

A Land of Change

SECTION 1 What Will Texas Be Like When You Are 20?

SECTION 2 What Is Geography?

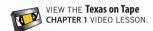
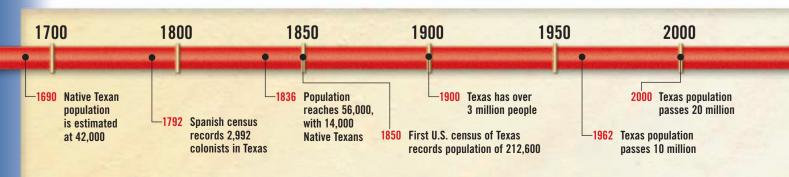


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No matter how far we may wander, Texas lingers with us, coloring our perceptions of the world.

Texas author Elmer Kelton



SKILLBUILDER

Reading Social Studies



Austin skyline

Before You Read

What comes to mind when you think about change? Have you changed schools, or has a parent changed jobs? Have you moved to a different street or a new town? Has your form of transportation to and from school changed? Texas has undergone many changes throughout your lifetime so far and will experience many more in the future. Maybe even your own community has changed since you have lived there.

Think about

- any construction in your community
- changes in population, such as an increase or decrease in the number of students in your school district
- how people in your community use the land
- how your community might be different in 20 years

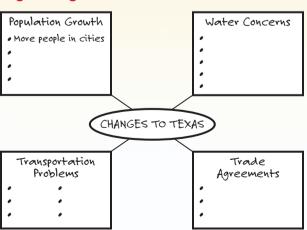
As You Read 2



Many changes have taken place in Texas's history. Completing this graphic organizer for Chapter 1 will help you understand and organize these

- Copy the cluster map in your Texas Notebook.
- As you read, notice how each of the events in the organizer has had an effect on Texas.
- Under each heading in the organizer, summarize in your own words the impact that population growth, water concerns, transportation problems, and trade agreements have had on Texas.

Organizing Information





What Will Texas Be Like When You Are 20?

Why It Matters Now

Changes in Texas will affect your ability to work or go to school, your income, your transportation, and other aspects of your daily life.

TERMS & NAMES OBJECTIVES

geography,
physical geography,
human geography,
trend, climate,
census, drought,
precipitation,
reservoir

- 1. Use graphs to analyze population changes in Texas during the 1800s and 1900s.
- **2.** Make generalizations and predictions about geographic trends in Texas.
- **3.** Analyze the effects of physical factors such as climate and weather on Texas history.
- **4.** Identify how Texans have adapted to and modified their environment, and the consequences.

MAIN IDEA

Just as Texas has undergone many changes during its long and colorful history, it will continue to change in the future. By the time you are 20 years old, Texas may be a very different place.

WHAT Would You Do?
Write your response
to Interact with History
in your Texas Notebook.

INTERACT WITH HISTORY

Imagine that ten years ago your family moved from a big city to a rural area in Texas. By moving you hoped to enjoy more wide open spaces, less traffic, fewer crowds, and a lower crime rate, among other things. However, over the past few



years, your community has grown. The population has doubled, and many new businesses have popped up, increasing traffic and overall congestion. What would you do to decrease the negative effects of population growth in your community?

Tying History to Geography

Think about where you live. It hasn't always been the same as it is today. Perhaps you've seen open fields in your area developed into new neighborhoods or old buildings torn down to make room for new ones. If so, you have watched history in progress. Just like old fields and old buildings, the past is always giving way to something new. The history of Texas is the story of how our state came to be the way it is today. History helps us answer important questions about when and why. By studying history we can understand not only the past but also why and how things might happen in the future.

The history of Texas is tied closely to geography. Geography is the study of the land and the people who live on it. It also looks at where things are and why. Have you ever wondered why it rains a lot in East Texas but there are deserts around El Paso? This type of question deals with the land. It is part of physical geography. You might ask "Why are

geography the study of the earth, its physical features, and its peoples

cattle, farming, and oil important in Texas?" or "Why is the capital of Texas Austin rather than Dallas or Houston?" These questions deal with people and how they use the land. They are part of human geography.

As you explore the stories of Texas's past, you will find that its history and geography are forever linked. Just as history has shaped the state's geography, its geography has affected Texas history. Can you think of some ways in which geography and history in Texas are linked?

Knowing What to Expect

Have you ever wondered what things will be like when you are an adult? Chances are that you haven't given it much thought. If you're like most people, you may assume that life will be about the same as it is now. However, a quick look at history shows that this view is far from the truth.

History tells us that the world is constantly changing. In fact the very nature of history is change. So by the time you are 20 years old, some dramatic changes are likely to have occurred in Texas. Of course no one knows everything the future will bring, but by studying history you can predict some likely changes.

Knowing something about the past can make it much easier to predict which trends will continue into the future. It also helps to know about the land, climate, resources, and people of Texas. These features are part of the Lone Star State's geography. Knowledge of geography tells you what nature has to offer and how people organize their environment and use its resources.

Growing with the Times

Texas is the second most populated state in the United States and it is growing fast. In the year 2000 about 21 million people lived in Texas. Fewer than 17 million lived there in 1990. In only ten years the population in Texas grew by almost 4 million people!

How many is 4 million? That's about as many people as live in the Houston area. So, we can say that Texas gained enough new people in just ten years to make a whole new city the size of the Houston area.





Many Texans call the area around El Paso "Sun Country," and with good reason. El Paso is one of the sunniest cities in the United States. In fact, it has over 300 days of sunshine per year.

trend a general movement toward change over the course

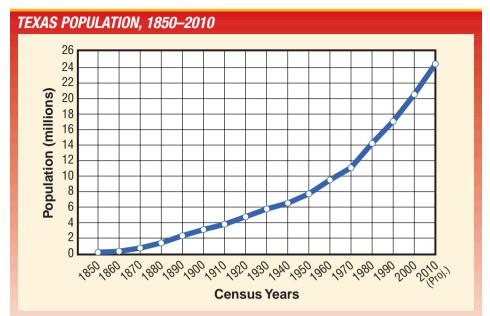
climate the expected weather conditions at a place, usually over a period of years

Dallas's light-rail system, much like an above-ground subway, has decreased the number of cars traveling to and from downtown. This has reduced traffic, pollution, and parking problems. • What might your community do to help solve these types of problems?



To Mathematics

n 1850 the census revealed that about 212,600 people were living in the state of Texas. That number had grown to about 3 million by 1900 and 21 million by 2000. Experts estimate that there will be about 24.5 million people by 2010. • What is the percentage of increase between 1900 and 2000? between 2000 and 2010?



▲ The first census taken in the United States showed about 3.9 million people in the entire nation in 1790. Texas took its first census in 1850. Population for 2010 is projected, or estimated from current trends. • What trends does the line graph show?

census a periodic count of the population



Troy Dungan

Troy Dungan has studied the weather in Texas for more than 30 years. "Texas weather has always been fascinating to me," Dungan has written. He has served as chief weather anchor for WFAA-TV in Dallas since 1976. WFAA-TV was one of the

first stations in the nation to have its own weather radar. Dungan has been named Best Television Weathercaster numerous times by various Texas broadcast associations.

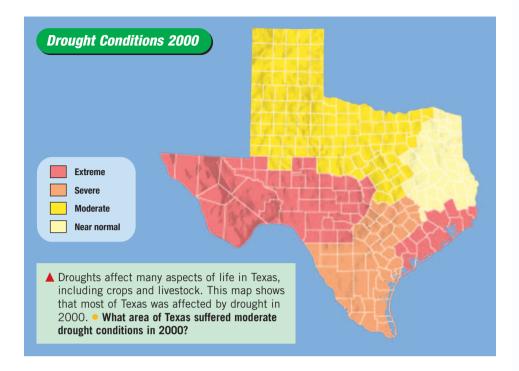
Look at the line graph of Texas population growth. It shows how many people lived in Texas at every U.S. census since 1850. The United States government takes a census every ten years to find out how many people are in this country and where they live. From the line graph, you can see that the population of Texas has followed a certain pattern over the past 150 years. With this in mind it seems safe to predict that the state's population will continue to grow in the future. If Texas grows at nearly the same rate as it did from 1990 to 2000, it will be home to about 24.5 million people in 2010.

Of course, something might happen to cause this population growth rate to change. If the trend changes, our prediction will be wrong. What are some reasons why the trend shown in the graph might change? Why might it stay the same?

If the trend continues, where will all these new Texans live? A study of history shows that most of the population growth will likely be in cities. People want to live close to work, and more jobs tend to exist in urban areas. This continuous move from rural areas to cities has led to a shortage of important services in some communities. If you were a city planner, what types of questions might you need to ask to make sure your community was prepared for growth over the next ten years?

Addressing Water Concerns

The summer of 2000 was the driest in Texas history. It was even drier than the 1930s, when years with little rainfall led to dust storms that wiped out North Texas farms. The weather in 2000 was also hot, setting record temperatures in many Texas cities.



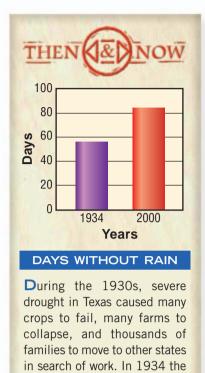
The dry conditions caused water shortages that affected people in many ways. Dry forests and grasslands posed an extreme fire hazard, so citizens were not allowed to burn anything outdoors. Many Texans stopped watering their lawns, and some car washes were closed down. Some cities almost ran out of water. The lack of water forced some farmers to sell their animals and stop irrigating crops. Overall, losses caused by the hot, dry weather in 2000 amounted to more than \$1 billion.

Will the weather be wetter or drier in 2010 than in 2000? Because so many factors influence an area's climate and weather, trends in weather are much harder to predict than in population. However, droughts are fairly common in Texas. History shows that droughts tend to occur in Texas about every 10 to 20 years. Therefore, the weather may be wetter in 2010 than it was in 2000. Water, however, may still be scarce.

As the population of Texas continues to grow, demand for water will increase regardless of what happens with precipitation and temperature patterns. Chances are that ten years from now you still will be seeing news stories about water shortages in Texas. To meet the state's growing need for water, the government may decide to build new reservoirs in some areas and to set limits on irrigation, car washing, and other unnecessary uses of water in other areas.

Traveling to Work and School

More people in Texas means more cars on the road. This means more traffic and longer delays as people try to get to work, school, and everywhere else they need to go. By the time you are 20, Texas will have to make some major decisions about its transportation problems. Should the state build more highways to keep up with all the additional cars and



drought a long period of dryness that causes damage to crops or prevents their successful growth

state set a record of 58 days

without rain. That record was

tied in 1950 but not broken

until 2000, when 84 days

passed without rain. • When

a drought occurs, what actions might your community take to

conserve water?

precipitation moisture that falls from the sky in the form of rain, snow, sleet, or hail

reservoir an artificial lake where water is collected for use

▶ The Trinity Railway Express was developed especially to shuttle people between Dallas and Fort Worth. Look at the map below. What other pairs of major Texas cities might benefit from a shortdistance railway system?



buses? Or should large cities build public transportation, such as railways or subways, to get people around? Would money be better spent building railroads to connect major cities such as Houston, Dallas, Fort Worth, Austin, and San Antonio? The answers to these and other questions will determine how Texans will travel ten years from now. What types of solutions would you propose?

Working with Our Neighbor to the South

Texas and Mexico share more than a border. Because of their geography they also share many ways of life and their economy. In 1992 the United States, Canada, and Mexico signed the North American Free



Trade Agreement (NAFTA) to increase trade with each other. The agreement made it easier for these countries to buy and sell each other's products and services. Since Mexico is Texas's neighbor, the increase in trade has had quite an impact on cities near the border. In fact the city of Laredo grew at the fastest rate of any city in Texas between 1990 and 1997. Other cities along the border also grew quickly. This rapid growth resulted in part because companies in the area expanded or were created to do business with Mexico. This increased trade created more jobs in businesses such as shipping, warehousing, banking, and even housing as thousands of people moved to border cities to take jobs.

Will the border area keep growing over the next ten years? It seems likely that trade will continue to increase, creating even more jobs and a need for new houses, schools, hospitals, and many other services. But this growth won't stop at the border. New and improved highways will be needed as more trucks carry products between the United States and Mexico. New businesses are likely to move to Texas to be closer to Mexican markets—and that means even more demand for electricity, highways, and workers.

ulticultural

Hispanic **Population**

Texas has a vast and diverse population. In 1990 Hispanics made up 26 percent of the state's total population. Just ten years later, the Hispanic population had increased to 32 percent. • If the Hispanic population in Texas continues to increase at the same rate. what percentage of Texans will be Hispanic in 2010?

Looking Toward the Future

Bigger cities, better management of natural resources, and changing patterns of transportation are just a few of the many changes expected to occur in Texas by the time you are 20. Population will also keep growing, particularly along the Texas-Mexico border. How can experts be so sure that these changes will occur in the future? They study and learn from the past. Perhaps after learning more about Texas history, you too will be able to make predictions about the future of Texas.

SECTION **ASSESSMENT**

Terms & Names

Identify:

- geography
- trend
- climate
- census
- drought
- precipitation
- reservoir

Organizing Information

Use a chart like the one shown to list changes in Texas when you are 20.

WHEN I AM 20	
Population	
Transportation	
Water Concerns	

Which change do you think will have the most impact on your life?

Critical Thinking

- 1. Examine the line graph on page 14. What statement can you make about the population of Texas over the past 150 years?
- 2. With the rapid growth of cities, what do you think may happen to Texas's rural areas in the future?
- 3. How have climate and weather affected the economic history of Texas?

4. How have Texans modified or adapted their environment to respond to droughtlike conditions in the state?

Interact with History



Review your response to Interact with History in your Texas Notebook. Now that you have studied this section, has your answer changed? Why?

Go to www.celebratingtexas.com to research the Activity topic.

ACTIVITY

Geography

Research population changes in or around your community. What were the causes of the population shift? What were the effects?

SKILLBUILDER

Social Studies

Reading a Line Graph

LEARNING the Skill

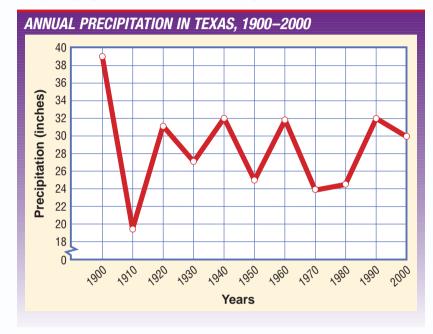
Graphs are drawings that help us organize information visually. Graphs also are used to compare data and show relationships. A line graph is effective for showing changes that take place over a period of time. A line graph has a horizontal axis, which is known as the x-axis, and a vertical axis, which is known as the v-axis. Data are plotted on a line graph with points connected by line segments.

To read a line graph, use the following steps:

- · Read the title to understand the subject or theme of the graph.
- Read the horizontal and vertical axes to make sure you understand the given information.
- Study where the points are plotted on the graph.
- Study how the line shows change over time.
- Interpret the information that the graph provides and form your own conclusions.

PRACTICING the Skill

Study the graph below. Then answer the questions that follow.



- 1. What is the theme of this graph?
- **2.** What information is represented by the *x*-axis?
- **3.** What information is represented by the *y*-axis?
- **4.** What was the average precipitation for Texas in 1930?

APPLYING the Skill

Read the graph Texas Population, 1850-2010 on page 14. Use the steps in Learning the Skill to read the line graph. Then answer the following questions.

- 1. What is the theme of this graph?
- **2.** What information is represented by the *x*-axis? by the *y*-axis?
- **3.** What was the largest population increase in any single decade?
- **4.** Which 10-year intervals on the graph represent the smallest population increases? Which represent the largest? Using library or Internet resources, research possible reasons why these intervals reflect such different population increases. Do you think this might happen again in the future? Discuss your findings as a class.



Go to www.celebratingtexas.com to research this topic.



What Is Geography?

Why It Matters Now

Just as you affect the environment, the environment affects where you live, what you do, where you go, and what you see.

TERMS & NAMES

landform, relative location, absolute location, place. physical environment, humanenvironment relationships, movement, migrate, region

OBJECTIVES

- 1. Use maps to locate places and regions of importance to Texas.
- 2. Identify ways in which Texans have modified their environment.
- 3. Analyze the consequences of human modification of the environment.

MAIN IDEA

Physical characteristics tell only part of the story of geography. Much more can be learned by studying how places are similar to or different from each other and how humans have changed them over time.

INTERACT WITH HISTOR

If someone were to ask "Where are you right now?" how would you answer? Of course, you're right here, aren't you? But where is here, exactly? There are many different ways to describe your location, depending upon who is asking and why. For instance, how might you describe your location to someone calling on the phone? How might your description change if you were giving directions to someone from another city or state? What would you do if you were e-mailing a friend in another country?

WHAT Would You Do? Write your response to Interact with History in your Texas Notebook.

The Five Themes of Geography

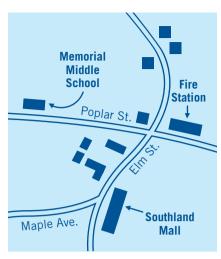
So far you have learned that history is a story about the past. You also have learned that history and geography have a great impact on each other. But what exactly is geography? Many people think geography deals with only the shape of the land—its elevation, landforms, and other physical characteristics. However, geography actually has many different parts. It is the study of not only the earth but also its people. To learn more about how people use the land, geographers have broken the study of geography into five distinct parts.

Location

When you think of location, you may think only of what is nearby. If asked to describe the location of your school, you would probably name the street or neighborhood where it is located. When you use street landform a feature of the earth's surface, such as a hill, valley, river, or plain

FIVE THEMES OF GEOGRAPHY

- **★** Location
- **★** Place
- **Human-Environment** Relationships
- **★** Movement
- * Region



▲ The things you notice on your way to school help to define the school's relative location. • How might you describe the relative location of the school in this illustration?

relative location the position of a place relative, or in comparison, to another place

absolute location the exact position of a place on the earth physical environment the

external surroundings and conditions in which something exists

names or refer to other buildings or landmarks, you are providing information about your school's relative location.

When geographers think of location, they may want to know exactly where something is found. For example, they might describe the location of your school by giving its exact position on the earth's surface. This would be its absolute location. Geographers use maps to show both relative and absolute location. Look at the illustration at left. The buildings near the school help define its relative location.

Place

Imagine that you are on a trip and someone asks what it's like where you are from. How would you describe the place where you live? The first thing you might think about is the natural setting. Is it a flat place or is it hilly? Is there a river, lake, or beach nearby? These features are all part of the physical environment.

Humans change their physical environment in many ways, such as by building skyscrapers or planting crops. These changes define the human characteristics of a place. Geographers are interested in how physical features, such as climate, vegetation, and landforms, combine with human characteristics to create a unique environment. These features give a place its identity. They are why no two places on earth are exactly alike.

Human-Environment Relationships

Think about the kinds of trees and other plants that grow around your home. Were all of those plants growing there before your home was built? When people move into an area, they often change the natural environment by leveling the land, creating new hills and bodies of water, and bringing in plants from other places. These are just a few examples of how people change their physical surroundings. Almost everything people do causes some sort of change in nature.

Of course, some environmental changes are needed for survival. Without farms to produce food, many people around the world would



Petrochemical plants create jobs and important products. In what ways do you think the natural environment was changed in order to build these plants?



 Human activities can have a significant impact on the environment. A lignite (coal) mine such as the one below can transform a landscape. • What is one way humans are trying to limit the damage they do to the environment?

starve to death. On the other hand, some changes, such as polluting the environment, are harmful. For this reason protecting the environment has become a major issue in world politics. By learning how humans harm the physical environment, people can better limit the damage that they do.

Movement

Were you born in the city where you now live? You, your family, or someone you know may have migrated to your city from another place. Long ago, colonists from Spain and other countries migrated to Texas, bringing with them their ideas and ways of life. They were followed by other people from around the United States and the world, once again changing the face of Texas. The patterns of human migration are an important part of movement.

However, it is not only people who move from place to place. The next time you go to the grocery store, think about all the foods that traveled to your city from other places. Movement allows you to enjoy foods and many other products from around the world.

Communication is another major part of movement. Imagine what life would be like if you could communicate only with the people on your own block. Fortunately, satellite technology lets us receive news and entertainment from faraway locations through our television sets. Likewise, e-mail and the Internet let people send and receive information around the world in an instant using computers. Communication, like migration and the movement of products, allows humans to change their environment to better meet their needs.

Region

The earth is a very complex place with many different physical and human characteristics. One way geographers make sense of these differences is by dividing the world into geographic regions, or areas that have certain features in common.

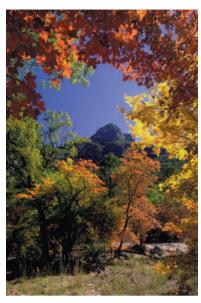
migrate to move from one place to another



MOVEMENT

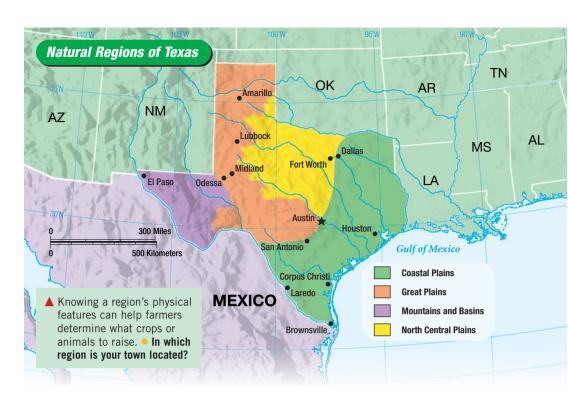
From 1990 to 1998, the population of Texas grew by 2.7 million people. Where did these new Texans come from? Between these years Texas had about 1.5 million more births than deaths. Moreover. about 1.2 million more people moved to Texas than moved away. • What are some of the reasons why people might move away from Texas?

region a geographical area characterized by shared features

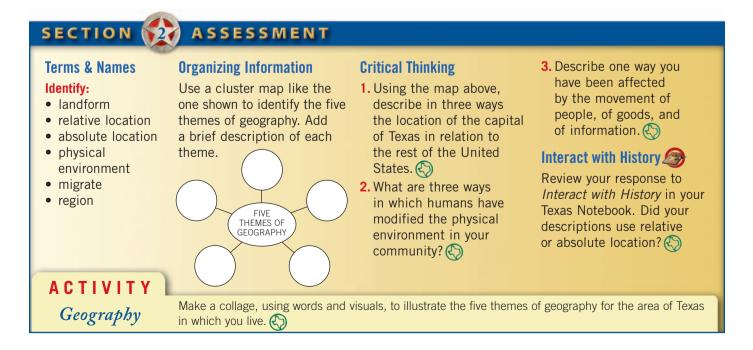


Regions vary in physical features such as landforms and vegetation. The highest peak is in Texas in the Guadalupe Mountains in the Mountains and Basins region. Why do you think the Apaches and Comanches often camped in

the Guadalupe mountains?



The above map shows the four natural regions of Texas: the Mountains and Basins, the Great Plains, the North Central Plains, and the Coastal Plains. Each region has a number of different physical features. For instance, the land in the Great Plains region tends to be semi-arid, or somewhat dry, while the Coastal Plains have more green forests and vegetation. Defining regions helps people quickly find and organize information about their surroundings. For this reason, regionlike location, place, human-environment relationships, and movement is a very important theme in geography.



TALES OF TEXAS

The Critters Create Texas

TEXAS

Polk County

Geographers are interested in explaining how physical features combine with human characteristics to create particular environments. This Alabama-Coushatta myth offers a unique explanation of Texas's beginnings. Today, this story is still passed on ama-Coushattas, many of whom

through the Alabama-Coushattas, many of whom live on a reservation in Polk County in East Texas.

In the beginning, water covered the face of the earth. And nothing could be seen on the water but a large log raft filled with animals. They were tired of the raft, and they were looking for a home.

Horned Owl called them together one day and said, "We must find some land so that we can get off this raft and build ourselves homes."

Beaver swam a big circle around the raft, but he could find no land.

Frog swam down and around the raft, but he could find no land.

Finally Crawfish swam down and down and down until she found land at the bottom of the sea. She began to roll balls of mud so that she could build a crawfish chimney. She built a chimney so big that it reached the surface of the sea. She kept building until the mud spread out in a great plain of land in the middle of the ocean.

The animals liked the land, but they thought that it was too flat. Horned Owl sent Buzzard to shape the land's surface. Buzzard flew all across the land. When he raised his wings, he made hills and mountains. When

he lowered his wings, he made deep valleys. He soared and made the flat prairies. The animals were happy with Buzzard's new land-scape and began building their homes.

Many moons later the Creator, Aba Mikko, made people out of clay. For many generations they lived in a big cave deep in the earth. One day they decided that they wanted to go outside. They climbed for four days before they reached the earth's surface.

A large tree stood at their cave's entrance, dividing it in two. When the people went outside, some exited on one side of the

root. Others went on the other side. Each side became a different group—one the Alabamas and one the Coushattas. They differ in speech and traditions, even though they are kin and have always

lived close together. Because they have lived together for over 150 years, sharing the same hunting ground, we think of them as one: Alabama-Coushattas.



Alabama-Coushatta basket woven from pine needles

LINKING TO HISTORY

Use your school library and online resources to research another Native American myth that explains Texas's beginnings. Then, in a paragraph, compare and contrast the two myths. Share your work.

LINKING TO TODAY

A myth is a traditional story of a particular people that often attempts to explain a natural occurrence. Myths are passed from one generation to the next. Why are myths as important today as they were when they first were told?





ASSESSMENT

TERMS & NAMES

Explain the significance of each of the following:

- 1. physical geography
- 2. human geography
- 3. location
- 4. place
- 5. human-environment relationships
- 6. movement
- 7. region

REVIEW QUESTIONS

What Will Texas Be Like When You Are 20? (pages 12–17)

- **1.** What are two important things people can learn by studying history?
- 2. In which areas of Texas has the population grown most rapidly in recent years? Why?
- **3.** Identify one way NAFTA may benefit Texas in the near future.
- **4.** Which Texas trends likely will continue into the future?

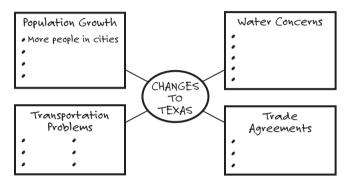
What Is Geography? (pages 19–22)

- **5.** How are absolute location and relative location alike? How are they different?
- **6.** Name the five themes of geography and give an example of each.
- **7.** What is another name for the movement of people in geography?
- **8.** Why do geographers divide the world into geographic regions?
- **9.** Identify the four natural regions of Texas and describe where each is located.

READING SOCIAL STUDIES

After You Read

Review your completed cluster map. Which of the problems will be the most difficult for Texans to resolve? Why?



CRITICAL THINKING

Predicting

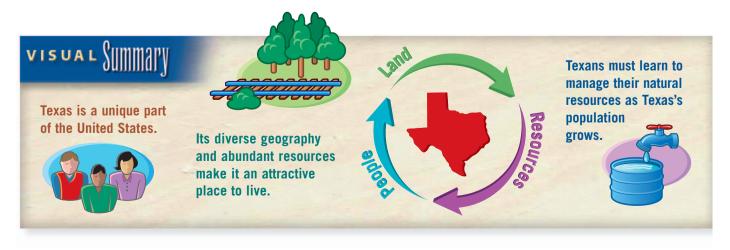
1. What businesses might profit most from trends toward more people and bigger cities in Texas? What businesses might be hurt by these trends? Explain your answers.

Making Comparisons

2. Compare the physical features and human characteristics of the place where you live with those of another city. What is one of the main features that makes your home environment unique?

Applying Information

3. Describe three ways in which you personally adapt to or modify your physical environment. What is one way you might limit your own harmful modifications to nature? What is one way you might adapt to the environment rather than change it?

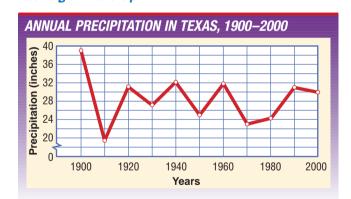






- 1. Identify the relative location of the four natural regions of Texas.
- 2. Brownsville, in the Coastal Plains region, experienced extreme drought conditions in the summer of 2000. How do you think this water shortage affected the many crops that grow there?

SOCIAL STUDIES SKILLBUILDER Reading a Line Graph



- 1. Would you conclude that precipitation in Texas is about the same from decade to decade? Why or why not?
- 2. Using the information on this line graph, can you determine why rainfall amounts increase or decrease from year to year? Explain.
- **3.** What are the three driest years represented on this line graph? What are the precipitation amounts for those years? Do these amounts help you see a precipitation trend in Texas? Explain.
- **4.** Using the information on this graph, what predictions can you make for the future of Texas?

CHAPTER PROJECT

Oral History Like the myth told by the Alabama-Coushattas, much of our early information was carried down from generation to generation by storytellers. What do you know about the early history of your community? Interview members of your family or community about the history of your area, or research your area's history in a local library. Work with a partner to write a myth to explain the unique combination of physical features and human characteristics that make up your area. Next add appropriate sound effects, props, and other special effects to enhance your oral history. Then give a dramatic reading of your story for the class. As other student pairs perform, take notes on the details shared by the storytellers. What common details did most groups include?

SCIENCE, TECHNOLOGY & SOCIETY ACTIVITY

Increasing Our Water Supply One

important issue facing Texans is how to identify more effective ways to conserve, store, and use our state's water supply. Select one of these topics: Water Conservation, Water Storage, or Water Usage. Divide class members into groups. Online or in your school or local library, research information on innovations and technology that can improve Texas's water supply. Then apply a problem-solving process to identify solutions to your issue. Create a model and present your conclusions and recommendations to the class.

Go to www.celebratingtexas.com to research this topic.

CITIZENSHIP ACTIVITY

Positive Human-Environment Relationships

Not all human modifications to the environment have to be harmful. Identify three ways that people can improve their environments. Then, on a sheet of paper, create a detailed cleanup or recycling plan for improving one area of your community. Include all the necessary information for organizing the event and accomplishing your goal. When you have finished, share your plans with your class.