They exchanged their rice, fish, and pottery for copper, gold, and salt from other peoples who lived along the river. Djenné-Djeno became a bustling trading center linked to other towns not only by the Niger, but also by overland camel routes.

The early inhabitants of West Africa were developing cities, cultures, and technologies that would make their mark on history. Meanwhile, other groups in West Africa were beginning to make an historic move out of West Africa. The Bantu-speaking people would take their culture and ironworking techniques with them to parts of eastern and southern Africa.