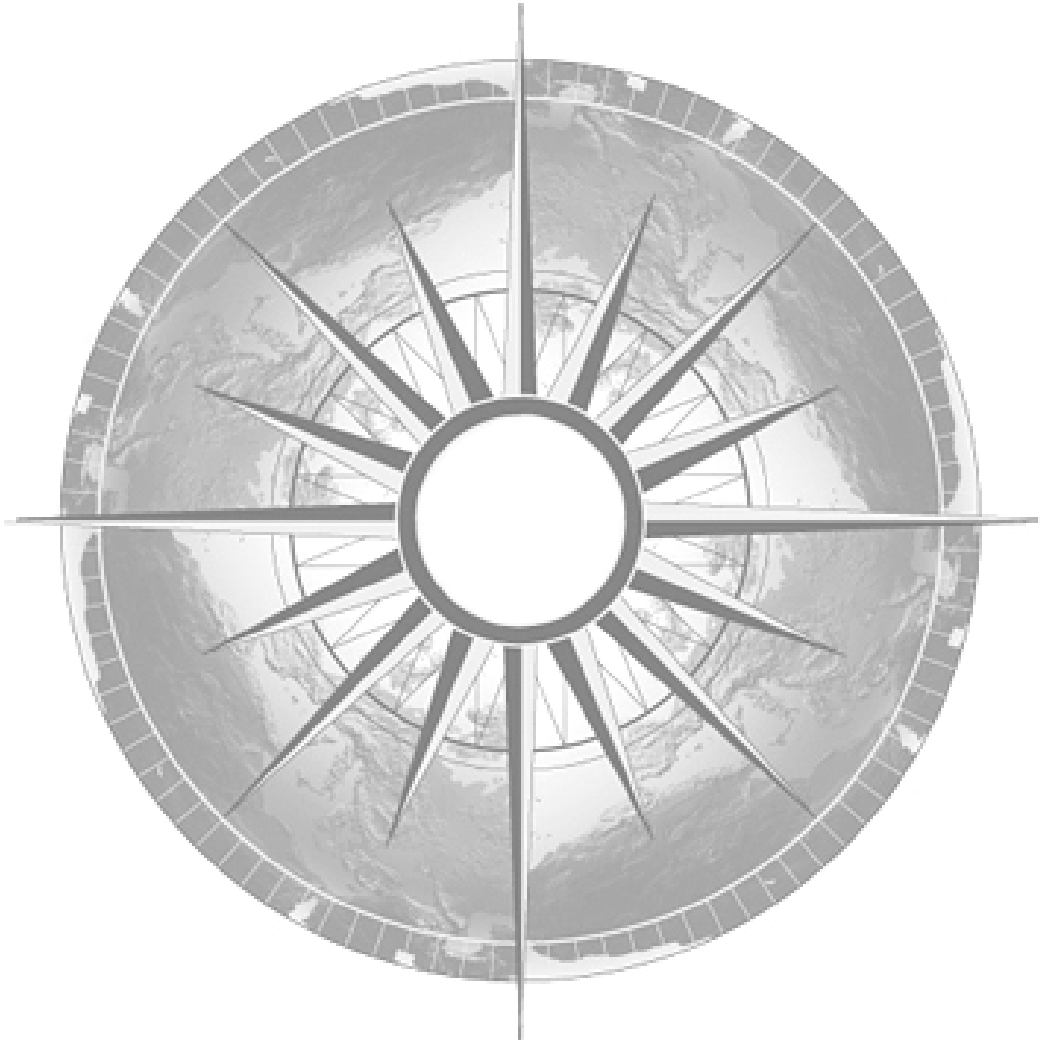


# HEMISPHERES

## People and Place Curriculum Resources on Human-Environmental Interactions



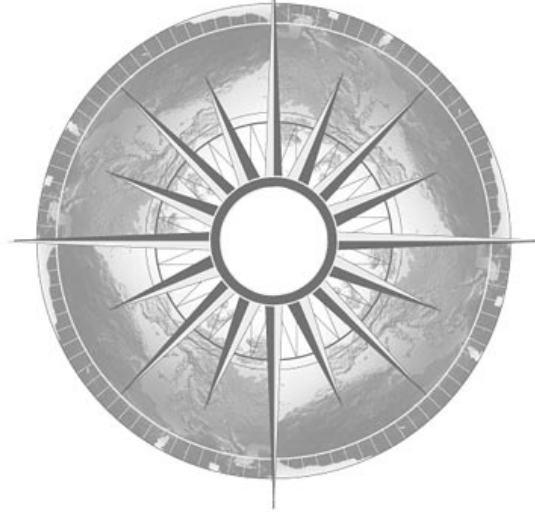
Hemispheres is a joint project of:  
Teresa Lozano Long Institute of Latin American Studies  
Center for Middle Eastern Studies  
Center for Russian, East European & Eurasian Studies  
South Asia Institute

in the College of Liberal Arts  
at The University of Texas at Austin



# People and Place

Curriculum Resources on  
Human-Environmental Interactions



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**People and Place**  
**Curriculum Resources on**  
**Human-Environmental Interactions**

Final Version

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## TEACHER NOTES

### GOALS

In this unit, students will understand the ways in which North African traders were able to adapt to the harsh environment of the Sahara desert in order to extract natural resources and engage in trans-desert trade for economic gain. They will understand: (1) the factors that define a desert and the different types of deserts; (2) that the introduction of the camel to North Africa provided a solution that made trans-Saharan trade possible; and (3) the natural resources available in the desert and the advantages to be had from harnessing them.

### ASSESSMENT EVIDENCE

*Adapting to the Environment for Trade:* Having learned about the ways in which humans adapted to the harsh desert environment in order to conduct trade successfully, students will work in small groups to consider similar adaptations for economic profit, working from a list of historical, current, and future examples.

### LEARNING ACTIVITIES

- The *Dramatic Moment: Mansa Musa's Visit to Egypt, 1324* reading with interpretive questions will pique students' curiosity about the wealth of riches that was perceived to exist south of the Sahara.
- In *The World's Largest Deserts* activity, students will learn that there are four different types of deserts, and may be surprised to find that Antarctica is the world's largest desert. Students are asked to guess the primary factor that defines a desert (low rainfall).
- The *Introducing the Sahara* reading introduces the Sahara desert, explains its geography, and answers the questions posed in the *World's Largest Deserts* activity.
- The *Ships on the Great Sand Sea* reading reviews the impact of the introduction of the camel in the first few centuries of the Common Era. This reading will help students understand why the camel opened up new possibilities in trade and why it was considered more useful than the wheel. Following the reading is a photo, which can be displayed to the class, depicting a caravan.
- *The Fruits of the Desert* reading looks at a crucial question: given that the Sahara is such a hostile geographic environment, why would anyone want to cross it? This reading describes two important commodities that drove the trans-Saharan trade: gold and salt. The photos that follow the reading can be used to familiarize students with the cities and types of markets discussed in the reading.
- In the *Crossing the Desert: Mapping Caravan Routes* activity, students will map trade routes across the desert, using the information that they have gained in the previous activities.

## Dramatic Moment: Mansa Musa's Visit to Egypt, 1324

Recounted by Al-Umari

In 1324, Mansa Musa, the king of the sub-Saharan African kingdom of Mali, arrived in Cairo on his way to Mecca to perform the *hajj* (Islamic pilgrimage). His visit caused quite a stir in Cairo, such that people were still talking about it when the historian Al-Umari arrived in the city two years later:

*When I arrived in Egypt, I heard talk of the visit of Mansa Musa on his hajj and found the Cairenes eager to recount what they had seen of the Malian's prodigal spending. I asked the emir ... and he told me of the opulence, manly virtues, and piety of the Mansa.*

*[The emir reported:]*

*When I went out to meet him on behalf of Sultan al-Malik al-Nasir, he did me extreme honour and treated me with the greatest courtesy. He addressed me, however, only through an interpreter despite his perfect ability to speak in the Arabic tongue. Then he donated to the royal treasury many loads of unworked gold and other valuables. ...*

*The sultan sent to him several complete suits of honor for himself, his courtiers, and all those who had come with him, and saddled and bridled horses for himself and his chief courtiers....*

*Mansa Musa flooded Cairo with his gifts. He left no prince nor holder of a royal office without the gift of a load of gold. The Cairenes made incalculable profits out of him and his entourage in buying and selling and giving and taking. They exchanged gold until they depressed its value in Egypt and caused its price to fall.*

Source: Al-Umari, cited in Levitzion and Hopkins. *Corpus of Early Arabic Sources for West African History*. Cambridge: Cambridge University Press, 1981. 269-273.

### Comprehension Exercises

- (1) What does this passage describe?
- (2) What can you tell about Mansa Musa from this passage? Where is he from?
- (3) What can you tell about Mali from this description? Do you think that Mali might have been an important trading partner for Egypt after Mansa Musa's visit? Why?

Name: \_\_\_\_\_

**The World's Largest Deserts**

#	Name	Location	Area	Type
	Antarctic	Antarctica	5.5 million miles <sup>2</sup>	Polar
	Sahara	Algeria, Chad, Egypt, Eritrea, Ethiopia, Libya, Mali, Mauritania, Morocco, Niger, Somalia, Tunisia, Western Sahara	3.5 million miles <sup>2</sup>	Subtropical
	Arabian	Kuwait, Oman, Qatar, Saudi Arabia, United Arab Emirates, Yemen	1 million miles <sup>2</sup>	Subtropical
	Gobi	China, Mongolia	500,000 miles <sup>2</sup>	Cold Winter
	Patagonian	Argentina	260,000 miles <sup>2</sup>	Cold Winter
	Great Victoria	Australia	250,000 miles <sup>2</sup>	Subtropical
	Kalahari	Botswana, Namibia, South Africa	220,000 miles <sup>2</sup>	Subtropical
	Great Basin	U.S. (Nevada, Oregon, Utah)	190,000 miles <sup>2</sup>	Cold Winter
	Thar	India, Pakistan	175,000 miles <sup>2</sup>	Subtropical
	Chihuahuan	Mexico, southwestern U.S.	175,000 miles <sup>2</sup>	Subtropical

(A) Match each of the deserts above with its location on the map by writing the number that appears on the map in the first column of the chart.

(B) Use the map and the data in this chart to answer the following questions:

(1) Do any of the entries on this chart surprise you? Which one(s)? Why?

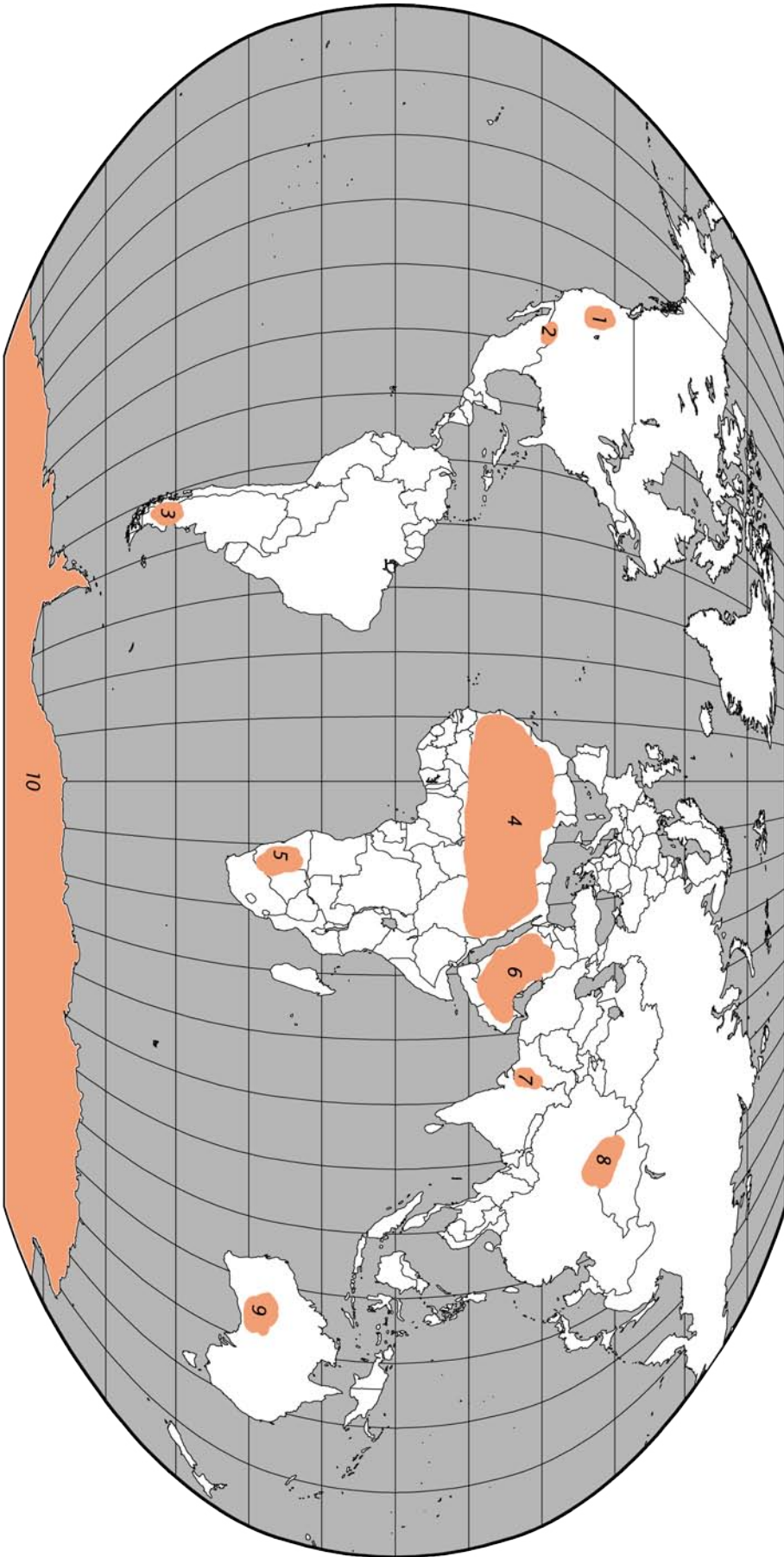
(2) What do you think the differences between the four types of deserts listed might be? Which do you think have the hottest average temperatures? Which do you think have the coldest average temperatures?

(3) Are there any trends in the locations of deserts (e.g., similar latitude and longitude, distance from the poles/equator)?

(4) In a small group or as a class, discuss the following: what do you think defines whether a place is a desert?

The World's Largest Deserts Map

ROBINSON PROJECTION OF THE WORLD



Produced by the Cartographic Research Lab  
University of Alabama

## Introducing the Sahara

The area that we know as the Sahara desert consists of four million square miles of sand, gravel, bare rock, and mountain ranges stretching from the Atlantic Ocean in the west to the shores of the Red Sea in the east. The Sahara is the second largest desert in the world and comprises some of the most inhospitable terrain on Earth. Its name comes from the Arabic word *saharaa*, which simply means “desert.”

Deserts are **arid** (dry) regions. A desert is defined as an area that receives less than ten inches of precipitation a year.

The world’s deserts are divided into four categories. **Subtropical deserts** are the hottest, with parched terrain and rapid evaporation. Although **cool coastal deserts** are located within the same latitudes as subtropical deserts, the average temperature is much cooler because of frigid offshore ocean currents. **Cold winter deserts** are marked by stark temperature differences from season to season, ranging from 100° F (38° C) in the summer to 10° F (–12° C) in the winter. **Polar regions** are also considered to be deserts because nearly all moisture in these areas is locked up in the form of ice.

The Sahara is a subtropical desert. The hottest temperature ever recorded on Earth (136° Fahrenheit) was taken at Al-‘Aziziyah, Libya, in the coastal region of the Sahara, in 1922. In an ironic display of the extreme weather conditions in the desert, the coldest recorded temperature on the African continent (–11° Fahrenheit) was also recorded in the Sahara, at Ifrane, Morocco, in 1935.

The Sahara covers all or part of eleven countries in North Africa. With the exception of the Nile and Niger Rivers, the only sources of water in the desert are underground aquifers. Rainfall in the desert is irregular and unreliable. Some parts of the Sahara have not received rain at any point in recorded history.

In some places in the desert, water and greenery can be found in places where the bedrock is thin enough that water from aquifers springs to the surface. These places are called oases (singular: oasis). Oases like Sijilmasa, Tuat, Tadmekka, and Azelik were extremely important for traders and travelers in the desert, and tribes or groups who controlled an oasis in the past could become very powerful.

Along the coast of North Africa are four regions that receive a regular supply of water and can support large settled populations. Egypt, which relies on the Nile River, has a population of some seventy million people. Six hundred miles to the west of Egypt is Cyrenaica, in the eastern part of what is now Libya. A further eight hundred miles to the west is the coastal belt of Tripolitania, a narrow band of fertile land that supports Libya’s capital and largest city. Finally, the region known as the *Maghreb* (Arabic for “furthest west”), which consists of fertile highlands stretching from Tunisia to Morocco, receives significant amounts of rainfall—some places receive more rainfall than neighboring Spain.

Despite the lack of permanent water supplies, approximately 2.5 million people make their home in the desert. There are few large cities in the Sahara. Among the largest settlements in the desert are Agadez, Niger (population: 78,600); Tamanghasset, Algeria (76,000); and Timbuktu, Mali (32,000). Nouakchott, the capital of Mauritania, which houses its 881,000 residents on the Atlantic coast, is the only Saharan settlement to exceed 100,000 residents.

## **Introducing the Sahara**

### **Comprehension Questions**

- (1) How large is the Sahara? Look up the area of the United States in an almanac or encyclopedia. Is the Sahara larger or smaller than the United States?
- (2) How much rainfall does your town receive every year? (Hint: look at the statistics on the page of your local newspaper where the weather forecast can be found.) Compared to the five inches per year received in parts of the Sahara, does your town receive a lot of rain or very little?
- (3) Compare the record high and low temperatures recorded in your town to the highest and lowest temperatures recorded in the Sahara. How does your town compare?
- (4) Why do you think that most of the towns in the Sahara are small? Why might Nouakchott be able to support a larger population than the other towns in the region?

## Ships on the Great Sand Sea

During ancient times, the cities and kingdoms of North Africa were much more closely linked to their neighbors in Europe than to their neighbors across the desert. Some of these cities, like Tunis, Telmcen, Cairo, and Um Durman were on the water. Others, like the imperial cities of Marrakech and Fez, had easy access to the shore and were easily defensible because of their mountain location. Because its relatively smooth waters were easy to sail, the Mediterranean Sea served as a highway that made travel and communication easier, rather than as a barrier. The Phoenecians, Greeks, and Romans were all at the mercy of the winds in their sea-borne trade. A sailed vessel could, on a good day, manage to sail about thirty miles. Hence, traveling the two-thousand-mile length of the Mediterranean would have taken about nine or ten weeks under the best conditions.

In stark contrast to the relatively easy waters of the Mediterranean, the Sahara was a barrier to trade and communication. Its sands formed a hazardous region where travelers could get lost easily. The Persian Emperor Cambyses, whose armies overran Egypt in the sixth century BCE, sent an expedition to the oasis of Siwa to destroy the oracle of Amun. Unfortunately, as one of the expedition's chroniclers reported, "A wind arose from the south, strong and deadly, bringing with it vast columns of whirling sand, which entirely covered up the troops, and caused them wholly to disappear." Merchants and other people who attempted to cross the desert encountered similar hazards. Many who tried to cross the desert were never seen again, which led, in some cases, to the creation of legends about man-eating creatures and supernatural forces that waited for unwary travelers beyond the sand dunes.

In the second and third centuries CE, an innovation began to migrate slowly into North Africa, one that was well-suited for long treks across the desert. This innovation, which came from Arabia, was already in use there and in central Asia, but was previously unknown in Africa. Unusually, this innovation was not a new technology but rather an animal: the camel.

The first ancestors of the camel originated in North America, where they are now extinct. Descendants of the proto-camel migrated into South America, where they evolved into the "camelids" (the alpaca, the guanaco, the llama, and the vicuña). They also migrated into Eurasia, where they evolved into the two species of camel that are commonly found today.



It is believed that camels were first domesticated between 3000 and 2000 BCE in the Arabian Peninsula. Although the camel was introduced to North Africa by way of Egypt in about 800 BCE, they did not become common in the region until about 750 CE, after the Arab conquests. Until that time, camels were used primarily as a food source; camels can provide milk, fur, hides, and meat. Later, they became used as beasts of burden when traders began to appreciate the camel's ability to withstand harsh geographic conditions.

The Romans had introduced their transportation technology to the region, but wheeled vehicles were fairly useless in the desert. The desert regions of North Africa and the Middle East have the unique

distinction of being the only known instance where the wheel was abandoned in favor of other forms of transportation—in this case, for the so-called “ships of the desert”: the camel.

The two modern species of camel are the two-humped **Bactrian** camel and the one-humped **dromedary** camel. Each species grows to be very large (600–1,100 lbs), and both have the same basic body type: a large trunk with very long legs, and a long head on top of a very long neck. Bactrian camels are found primarily in Asia, in an area stretching from Turkey in the west to China in the east, while dromedary camels are usually found in North Africa and the Arabian Peninsula. Their long legs enable them to cover a significant distance: the average camel can travel about 25 miles in a day.

Camels have a very slow rate of water loss, and they can go for much longer periods of time without consuming water—longer than any other domestic animal. In the Sahara, camels do not usually drink at all during the cool season, when plant life is abundant and they can absorb water from the vegetation they eat. Only in the hot summer months do camels need to drink water. When the temperature is between 90° and 100° Fahrenheit, they can go 10–20 days without needing to drink. Only when the temperature rises above 100° do camels need to take regular drinks of water.

When they do drink, camels can ingest large quantities of water—as much as 2½–5½ gallons per minute. In very high temperatures, a camel needs to drink between 5½–8 gallons of water to sustain itself for a full day without needing to drink again.



Despite what many people think, a camel's hump is not for storing water. In fact, camels do not store liquid water anywhere in their bodies. Instead, their bodies have adapted to an unusual degree that allows them to go without water for long periods without suffering the effects of dehydration. A camel can lose 25% of its body water without causing any

harm; a similar loss in a human would be fatal. The hump is where camels store body fat, which they can consume when food is scarce.

Camels are vegetarians, and generally graze whenever there is a food source nearby. Camels actually prefer hard, dry, thorny plants that have a high salt content. On a good day, a camel consumes 20–40 pounds of green food, or 10–20 lbs of dry goods such as tree bark. However, they can survive longer on a much smaller amount of food. Camels are also **ruminants**, or cud chewers. They chew and swallow their food while grazing, and after a period of digestion, their food is regurgitated into the mouth to be re-chewed. This is why camels are often seen chewing even if they are not grazing.

When crossing the desert, camels are often gathered into large groups called **caravans**. An average caravan consists of about one thousand camels, but can range anywhere from a few hundred to a couple thousand. Most traders walk alongside the camels, as the animals' uneven walk can make them extremely uncomfortable to ride. Cargo is usually tied to the camel's back, with an even amount of weight distributed on either side of the camel's hump. The beasts are strong, capable of carrying a couple hundred pounds each. Their strength is such that a camel does not show strain until the load is too heavy for them to carry—an attribute that gave rise to the expression “the straw that broke the camel's back.”

Caravan



Source: Tor Eigeland / Saudi Aramco World (PADIA).

Name: \_\_\_\_\_

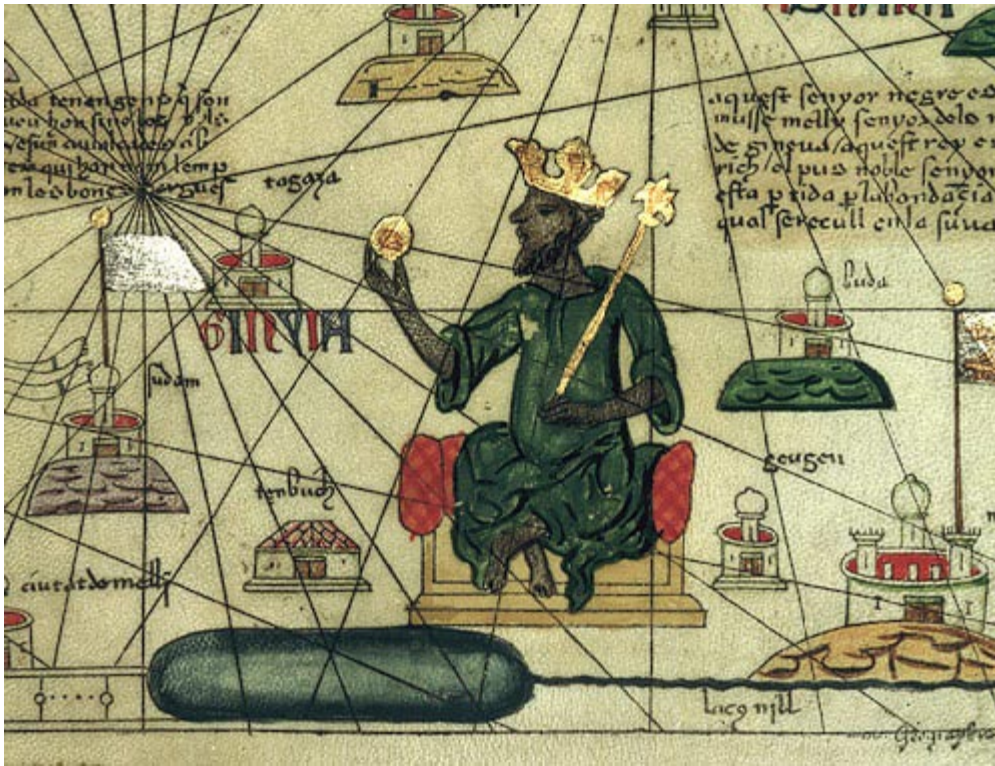
### **Ships on the Great Sand Sea**

#### **Comprehension Exercises**

- (1) Why was it easier to cross the Mediterranean than the Sahara? Why do you think that some historians refer to the Mediterranean as a “highway,” and to the Sahara as a “sea”?
  
- (2) Where did the camel come from?
  
- (3) Why were camels first domesticated?
  
- (4) List three characteristics of camels that make them well-suited for life in a desert climate.
  
- (5) Why would traders in the medieval Middle East have preferred camels to wheeled vehicles? Think about the geography and environment of the region.
  
- (6) Short research question: What similarities exist between the “camelids” and the Bactrian and dromedary camels? How are the camelids similarly well-prepared for life in their own environments?

## The Fruits of the Desert

“Man can live without gold but not without salt.” —Cassiodores



When Mansa Musa arrived in Cairo in 1324, the riches of the kingdom of Mali were already well known to traders from North Africa and Europe. Caravans had been crossing the desert for centuries to trade for gold and bring it back to North Africa, from where it could be sent on to the Middle East and Europe at great profit. The exact location of the gold fields and mines was a closely guarded secret known only to a select few in Mali. The Malians brought the gold to market in the summer and winter capitals of Awdaghust and Kumbi Saleh, or to market cities along the Niger River. Some of these market cities have names that have become legendary: Timbuktu, Djenne, Gao.

It is not known for certain when and how the people of North Africa became aware of the existence of vast deposits of gold in sub-Saharan West Africa. There are a few legends about islands where gold ran in rivers, “many days sailing past the Pillars of Hercules [Gibraltar and Tangiers],” but there is no real evidence to suggest that the Carthaginians or Romans knew of the existence of gold in the Niger River basin.

The most likely explanation is that the connection between the two “coasts” of the Sahara was made by one of the Berber groups that established itself in the desert oases in the Fezzan region (southern Libya) in order to escape Byzantine control of the coast. They may have first crossed the desert in search of new trading partners, hoping to find different sources for goods than their Byzantine enemies. The introduction of the camel and its gradual use in long desert travel made crossing the Sahara much easier.

There was a stable trade in gold crossing the desert by the time the Arab armies conquered North Africa in the seventh century CE. The Arabs, a traditionally nomadic trading people, expanded the trade significantly by exploiting a natural resource they discovered along the way through the desert, one that the people of the sub-Saharan plains desperately needed: **salt**.

Salt is necessary for the survival of all living creatures, including humans. Salt is lost from the body through sweat and urination, and the only way to replace it is to ingest more. One way to do this is to eat meat, milk, or cheese from animals who have ingested salt and another is to incorporate salt directly into the diet.

Today, people are often unaware of how important salt is for their health because packaged foods usually include salt, making it unnecessary to add salt while cooking or at the dinner table. In fact, some people now suffer health effects from the over-consumption of salt. In the past, however, salt was critically important and huge efforts were made to keep a steady supply of salt flowing into areas where it was not found naturally—areas like the sub-Saharan plains in West Africa, where the kingdom of Mali was situated.

Salt is a naturally occurring mineral, and is one of the very few rocks that is routinely eaten by humans. There are many different kinds of salt. When most people refer to salt, they are referring to the chemical compound **sodium chloride**, which is commonly referred to as “table salt.” There are many different kinds of salts, however, and they vary in color and the minerals that they contain.

There are two types of salt found in the Sahara: earth salt and rock salt.

**Earth salts** form as crusts on top of the ground, sometimes on top of rock salt deposits. Earth salts do not travel or keep as well as rock salts. Nomads generally bring herds of livestock to earth salt deposits rather than trying to harvest and transport the salt to market.

The most valuable kind of salt for the desert trade was **rock salt**, which forms in layers beneath the ground. It generally must be dug out of the ground, either in mines or large pits, and brought to market nearby. The salt is extracted in large slabs that are resistant to moisture and do not easily break, which makes them easy to transport over long distances. Desert caravans of camels, each carrying several slabs of rock salt, were an important part of the Sahara trade. Oases such as Taghaza and Ghat became very important stops for caravans because of their location near the salt mines.

Because of the need for salt in Mali, it became an extremely valuable commodity for both the Malians and the Berber and Arab traders. It was one of the very few commodities that could travel across the desert without spoiling, and it was in such high demand that at the height of the trans-Saharan trade, salt could be traded ounce for ounce for an equal amount of gold. Caravans would stop at the oases-mines to pick up salt to trade for gold and replenish supplies, and then continue across the desert to trade for gold. The vast amount of money that could be made from the trade made it well worth the effort and risk involved in crossing the desert.



The Great Mosque of Djenné is an example of the splendid architecture that was built in the wealthy Malian trading cities along the Niger River.  
Source: Brynn Brujin / Saudi Aramco World (PADIA).



Ports along the Niger River are still very important for trade and commerce.  
Source: Stephennie Hollyman / Saudi Aramco World (PADIA).

Name: \_\_\_\_\_

## Crossing the Desert: Mapping Caravan Routes

You'll need: four different colored pens or pencils, the map of the Sahara

(A) Answer the following questions using the readings that you have completed:

- (1) How far can a camel travel in a day?
- (2) How many days can a camel go without water in extremely hot (over 100°) temperatures?
- (3) How many days can a camel go without water in moderately hot (90–100°) temperatures?
- (4) How far can a camel travel without stopping for water in extremely hot temperatures? (Hint: multiply the days a camel can go without water by the distance a camel can travel in a day.)
- (5) How far can a camel travel without stopping for water in moderately hot temperatures?
- (6) Where in the desert is it possible to “refuel” a camel (find food and water)?
- (7) What is the maximum distance between two oases that a caravan can travel and still safely cross the desert in extreme temperatures? When forming your answer, consider the following: a caravan can only travel as far as the individual animals in it can travel. It is sometimes difficult to predict the weather, so it is better to be prepared for extreme temperatures.
- (8) As a trader coming from North Africa, where must you stop before arriving in a place that you can purchase gold? Why? (Hint: think about what you will need to acquire in order to trade for gold.)

(B) Use the map of the Sahara to label (in any color you choose) the Mediterranean Sea, the Atlantic Ocean, and the Arabian Peninsula.

(C) Label each of the following by underlining their names, using a different color for each category. In the blank spot beneath the map, create a legend identifying the category and the color you are using to label it.

- **Coastal trading cities** in North Africa along the Mediterranean and the Nile where gold is sold to traders from Europe, Asia, and/or East Africa
- **Oases**—cities that are not close to the salt fields, but where other resources (food, water, etc.) can be obtained
- **Salt-trading oases**—cities that are close to the salt fields where salt can be purchased or mined
- **Sahelian trading cities**, close to the gold mines, in the steppe where salt can be traded for gold

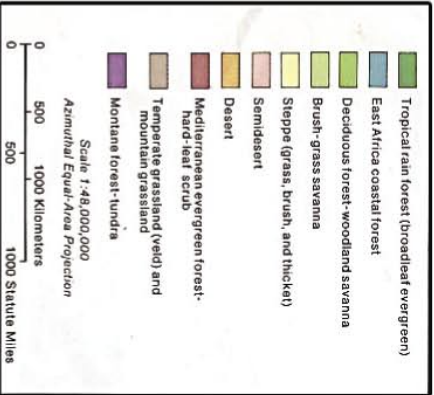
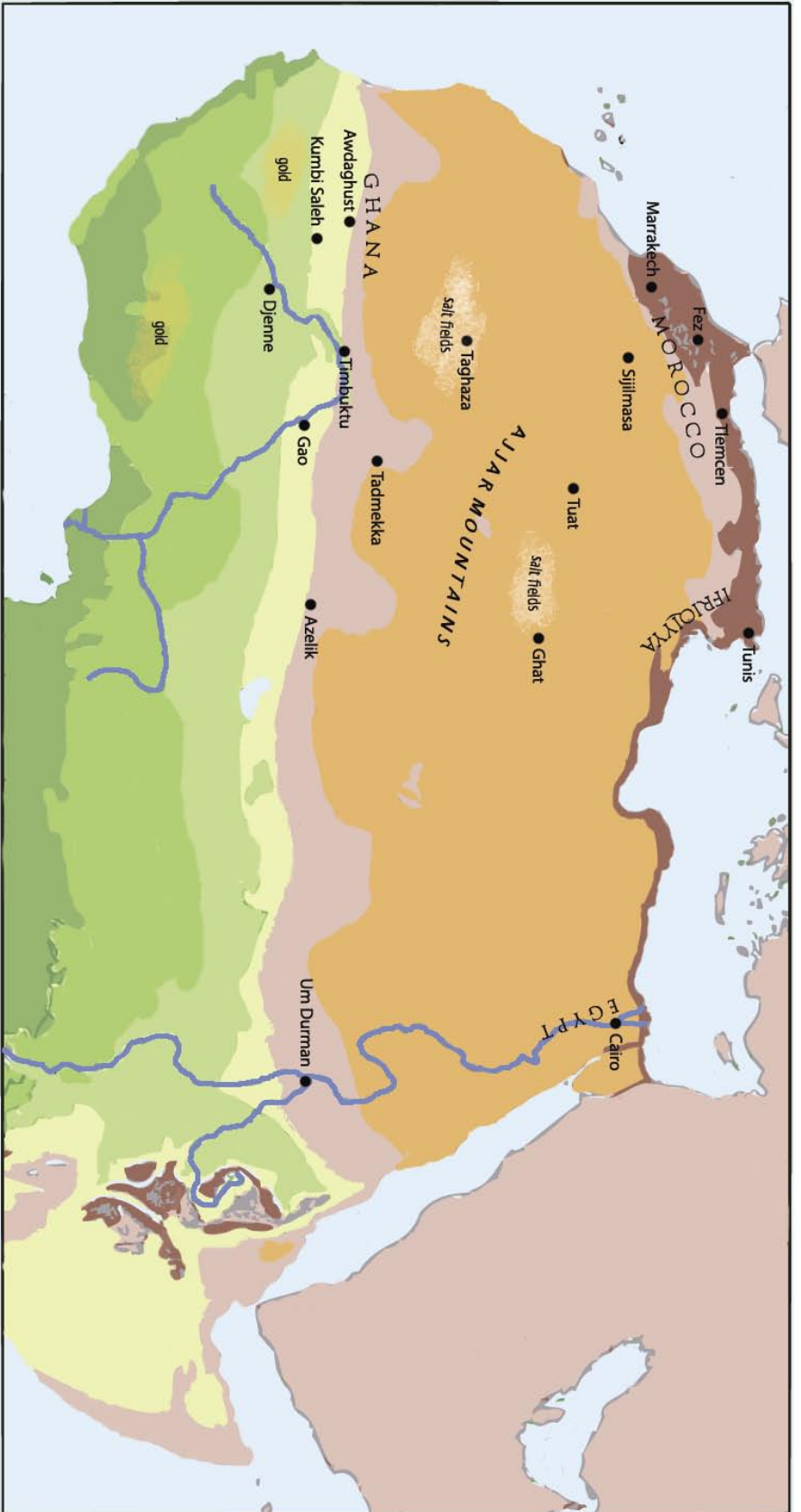
(D) Use a red pen to draw in trade routes between the trading cities on the Mediterranean or Nile and the trading cities in the steppe. Also, draw in trade routes from the gold fields to the Sahelian trading cities.

Keep in mind the following as you plot the trade routes:

- Do not cross mountains—your trade route must go around them.
- Your trade route may pass through as many points as necessary.
- Your trade route must include at least one coastal trading city, one salt-trading oasis, and one Sahelian trading city.
- When passing through desert or semi-desert, you may not exceed the maximum distance given in the answer to question 7 above without stopping or diverting into another geographic region.

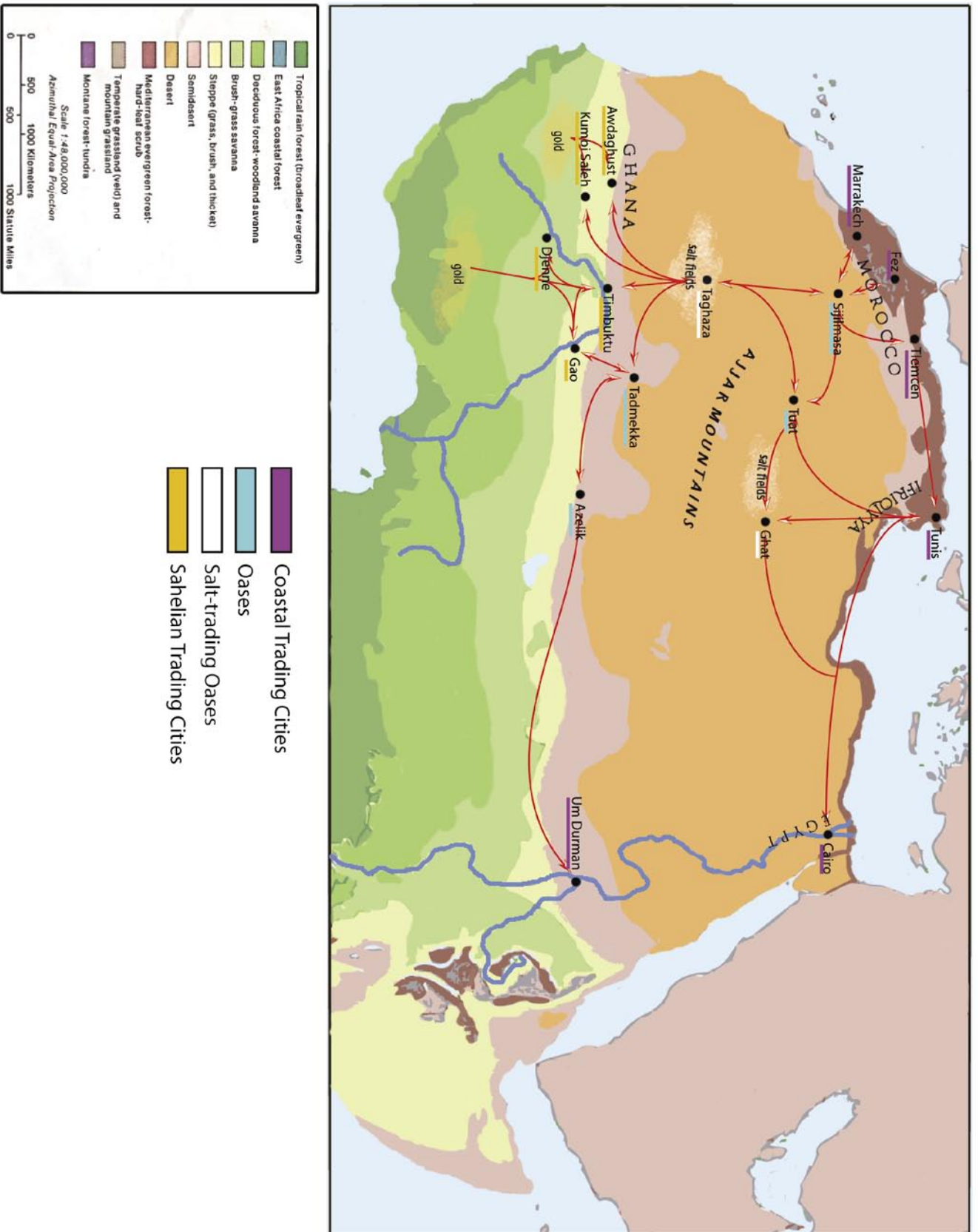
Map of the Sahara

Name: \_\_\_\_\_



- Coastal Trading Cities
- Oases
- Salt-trading Oases
- Sahelian Trading Cities

Teacher's Answer Key: Map of the Sahara



- Coastal Trading Cities
- Oases
- Salt-trading Oases
- Sahelian Trading Cities

## Research Project: Adapting to the Environment for Trade

In order to trade for gold, merchants from North Africa had to solve the problem of how to cross the Sahara safely. This is not the only example in history in which humans have had to seek new technology or innovations in order to adapt to a new environment for trade or to access natural resources.

Work in small groups of two or three people to create a large table with five columns and six rows, and fill it in like this:

	Sahara desert trade			
GOAL				
PROBLEM				
NEEDS				
SOLUTION				
RESULT				

Working together, you should use the material and readings that you have covered to complete the first column addressing the following five points as they relate to the Sahara desert trade:

GOAL: What did they want to do?

PROBLEM: Why couldn't it be done?

NEEDS: What would it take to do it?

SOLUTION: How was the problem resolved?

RESULT: What was the outcome?

Pick three of the following examples of instances where humans have had to overcome geographic obstacles. Label each of the three remaining columns with one of these examples.

- Trade along the Silk Route
- Trans-oceanic exploration and trade between Europe and Asia, Europe and the Americas
- Drilling for oil in the desert
- Drilling for oil underwater
- Drilling for oil in the Arctic
- Mining coal and other minerals underground
- Mining for natural resources on the moon or other planets
- Producing enough food keep a population healthy
- Producing enough food to feed an expanding population

Then, based on group or independent research, fill in the chart, identifying the goal, problem, needs, solution, and result for each example.

Present your results to the class, and compare your examples with those of other students. Are there any similarities between these examples? How is each similar to the example of the Saharan desert trade? How is each different?

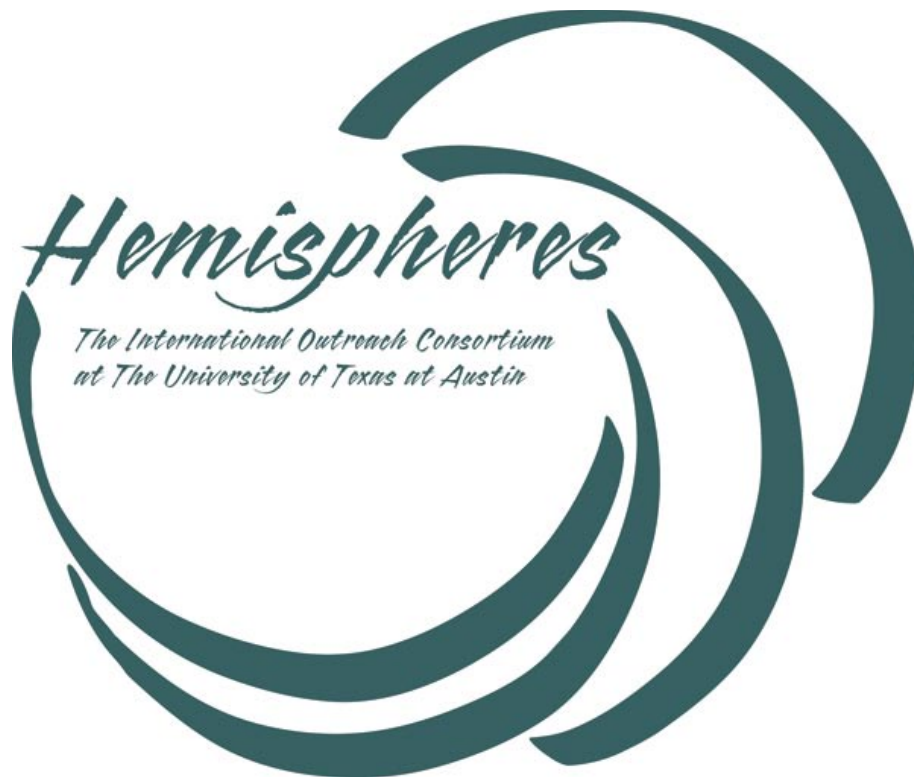
# About Hemispheres

Created in 1996, Hemispheres is the international outreach consortium at the University of Texas at Austin. Hemispheres utilizes University resources to promote and assist with world studies education for K-12 and postsecondary schools, businesses, civic and non-profit organizations, the media, governmental agencies, and the general public.

Comprised of UT's four federally funded National Resource Centers (NRCs) dedicated to the study and teaching of Latin America; the Middle East; Russia, East Europe & Eurasia; and South Asia, Hemispheres offers a variety of free and low-cost services to these groups and more. Each center coordinates its own outreach programming, including management of its lending library, speakers bureau, public lectures, and conferences, all of which are reinforced by collaborative promotion of our resources to an ever-widening audience in the educational community and beyond.

Hemispheres fulfills its mission through: coordination of pre-service and in-service training and resource workshops for educators; promotion of outreach resources and activities via exhibits and presentations at appropriate state- and nation-wide educator conferences; participation in public outreach events as organized by the consortium as well as by other organizations; and consultation on appropriate methods for implementing world studies content in school, business, and community initiatives.

For more information, visit the Hemispheres Web site at:  
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