

CHAPTER
3

Texas Regions

SECTION 1 Mapping Texas Lands

SECTION 2 Identifying the Four Regions of Texas

SECTION 3 Mapping Texas People



VIEW THE **Texas on Tape**
CHAPTER 3 VIDEO LESSON.



Even the weeds in Texas are artistic.

Texas author Mary Lasswell

1850

1875 *Indianola* Hurricane strikes; 176 lives are lost

1886 *Indianola* Second hurricane destroys town, which is never rebuilt

1900

1900 *Galveston* Deadliest hurricane on record kills more than 6,000

1899 *Hearne* Brazos River floods 12,000 miles of land

1950

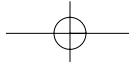
1947 *White Deer, Glazier, Higgins* Mile-wide tornado rakes Panhandle

1979 *Wichita Falls* Worst single tornado in Texas strikes

2000

1985 *San Antonio* Storm drops 13 to 15 inches of snow

1998 *South Central Texas* Rivers flood 20 counties



SKILL BUILDER

Reading Social Studies



Petrochemical plant

Before You Read

Can you think of some ways in which the environment has an impact on your life? For example, does the weather influence how you dress or what activities you participate in? How do you think your actions affect the environment? Have you recently traveled in a car or planted a tree? Humans and the land interact every day.

Think about

- what the land looks like in your town or city
- the climate in your town or city
- any changes in your town or city, such as construction or agriculture
- the businesses located in your town or city
- your way of life, including language, foods, and clothing

As You Read

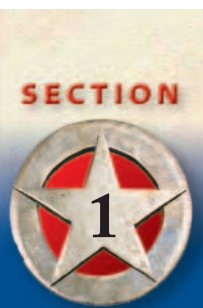
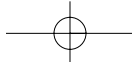


Geographers study how humans and the land affect each other. Texas's location and landforms affect the kinds of businesses that are located in the state and even the foods that Texans eat. On the other hand, humans have introduced new plants and animals into the state, changing how Texas looks. Completing this graphic organizer for Chapter 3 will help you understand the fields of physical geography and human geography and how the two interact.

- Copy this chart into your Texas Notebook.
- As you read the chapter, note key words and phrases that describe the field of physical geography in the first column.
- In the second column, note key words and phrases that describe the field of human geography.

Organizing Information

GEOGRAPHY	
Physical Geography	Human Geography



Mapping Texas Lands

Why It Matters Now

The land and climate will help determine where you choose to live, what jobs will be available, and the quality of your life.

TERMS & NAMES

plains, physical geography, human geography, settlement, Rio Grande, tributary

OBJECTIVES

1. Compare places in Texas in terms of their physical characteristics.
2. Compare regions of Texas in terms of their physical characteristics.

MAIN IDEA

Texas is a big place. The land, weather, and climate vary a great deal from one part of the state to another. This variation affects where we live and what we do there.

A REAL-LIFE STORY

During the 1880s some Texans believed that Texas should be surveyed, or explored and mapped. They believed that this survey would help the state's economic progress. Others would be able to use the survey to help them locate mineral resources and find sources of water for irrigation. Robert T. Hill was a Texan who devoted his life to studying the physical geography and geology of Texas. He believed that it was important to survey the state. When the legislature refused to conduct the survey, Hill expressed his disappointment in a newspaper article.



Robert T. Hill

Little did I think when, as a Texan, I [worked] . . . for the purpose of developing [the state's] resources, . . . that I was casting pearls before swine.

Robert T. Hill, *Austin Daily Statesman*, March 25, 1887

plains *a wide area of flat or gently rolling land*

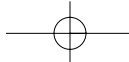
physical geography *the physical features of the earth's surface*

human geography *the features of the earth that are created or changed by humans*

settlement *a place where people live*

Two Kinds of Geography

Geography deals with the land and its people. Things that relate to the land—such as climate, vegetation, rivers, lakes, oceans, plateaus, plains, and mountain ranges—make up **physical geography**. Things that people do are considered **human geography**. This includes economic activities such as how we earn our living—by farming or mining, for example. People who study human geography also analyze customs, ethnic makeup, settlements, transportation, and political systems, along with other ways in which humans create their own environment. Geographers look at how physical and human geography interact.



Weather and Climate

How would you describe the weather today? Weather is the condition of the atmosphere at a specific time and place. The weather may be typical of the area, or it may be unusual. People often want to know what the weather will be like so they can plan their daily activities or choose what type of clothing to take on a trip.

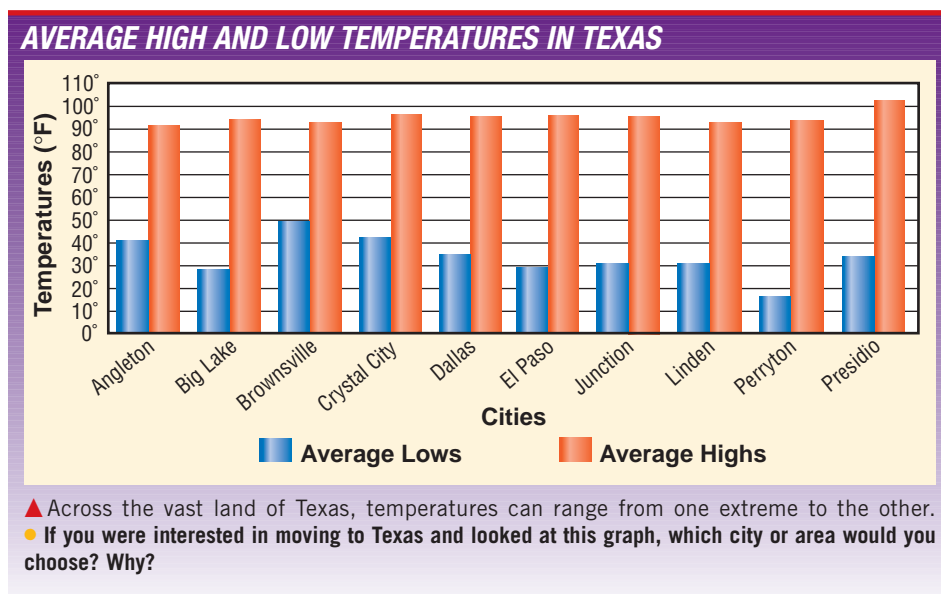
Climate is the expected weather conditions at a place based on what has happened in the past. When the weather forecaster on television says, "The normal rainfall for the year is 30 inches," she or he is talking about climate. People need to know what the climate is like to plant the right kinds of crops in a particular place or to ensure that the trees and plants around their home will grow.

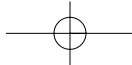
▲ Weather in Texas ranges from snow and freezing temperatures in the Panhandle to scorching heat in West Texas. ● **What is the difference between weather and climate?**

Texas Climate

What kind of climate does Texas have? Texas is in the middle latitudes, so it has warm summers and cool winters. As you would expect, winters are colder in the northwestern part of the state known as the Panhandle. Winters are milder in South Texas.

The graph below shows how temperatures vary in Texas. Perryton, in Ochiltree County on the Oklahoma border, has the coldest average low





HUMAN-ENVIRONMENT RELATIONSHIPS

Some of the most productive farming areas in Texas get too little precipitation to raise crops. Irrigation must be used for farming to be successful. Sometimes water for crops can be pumped from underground, but dams and reservoirs also have been built all over Texas to store water for crops. These dams and reservoirs change the natural flow of rivers.

- Where in Texas is irrigation most needed?

temperature: a chilly 17°F. Although not the state’s highest point, Perryton is located in the highest part of northern Texas. Perryton’s elevation is about 3,000 feet above sea level. Average temperatures decrease as elevation and distance from the equator increase.

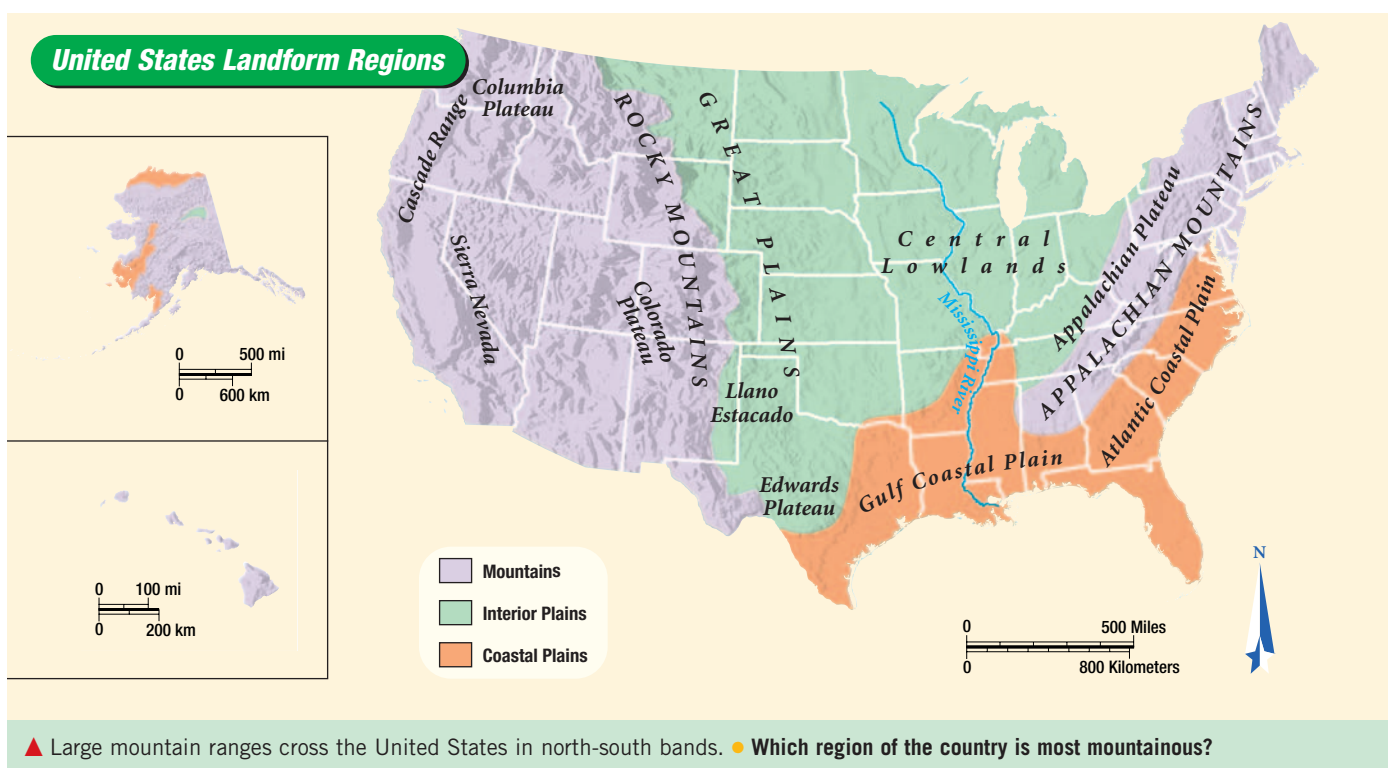
Summer temperatures are just the opposite, as the graph shows. The hottest temperatures tend to be in Northwest and West Texas. Presidio, on the Rio Grande, has an average July high temperature of 102°F. It is the only place in Texas where the average high temperature in July is over 100°F. The southern and eastern parts of the state are a bit cooler. This is because South and East Texas are close to the Gulf of Mexico, where conditions are more humid. Frequent clouds and rain keep summer temperatures from getting as high as they do in the west.

Precipitation in Texas varies from east to west. East Texas gets more precipitation than West Texas because it is close to a major source of moisture, the Gulf of Mexico. West Texas, on the other hand, is far from any large body of water, so it gets much less rain.

The city of Orange, in East Texas, averages 58.3 inches of rain per year, the highest precipitation in Texas. El Paso is the driest place in Texas, with an average of only 8.8 inches of rain each year. This difference in precipitation explains why there are pine forests in East Texas and deserts in the western part of the state.

Landform Regions

Landforms include mountains, valleys, rivers, seacoasts, lakes, plateaus, and plains. Most of Texas is made up of plains. In fact, two U.S. plains regions reach into Texas. The Gulf Coastal Plain extends all the way





through Texas to Mexico. The Great Plains also extend into Texas. East of the Great Plains are the Central Lowlands, which lie along the Mississippi River.

The Great Plains are bordered on the west by the Rocky Mountains, which extend into West Texas. The Central Lowlands are bordered on the east by the Appalachian Plateau, which ends at the Appalachian Mountains. In the western United States, the Colorado Plateau covers a huge area that includes parts of Arizona, New Mexico, Utah, and Colorado. Farther north, the Columbia Plateau makes up a large part of eastern Washington and Oregon. The Pacific Coast is bordered by long mountain ranges that are separated by large valleys.

Rivers of Texas

Rivers are important to Texas. Much of the Texas border is made up of three rivers. The Rio Grande separates Texas and Mexico and is the longest river in Texas. The Rio Grande begins in Colorado and flows about 1,900 miles southward through New Mexico before entering Texas near El Paso. Two large dams have been built on the Rio Grande in Texas: Amistad Dam and Falcon Dam. Water stored in reservoirs behind these dams is used to irrigate crops in Texas and Mexico.

The Sabine River separates Texas from Louisiana. The Sabine River is much shorter than the Rio Grande, but it has also been dammed to form Toledo Bend Reservoir. This reservoir provides water for drinking as well as for industrial and agricultural uses.

The Red River separates Texas from Oklahoma. It begins in eastern New Mexico and flows eastward to Arkansas. It originally flowed to the Mississippi. Due to construction of a flood-control system, it now also flows to the Gulf of Mexico. The Canadian River is the other important river in the Panhandle. It begins in northern New Mexico and crosses Texas to Oklahoma, where it joins the Arkansas River. The Canadian River is the only major Texas river that does not flow into the Gulf of Mexico.

- ◀ Enchanted Rock is a 1,825-foot granite mountain on the border of Gillespie and Llano Counties in the Great Plains region of Texas. It is one of the oldest geological formations in Texas. ● **Why do you think it is so round in shape?**



ENCHANTED ROCK

Did you know that a mountain can be noisy? Enchanted Rock is known to make groaning and creaking noises at night. Legend says the noises are related to sacrifices held at the base of the mountain long ago. However, science offers a different explanation. During the day, Enchanted Rock expands in the Texas heat. The weird noises are made when the mountain contracts in the cool of the evening.



To Language Arts

The names of many Texas rivers come from the Spanish language. For example, the Colorado River received its name from the Spanish word for red, *colorado*. The Nueces River was named for the pecan trees that grew along its banks. In Spanish, *nueces* means “nuts.”

- Find five other Texas rivers with Spanish names and research the meaning of each name. Why do you think those Spanish names were chosen?



▲ In Texas, most rivers flow from northwest to southeast. ● What do you think is the reason for this geographic pattern?

tributary *a stream that flows into a larger stream or other body of water*

The Pecos River is an important **tributary** of the Rio Grande. It starts in northern New Mexico and flows southward into Texas. The Pecos River provides irrigation water for farms in New Mexico and Pecos, Texas.

Many Texas rivers flow into the Gulf of Mexico. These rivers include the Neches, Trinity, San Jacinto, Brazos, Colorado, Guadalupe, San Antonio, Nueces, and now the Red. Many important Texas cities are located on these rivers. The locations, sizes, and characteristics of these rivers influence the lives of residents of the Lone Star State.

SECTION 1 ASSESSMENT

Terms & Names

Identify:

- plains
- physical geography
- human geography
- settlement
- tributary

Organizing Information

Use a chart like the one shown to identify the U.S. landform regions that extend into Texas, the other parts of the United States that are included in these regions, and the physical characteristics of each region.

Landform Region	Included in Region	Description

Why do you think certain areas are included in the same region? 🗺️

Critical Thinking

1. If you were to move from Houston to Amarillo, what differences in climate and precipitation might you notice? Why? 🗺️
2. Look at the U.S. map on page 48. Notice the shapes of the states. Some are almost square, while others have irregular shapes. Why do you think Texas is shaped as it is? Be specific. 🗺️

3. If you wanted to grow oranges and other citrus fruits in Texas, would you plant your orchards in the Great Plains region or in the Gulf Coastal Plains region? Why? 🗺️

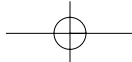
A Real-Life Story

Review *A Real-Life Story* on page 46. How do you think Hill thought the survey “would help the economic progress” of Texas?

ACTIVITY

Geography

Create a map that shows the physical geography of your town or city. First outline the general shape of your city, and then show the locations of its landforms. 🗺️



Lone Star Legends

Roy Bedichek



Roy Bedichek spent most of his life watching and paying tribute to the Texas landscape and its wildlife. In his works *Adventures with a Texas Naturalist* and *Karánkaway Country* Bedichek described the beauty of his environment with almost childlike wonder.

Born in Cass County, Illinois, on June 27, 1878, Roy Bedichek spent his childhood in the small farming town of Eddy, Texas, south of Waco. He later attended the University of Texas at Austin. In 1913 Bedichek moved to Austin permanently with his wife, Lillian Lee Greer Bedichek, and their three children.

In Austin, Bedichek served as secretary of the Young Men's Business League and the Organization for Promoting Interest in Higher Education in Texas. After serving a year as the city editor at the *San Antonio Express*, he began a new project. In the fall of 1917, Bedichek was named director of the University Interscholastic League (UIL), coordinating sporting and academic competitions for Texas high schools. The UIL grew under his instruction for over 30 years.

As the UIL director, Bedichek often traveled throughout Texas. Instead of sleeping in hotels, Bedichek liked to camp under the stars. These overnight adventures seemed to fuel Bedichek's love for nature, especially birds.

At the insistence of his friends J. Frank Dobie and Walter Prescott Webb, Bedichek took a leave of absence from his job and went into isolation to write his first book. At the age of 68, Bedichek began writing *Adventures with a Texas Naturalist*. It was published in 1947. In it, he describes with wonder his first glimpse of a bird called the vermilion flycatcher:

He is a brilliant flaming gem, an outburst of gleaming color, and outshines the most brilliant scarlet flowers. . . . Poised high in the crystal-clear air that morning, he seemed to me to be a star of first magnitude which the vanishing darkness had failed to take with it from the daylight sky.

His next works, *Karánkaway Country* and *Educational Competition: The Story of the University Interscholastic League of Texas*, received the Carr P. Collins Award for the best Texas books of the year in 1950 and 1956, respectively.

Roy Bedichek died on May 21, 1959. He left a legacy of respect for the beauty and natural resources of Texas. Today, he is recognized as a major contributor to Texas literature as well as a pioneer in the study of Lone Star wildlife.

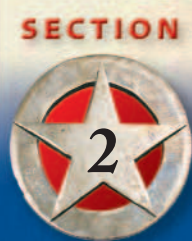
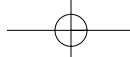


LINKING TO HISTORY

Skim a copy of Roy Bedichek's *Adventures with a Texas Naturalist* for a passage that gives the author's point of view. Summarize the passage in your words and then identify Bedichek's point of view on the subject. As a class, discuss Bedichek's points of view.

LINKING TO TODAY

Texas has a larger variety of birds than does any other state in the United States. Choose a Texas bird, and then research the region it lives in and how it adapts to the physical geography. Write a one-page report and, then include a picture of the bird. Then, as a class, combine your reports to create a booklet on Texas birds.



Identifying the Four Regions of Texas

Why It Matters Now

The landforms, waterways, trees, and plants give each subregion its unique character.

TERMS & NAMES

subregion, Coastal Plains region, **escarpment**, **growing season**, North Central Plains region, **steppe**, Great Plains region, **aquifer**, Mountains and Basins region

OBJECTIVES

1. Identify the location of each natural subregion of Texas.
2. Compare the regions and subregions of Texas.

MAIN IDEA

As you learned in Chapter 1, Texas can be divided into four regions. Now you will see how the lands within each region can be further divided. By analyzing similarities and differences, we can further classify Texas into 11 subregions.

WHAT Would You Do?

Write your response to *Interact with History* in your *Texas Notebook*.



INTERACT WITH HISTORY

Imagine that you are a member of the Texas Film Commission. Your job is to persuade moviemakers to shoot their films in Texas. To do this, you must be able to direct them to a location that matches the setting of their story. Where in Texas might you send a film crew to shoot a horror movie about a mysterious forest creature? What if the movie were about rock climbers? What if it were about being stranded on an uninhabited planet? Explain your reasoning.

Dividing Up Texas

Natural regions are determined by physical geography features such as landforms, climate, and vegetation. Texas can be divided into four large natural regions: the Coastal Plains, North Central Plains, Great Plains, and Mountains and Basins regions. The first three natural regions can also be divided into smaller **subregions**. The Mountains and Basins region does not have subregions.

subregion *a smaller division of a geographic region*

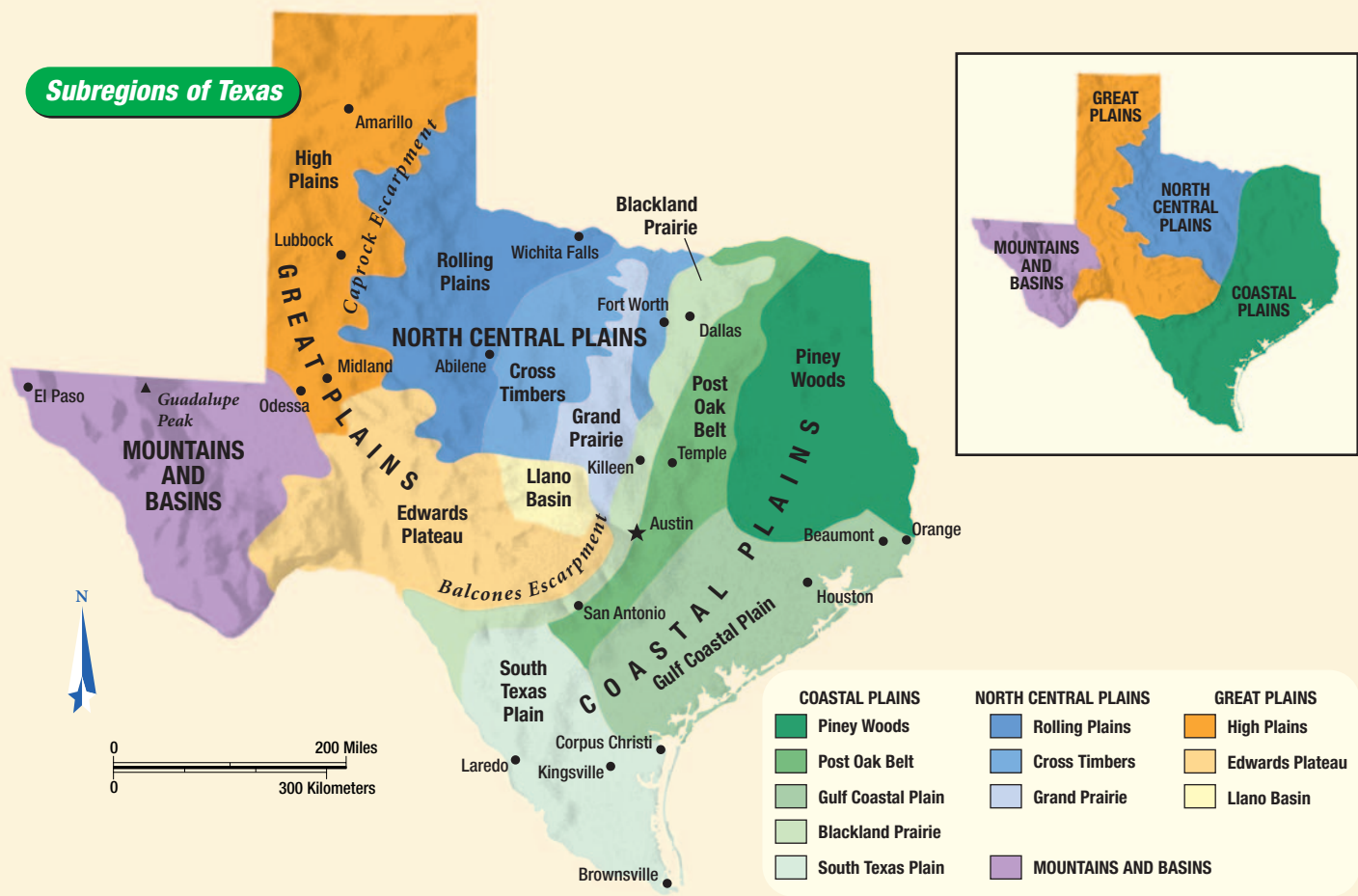
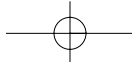
escarpment *a cliff or abrupt break in the land's surface*

Coastal Plains Region

The Coastal Plains region includes about one-third of Texas. It extends east and south from the Balcones **Escarpment** to the Gulf of Mexico. Most of Texas's large cities are in the Coastal Plains. As a result, the Coastal Plains region is home to more people than any other part of Texas. About two out of every three Texans live in the Coastal Plains.

Piney Woods

The name Piney Woods accurately reflects this area of pine forests in Texas. This subregion extends from the Texas-Louisiana border to the



▲ Texas's four natural regions can be divided into 11 subregions. The Mountains and Basins region has no subregions. ● In which subregion is Laredo located?

west for about 125 miles. It also extends from the Oklahoma state line south to where the coastal prairies begin, about 25 miles from the coast. The Piney Woods is the rainiest part of Texas, receiving about 45 to 60 inches of precipitation per year. Its **growing season** is about 230 to 265 days. Its elevation is low, only 100 to 400 feet above sea level.

Post Oak Belt

The Post Oak Belt is west of the Piney Woods. It is a long, narrow zone where pine trees are replaced by oak, hickory, and other hardwood trees. Prairie grasslands are scattered throughout the area as well. The climate in the Post Oak Belt is drier than in the Piney Woods, with about 30 to 45 inches of precipitation per year. Its growing season ranges from 230 to 280 days. The elevation is slightly higher than the Piney Woods—from 250 to 500 feet above sea level.

Blackland Prairie

The Blackland Prairie, another long, narrow area, from 15 to 70 miles wide and nearly 300 miles long. The Blackland Prairie follows the Balcones Escarpment from near the Oklahoma border down to San Antonio and beyond, to the United States–Mexico border.

growing season *the average number of days between the last killing frost of spring and the first killing frost of fall*

▼ Caddo Lake in the Piney Woods subregion of the Coastal Plains is known for its giant cypress trees, floating lotus, and plentiful fish. It is Texas's only natural lake. ● **Why do you think this area was popular among Native Texans?**





IN THIS LAND OF OURS

PLACE

Spanish and Mexican settlers lived in the South Texas Plain before the Texas Revolution, and many families still live there. Since then, others have continued to move in, creating a largely Hispanic population in the area. In fact, in most counties in the South Texas Plain, the population is over 75 percent Hispanic; in some counties, it is over 90 percent Hispanic. ● **If you were to visit South Texas, what languages would you most likely hear?**

- ▼ Most of the North Central Plains region is relatively flat and dry.
- **What are the main types of vegetation in this region?**



The Blackland Prairie receives 30 to 45 inches of rain per year. The growing season is from 230 days in the north to 280 days in the south. Elevation ranges from 400 feet to nearly 800 feet above sea level. The soils of the Blackland Prairie are not good for growing most trees, so the vegetation is largely tall prairie grasses with a few hardwood trees.

Gulf Coastal Plain

The Gulf Coastal Plain forms a large arc that follows the coast of the Gulf of Mexico from the Sabine River westward for about 260 miles to Kingsville. It extends inland about 30 to 60 miles. Elevations in the Gulf Coastal Plain are generally below 100 feet, and the climate is humid. Rainfall varies from 50 inches near Beaumont to 25 inches in the Corpus Christi area. Temperatures are warm, and the growing season is long, from 240 days near Beaumont and Orange to as much as 309 days in Corpus Christi.

South Texas Plain

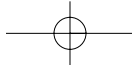
If you were to draw an imaginary line from San Antonio to Kingsville, the South Texas Plain would fall between that line and the Rio Grande. This area is about 270 miles long from north to south and about 250 miles wide from east to west. Elevations range from sea level to just under 1,000 feet above sea level. In this southernmost part of Texas, the climate is warm year round. The growing season ranges from 265 days near San Antonio to 341 days at Brownsville. Maximum rainfall is about 30 inches per year near San Antonio. The minimum is less than 20 inches near Laredo.

North Central Plains Region

The North Central Plains region begins at the Balcones Escarpment and extends west as far as the Caprock Escarpment. The North Central Plains is an area of rolling plains often covered by small oak trees, mesquite, brush, and scattered grasses. The subregions of the North Central Plains are a series of land belts extending north and south through the north-central part of the state. These subregions become increasingly drier and higher in elevation from east to west.

Grand Prairie

This long, narrow belt extends from near the Red River southward almost to Temple and Killeen. Elevations range from 800 to 1,700 feet. The area gets about 30 inches of precipitation per year, with more rainfall in the east and less in the west. The growing season is from 230 to 260 days. Soils in the Grand Prairie are not good for growing trees. The vegetation mostly consists of tall grasses and scattered hardwood trees, especially along streams in the area.



Cross Timbers

The Cross Timbers subregion surrounds the Grand Prairie. Because of this, it is divided into the Eastern Cross Timbers and the Western Cross Timbers. The main difference between the Cross Timbers and the Grand Prairie is that soils in the Cross Timbers are capable of growing trees such as post oaks, hickories, pecans, and elms. Rainfall in the Cross Timbers measures about 30 inches per year. The elevation ranges from 900 to 1,500 feet, and the growing season is about 240 days.

Rolling Plains

The Rolling Plains is the largest subregion of the North Central Plains. It begins west of the Cross Timbers and ends at the Caprock Escarpment. Rainfall in the Rolling Plains varies as you travel east to west. The eastern areas get around 30 inches per year, but the western areas usually get less than 20 inches. Elevations range from 900 feet in the east to over 2,000 feet in the west. The growing season is about 220 days.

The Rolling Plains subregion is largely a **steppe**. That is, the land is relatively flat and treeless. Vegetation generally consists of mixed short grasses along with mesquite and other brushy plants. Much of the Rolling Plains serves as grazing lands for large ranches.

Great Plains Region

The Great Plains region has three subregions. Two are large plateaus—the High Plains and the Edwards Plateau. The third subregion, the Llano Basin, is an area that is very different from any other part of Texas.

Llano Basin

The Llano Basin lies almost in the center of Texas. It forms an egg-shaped area south of the North Central Plains and east of the Balcones Escarpment. The Llano Basin is made up of granite, a very hard rock that is formed when molten rock cools slowly under the earth's surface. The pink granite that was used to build the Texas Capitol building in Austin came from the Llano Basin. The elevation of this subregion ranges between 1,000 and 1,800 feet above sea level. Precipitation averages about 30 inches per year, and the growing season lasts about 230 days. The vegetation is made up of mesquite, live oak and post oak trees, and short grasses. Pecan and oak trees often grow in low areas and along streams.

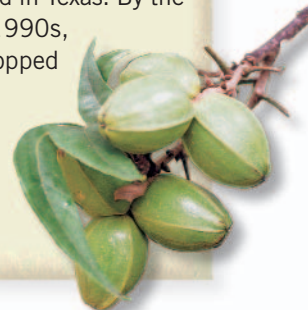
Edwards Plateau

The Edwards Plateau makes up the southern part of the Great Plains region. It lies north and west of the Balcones Escarpment. The plateau is primarily made of limestone, which has dissolved in spots to form a number



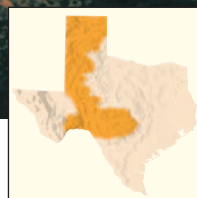
TEXAS PECANS

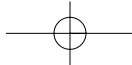
The pecan tree, native to more than 150 counties in Texas, has become a major source of income for the Lone Star State. It is the only nut grown in Texas for profit. In 1910 over 5 million pounds of pecans were produced in Texas. By the end of the 1990s, production topped 35 million pounds and brought in more than \$52 million.



steppe *a vast, treeless plain*

▼ The vast, treeless High Plains subregion of the Great Plains is broken by Palo Duro Canyon (at bottom of photo), which was formed by erosion. ● **What challenges might farmers in this region face?**





EDWARDS AQUIFER

The Edwards Aquifer extends under parts of 10 Texas counties and supplies water for communities from San Antonio to the Gulf Coast. In 1975 the San Antonio section of the aquifer was the first in the nation to be named a Sole-Source Aquifer by the Environmental Protection Agency. A Sole-Source Aquifer provides 50 percent or more of the drinking water for a particular area.

aquifer *an underground layer of porous rock, gravel, or sand containing water that may reach the surface through springs or wells*

- ▼ The Guadalupe Mountains in the Mountains and Basins Region rise high above the surrounding desert.
- **What kind of climate would you expect in this region?**



of caves and underwater streams. The Edwards **Aquifer** is a large bed of water-bearing rock that supplies water for San Antonio and many other communities below the Balcones Escarpment.

The Edwards Plateau is mainly between 1,000 and 3,000 feet above sea level. Precipitation ranges from about 18 to 30 inches per year. The growing season is estimated to last from 210 to 220 days each year.

High Plains

The High Plains, also known as the Llano Estacado, is one of the flattest places on earth. It was once covered with vast stretches of short grasses, like a steppe. Today, the High Plains is a major farming area.

The High Plains subregion extends west from the Rolling Plains to the Pecos River in New Mexico. The climate is dry, with precipitation amounting to less than 20 inches per year. The elevation of the High Plains ranges from 3,000 feet to over 4,000 feet above sea level. The growing season ranges from 220 days in the south to only about 180 days in the north along the Oklahoma border.

Mountains and Basins Region

This part of Texas is made up of tall mountains separated by large basins, or closed valleys. Most of the mountains receive enough rainfall to support forests of oak, piñon, and ponderosa pine trees. In contrast, the lower elevations and basins are desert country, with cactus, shrubs, short grasses, and other kinds of vegetation that can live a long time without water. Overall, this region receives little rain, ranging from a low of 8.8 inches per year near El Paso to almost 20 inches per year in higher areas. The growing season is usually between 220 and 245 days.

Elevations in the Mountains and Basins region vary widely. For instance, this region contains the highest point in Texas—Guadalupe Peak, which stands 8,751 feet tall. On the other hand, some parts of this region reach an elevation of only about 2,500 feet.

Summing Up Texas Regions

With so many plains, plateaus, and mountains, Texas boasts a very diverse landscape. In fact, learning to identify the many different regions in Texas can be difficult. How can you make Texas geography a little easier to understand? One way is by generalizing, or finding common characteristics among specific areas in Texas. Different parts of the state have different kinds of landforms. By making generalizations, we can simplify how we study these landforms.

One generalization you might make is that some areas have lower elevations and some have higher elevations. The Balcones Escarpment is very important because it divides the lowest parts of Texas from higher areas. The Coastal Plains areas east and south of the Balcones Escarpment



- ◀ At the Balcones Escarpment, the Blackland Prairie breaks sharply into the Hill Country. Austin, San Antonio, and other cities along Interstate 35 are located on or near the escarpment. • **Why is the Balcones Escarpment an important physical landmark?**

are all low and flat. West of the Balcones Escarpment the land is more varied. Also, the North Central Plains region is higher and hillier than the Coastal Plains. You can see the difference right away when you cross the Balcones Escarpment.

The Great Plains is largely an elevated plateau. It is even flatter than the Coastal Plains, but it contains deep canyons in some areas. Steep cliffs mark part of the plateau's edge. Only in the Llano Basin does the land become hilly.

The Mountains and Basins region is the only part of Texas where there are mountains. It is a large area of land with high mountain ranges separated by broad, flat-bottomed valleys called basins. This is the most distinctive landscape in Texas.

SECTION 2 ASSESSMENT

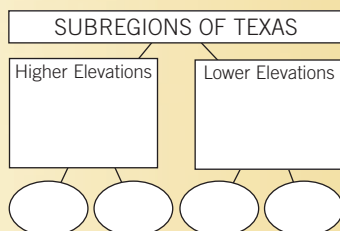
Terms & Names

Identify:

- subregion
- escarpment
- growing season
- steppe
- aquifer

Organizing Information

Use a diagram like the one shown to categorize each subregion as having a relatively high elevation or low elevation. In the ovals, list the common characteristics of all the subregions contained in each box. 🗺️



Critical Thinking

1. Which region of Texas is least like the other regions of the state? Why? 🗺️
2. Which of the regions or subregions of Texas might be best suited for farming? for ranching? for neither? Why? 🗺️

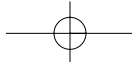
Interact with History 🗺️

Review your response to *Interact with History* in your Texas Notebook. How would you refine your instructions to each moviemaker? Explain in detail which area of Texas you would choose for each movie location and why.

ACTIVITY

Geography

Determine which region you live in. Then choose a different region, and create a chart to compare the regions. How are they similar? How are they different? 🗺️

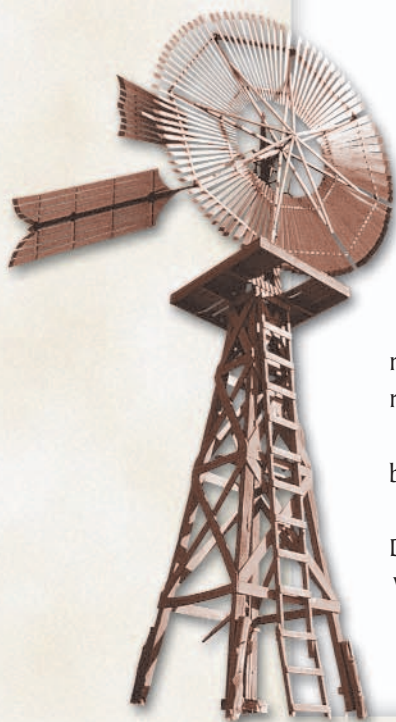


LONE STAR

Literature



Texas is a land of great diversity. Its unique physical and human characteristics have left lasting impressions on millions of individuals living in or visiting the Lone Star State. In the accompanying excerpt, A. C. Greene shares his own impressions of the place where he grew up—the North Central Plains region of Texas.



A PERSONAL COUNTRY

BY A. C. GREENE

Going west, through Texas, you leave Fort Worth and come out suddenly onto a rolling, bare-hilled country that stretches away on every side. Without warning you have been set adrift on a billowy ocean of land.

Behind you have been pine forests and tangly river bottoms and blackland farms that crowded the highway. But here the plow has never been. This is ranching country. You notice windmills lonely in the long, sweeping pastures, and cattle, grazing on the far slopes, are like tiny figures set there to give some comprehensive scale to the landscape. There are no houses, no people, few roads, and scarcely any trees. The overwhelming sense is solitude, and you may begin to feel naked and defenseless, moving across so much openness.

But there is beauty here, the beauty of space and of freedom, and the beauty of the wind feeling its way along the brown, grassy swells and ruffling the yellow ridges. It is strong, stark beauty, having so few ornaments that each plane, each shadow and broken feature of the land, must play an intense part in the composition, subtly forcing the eye out to the horizon and up to the sky.

This stretch is the farthest eastern finger of another, broader, higher place; a place called West Texas. Its barren grandeur, which gives way within a half dozen miles to woods and creeks again, is a suitable preview of what lies west. The way you feel here, released by the openness or oppressed by so much space, is a premonition of the emotion that will overtake you when you reach that larger land. . . .

You do not have to remove yourself very far from West Texas to have left it far behind. It is not duplicated in the regions immediately surrounding it. . . .

West Texas, for example, has nothing in common with Dallas, . . . although Dallas lies not too many miles east of where West Texas begins. On the other hand, West Texas shares even less with El Paso, and that city is hundreds of miles farther west in Texas than is West Texas itself. So much of West Texas is an attitude brought on by the country and its natural forces, tempered by its history.





PRIMARY SOURCE

Autobiography

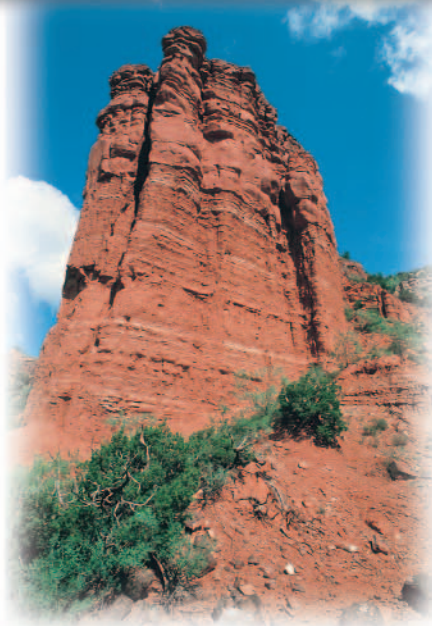
In those adjoining regions, history was inherited slowly and differently. . . . In West Texas most of the people think more alike.

So I would create a few boundaries for the place, defined more by instinct than the way it lies on the map. . . . Just about everyone in West Texas has his own idea of where West Texas begins and ends. So do I.

I would begin it at the Brazos River, on the east, and extend it west for about four hundred miles to the Pecos River. . . . There are several particularly good reasons for starting West Texas at the Brazos. The first is history. "Beyond the Brazos" was the semiofficial description of the Texas frontier for several decades; too many decades and generations for the distinction not to have entered into the legends of the land. Legends can become attitudes, and in West Texas many of them have. . . .

Marking off West Texas from north to south is a little more difficult. The northern border is fairly exact along the Cap Rock, which is a tall abrupt escarpment rising two hundred or more feet from the rolling prairie. On top are the High Plains or Llano Estacado (Staked Plains), where you know very well you are in a different country. Then if you come east from the Cap Rock, along that tier of counties bordering the Red River, you have established a fairly workable north boundary. . . .

Beyond these geographical lines, there is the matter of elevation which contributes to an identity. . . . Below one thousand feet the humidity is high, the heat is sticky, and the south wind doesn't always cool things off. Above three thousand feet—as on the High Plains and beyond the Pecos—you find distinct changes in vegetation and in the way things are done with the land. And the winters get blizzardy. Above the Cap Rock is a tableland with some of the finest irrigated farming in the United States. In some places, along the escarpment's edge, these lush, green rows lie above but only a few hundred feet away from the roughest kind of West Texas dry ravine country, so dramatic is the change.



The Cap Rock

Learning

About the Author

A. C. Greene was born in Abilene, Texas, in 1923. After serving in World War II, Greene graduated from Abilene Christian College. He has reported for the *Abilene Reporter-News*, owned a bookstore, and headed the journalism department at Hardin-Simmons University. He was awarded a Dobie-Paisano fellowship from the University of Texas, which resulted in his writing *A Personal Country*. Greene has written more than 22 books.


Reading

the Literature

As you read, form a mental picture of the land Greene describes. What does the physical environment look like? What words and tones does he use to create a picture of West Texas?



Thinking


About the Literature

According to Greene, how does West Texas compare to other places in Texas? 

Writing

About the Literature

Think about the region you live in. In your Texas Notebook, write a one-page essay describing your physical environment.  

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

To read more about A. C. Greene's observations and experiences read *A Personal Country*, A. C. Greene, Alfred A. Knopf, Inc., New York, ©1969.



SKILL BUILDER

Technology

Creating a Regional Tourism Guide



Texas Regions

Each year millions of people visit Texas. To promote travel to Texas, organizations such as the Texas Convention and Visitor Bureaus, the state Tourism Division, and the state Travel and Information Division produce tourism guides. Many visitors rely on these tourism and travel guides to learn about the Lone Star State. Visitors often want to know about the climate, points of interest, and special events of their destinations. Use the Internet to find information that would be useful to a visitor to one of the four Texas regions. Then use this information to create a regional tourism guide.



GETTING Connected

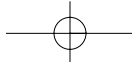
1. To get started, log on to www.celebratingtexas.com and go to **Chapter 3**.
2. Focus your search on information and links to travel and tourism in one of the four regions of Texas.
3. Find information that answers the following questions:
 - Why is this region a good place to visit?
 - What makes this region unique?
 - What is the climate like here?
 - What are some of the interesting sites and special events in this region?
 - Which national or state parks are located here? Where are they located?



DEVELOPING Your Presentation

Imagine that you work for the Tourism Division of the Texas Department of Commerce. You have been asked to create a tourism guide for a Texas region of your choice. Conduct additional online searches as needed to gather your information. Be sure to include several of the following in your presentation. 🌐

- An introductory **letter** that tells why the particular region is a good tourist location
- **Photographs** that represent the environment and attractions
- A monthly **calendar** that shows events in the region
- A **database** of Texas state and national parks in the region
- A **table** that shows the average monthly temperatures for the major cities in the region



SECTION



Mapping Texas People

Why It Matters Now

Where people choose to live has a large effect on quality of life.

TERMS & NAMES

census, **metropolitan area**, **suburb**, **industry**, **per capita income**, **heritage**

OBJECTIVES

1. Analyze geographic distributions and patterns in Texas.
2. Compare places and regions in Texas in terms of their physical and human characteristics.
3. Explain ways in which geographic factors have affected the political, economic, and social development of Texas.

MAIN IDEA

To understand why most Texans live in cities rather than in rural areas, it is important to study both the physical and human geography of Texas.

INTERACT WITH HISTORY

Sudden growth in an area's population can have a big impact on the environment. City planners predict changes in population and find ways to make their city handle all the new people. Imagine that you are a city planner in a rapidly growing Texas city. What types of facilities and services must you plan for to handle the growing population?

WHAT Would You Do?

Write your response to *Interact with History* in your *Texas Notebook*.



Where People Live in Texas

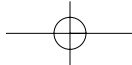
The 2000 census identified about 21 million people living in Texas. This makes Texas the second most populous state in the nation; only California has more people. Texas is famous for ranches and oil wells, but most Texans don't live in rural areas—they live in cities. By 1980 four of every five Texans lived in a city.

A **metropolitan area** is a city and the area around it, including all the **suburbs** and towns that rely on the city for jobs, shopping, and entertainment. Houston is the largest metropolitan area in Texas, with more than 4.1 million people. The Dallas metropolitan area is almost as large, with more than 3.5 million people. Three other metropolitan areas in Texas each have more than 1 million residents. San Antonio has about 1.6 million, Fort Worth has about 1.7 million, and Austin has about 1.2 million people. Over half of all Texans live in one of these five metropolitan areas.

Most of the large cities in Texas are east of the Balcones Escarpment. The escarpment runs in a large arc from near Waco south to Austin. It then curves west past San Antonio. The Balcones Escarpment is a good place to separate Central and East Texas from West Texas. Of the 27 major metropolitan areas in Texas, only seven are located west of the Balcones Escarpment.

metropolitan area *a city and all the areas around it that depend on the central city*

suburb *a smaller community just outside a city*

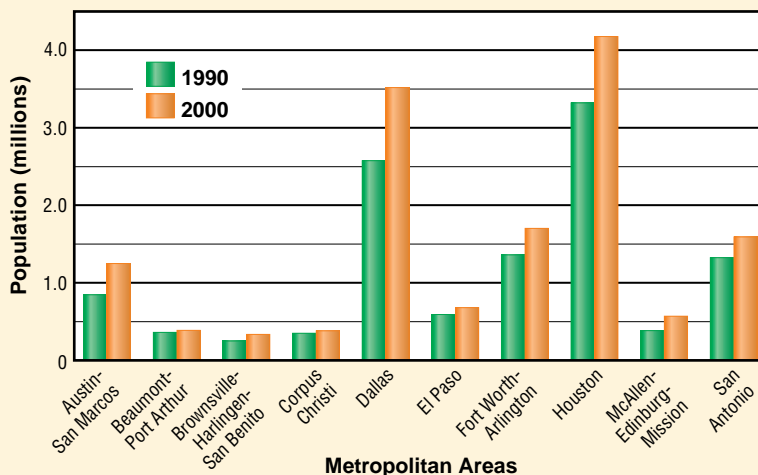


PLACE

A city collects taxes from its citizens to pay for the services it provides, such as road construction, public transportation, and police protection. If the population of a city expands beyond the city limits, the city cannot collect taxes in those areas. This is true even if the people work in the city and use all of its services.

● **What problems can be caused when many people live outside of a city but work inside the city limits?**

POPULATION OF TEXAS'S LARGEST METROPOLITAN AREAS, 1990–2000



▲ Texas cities and their surrounding areas have shown enormous growth in recent years. ● **Why do the populations of some areas grow faster than others?**

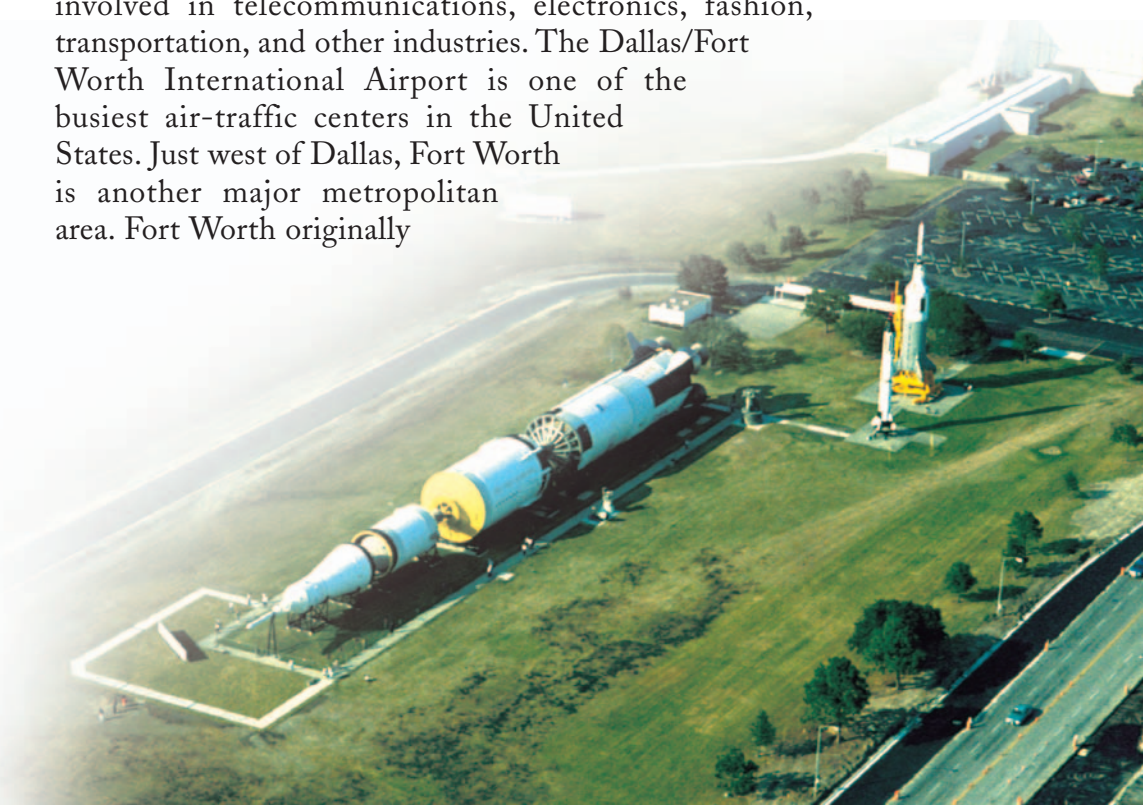
industry *the activity of making or preparing products for sale*

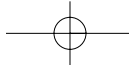
Why Cities Grow


Why do so many people live in Central and East Texas and so few in West Texas? Part of the answer is that people tend to live where the jobs are. Houston began to grow in its early years because of its oil **industry** and its port. Later, other industries provided jobs that made the city grow. Major industries include those that produce oil-based chemicals, oil-field equipment, aircraft, and computer hardware and software. The Houston area is also home to the Johnson Space Center, an important part of the United States space program.

Farther north, the city of Dallas originally grew as a financial and insurance center. Today it is home to a great number of companies involved in telecommunications, electronics, fashion, transportation, and other industries. The Dallas/Fort Worth International Airport is one of the busiest air-traffic centers in the United States. Just west of Dallas, Fort Worth is another major metropolitan area. Fort Worth originally

▶ Much of Houston's economy is related to technology and the space industry. ● **How do you think the Johnson Space Center affects Houston's economy?**








Fort Worth stockyards in early 1900s

FORT WORTH Established in 1849 as a military post to mark the Western Texas frontier, Fort Worth was named after General William Jenkins Worth, a hero of the War in Mexico. The post was later incorporated as a city, but it didn't grow much until the 1870s, when the cattle industry began to thrive. Earning the nickname "Cow Town," the city offered a convenient place for cowhands to rest from their cattle drives and for cattle buyers to establish businesses. At the same time it was developing its stockyards, Fort Worth also grew into a major railroad center—a combination that the meatpacking industry



Fort Worth today

found hard to resist. During the Great Depression, however, the meatpacking plants moved away, and the stockyards area fell into decline. Although the stockyards have now been restored as a historical landmark, they no longer support the Fort Worth economy. Rather, Fort Worth has shifted from a "cow town" to a high-tech city. Transportation and distribution are also important industries in Fort Worth. The city's cultural district is considered to be one of the liveliest in the Southwest. • **What changes do you think Fort Worth had to undergo to become a high-tech city?**

was a railroad center with feed lots and stockyards for cattle. Later, military bases and businesses in industries such as airplane and helicopter production moved to Fort Worth.

San Antonio boasts a number of military bases and claims one of the most famous sites in Texas history, the Alamo. In addition, San Antonio's scenic River Walk and its many theme parks make it an important tourist center. People visit San Antonio from all over the United States and the world to attend conventions, learn about Texas history, and vacation with their families.

Austin, the state capital, is the site of many state-government offices. The state's largest university, the University of Texas, is also located there. In addition to boosting the city's population, university students have been largely responsible for the growth of the music industry in Austin. Recently, Austin has emerged as an important center for high-tech industries, which are related to computers and electronics.

West Texas has not attracted as many industries as Central and East Texas, partly because West Texas is much farther away from major population centers such as Houston, Dallas, and Austin. The distance can translate into higher transportation, shipping, labor, and living costs. Another reason for the difference is climate. In dry West Texas, farming is mainly restricted to those areas where there is water for irrigation. This means that much of the land is used for ranching. Ranches don't need as many workers as farms do. They also do not earn as much income per acre as farms.



LARGEST TEXAS CITIES














When you think of Texas, do you think of skyscrapers and city streets? Maybe you should! Today, three Texas cities are among the top ten largest cities in the entire nation. Dallas appears in eighth place with an estimated population of 1,188,580 people, San Antonio ranks ninth with an estimated 1,144,646, and Houston qualifies as the fourth-largest U.S. city, with an estimated population of 1,953,631.

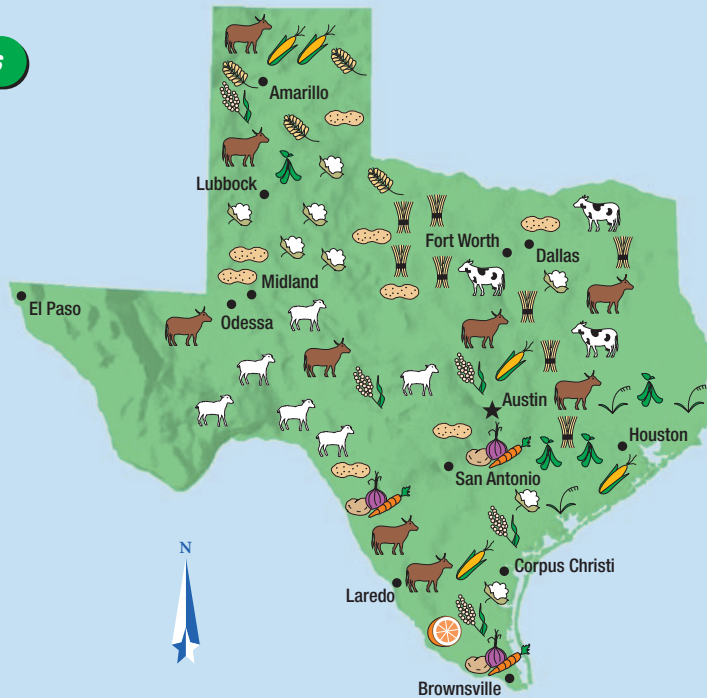
Multicultural Connections

Sicilian Immigrants in Texas

In 1875 a large number of immigrants came to the Brazos Valley from Sicily, an island off the coast of Italy. Many of the Sicilians moved to the area together, working on others' farms until they could afford their own. Today, at least 600 Sicilian families still operate farms in Brazos, Robertson, and Burleson Counties. These families have been very successful in preserving their traditions and way of life over the years. In fact, many parts of the Brazos Valley look and feel a lot like Italy. ● **Why do you think it is important for immigrants to hold on to some of their traditions and ways of life?**

Agriculture in Texas

-  Beef Cattle
-  Dairy Cattle
-  Sheep
-  Citrus Fruit
-  Corn
-  Cotton
-  Grain Sorghum
-  Hay
-  Peanuts
-  Rice
-  Soybeans
-  Wheat
-  Other Vegetables



- ▲ Texas produces a variety of agricultural products, from cotton to cattle and beyond.
- In which part of Texas would you find citrus crops?

Farming in Texas

Even though most Texans live in cities, agriculture is still one of the state's most important industries. Texas has the second-largest farm income in the United States. Only California earns more money from agriculture.

Texas has more than 225,000 farms that turn out many different products. The Lone Star State produces more cotton than any other state. It is the second-largest producer of sorghum, a kind of grain grown mainly for cattle feed. Other Texas crops include peanuts, black-eyed peas, pecans, wheat, potatoes, corn, rice, cottonseed, hay, soybeans, and citrus fruit such as oranges and grapefruit. Texas is also an important producer of livestock—mainly cattle, sheep, and goats.

Most of the cotton in Texas is grown in the western part of the state. In fact, the southern High Plains is the largest cotton-producing region in the United States. Although corn is widely grown, most production occurs in the West Texas Panhandle. Peanuts, potatoes, and wheat are also grown in West Texas.

Rice comes from the coastal areas south of Houston. Citrus fruit, which is very sensitive to frost, is grown in the Rio Grande Valley. Although sorghum is widely grown, the main area of production is in the Rio Grande Valley.



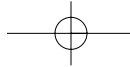
- ▼ Citrus and sorghum are key Texas crops.
- Why would sorghum be especially important in Texas?



The Rich and Poor in Texas

per capita income *the average amount of income per person per year in a given area*

Per capita income is often used as a measure of how wealthy people are. If you take all the money earned by everyone living in Texas in one year and divide it by the state's population, you will find the per capita, or per person, income. The per capita income in Texas in 1998 was \$25,369.



Where are the highest incomes in Texas? Big cities tend to attract people who are well educated and, therefore, can get high-paying jobs. Not surprisingly, Texas's large metropolitan areas have higher income levels than other areas. Earnings are above the state average in the counties that contain Dallas, Fort Worth, Houston, Austin, and San Antonio as well as in many of the counties that surround these cities. Suburban counties tend to have even higher per capita incomes. They are home to people who can afford to pay higher prices for homes that are usually larger. The second- and third-highest income levels are in Collin County (with Dallas suburbs McKinney, Frisco, and Plano) and Dallas County.

The highest per capita income in Texas is not in a county with a big city or a suburb. Sherman County, in the northern Panhandle near the Oklahoma border, has a per capita income of more than \$38,000. Sherman County has oil and gas wells, farms, and ranches that produce high incomes and has a fairly low population.

The lowest per capita incomes in Texas are along the Rio Grande from Hudspeth County, near El Paso, to the Gulf of Mexico. The per capita income in these counties is less than \$13,500. For a variety of reasons, these areas have not been able to attract businesses that pay high salaries. For one thing, many factories are located across the border in Mexico, where labor costs are much lower than in the United States. In addition, many of the people in these counties work as farm laborers, a job that usually does not pay well. As a result, the Lower Rio Grande Valley in South Texas is one of the poorest places in the entire United States.

Many inner-city areas are also home to people with low incomes. Nevertheless, a city often will not have a low per capita income if enough high-income people live in the rest of the city. Many low-income people in the inner city have had fewer years of schooling and may lack job skills. This makes it hard for them to find good jobs that could raise their income and standard of living.

Diverse Names of Texas Cities and Towns

Texas has a number of cities and towns whose names reflect the various people that make up our state. Many Texas place names are taken from Spanish words that honor a certain place, an individual, or a characteristic of an area. San Antonio is the largest city in Texas with a Spanish name. It is named after Saint Anthony. Hundreds of other places, from Amarillo to Zapata, also have Spanish names.

Dozens of other Texas place names reflect the state's varied **heritage**. For example, Barrett, originally called Barrett's Settlement, was named for a man who established the town after he was freed from slavery. Waco's name comes from a Native



H. Ross Perot

Born in Texarkana, Texas, in 1930, H. Ross Perot would grow up to become the wealthiest man in Texas. In 1962, with a \$1,000 loan from his wife, Perot started Electronic Data Systems (EDS). Within seven years, EDS had become a major competitor to IBM and had made Perot a billionaire. The Texan went on to start



several other successful companies and ran twice for president of the United States.

● **Research to find out which Texas city and county are home to EDS corporate headquarters.**

heritage *beliefs and customs that people get from their ancestors*

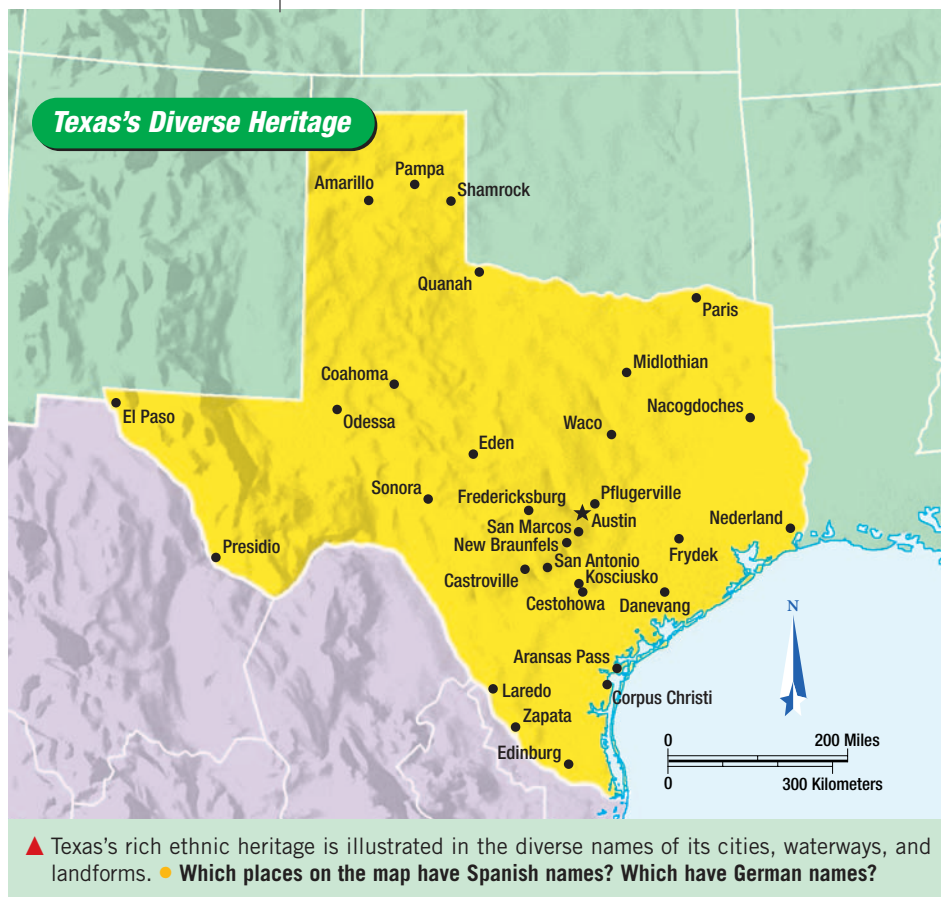
▼ Zapata was named for Antonio Zapata, a cavalry officer who led a struggle for independence in Northern Mexico after Texas won its independence. ● **What is the background of your town's name?**



Multicultural Connections

Community Origins

In addition to Spanish settlers, many other ethnic groups came to Texas seeking opportunities to start new lives away from persecution and poverty. The Polish Revolution of 1830 led many Poles to seek safety and stability in Texas. During the 1850s a number of Czech people settled in Central Texas. In addition, many Dutch settlers came from the Netherlands near the end of the century. ● **Research to find one city related to each group mentioned above. List the city name in the first column of a three-column chart. In the second column, list the language of origin. Then, in the third column, list what the city name means or for whom the city is named.**



American group in Texas. Danevang was named by people from Denmark, and Fincastle was named by Scottish settlers. New Braunfels is one of many places in Texas with a German name, and Frydek owes its name to Czech settlers. Kosciusko was named for a Polish general who fought in the American Revolutionary War. What names of places near you reveal Texas's rich ethnic heritage?

SECTION 3 ASSESSMENT

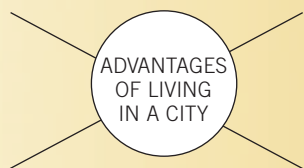
Terms & Names

Identify:

- metropolitan area
- suburb
- industry
- per capita income
- heritage

Organizing Information

Use a diagram like the one shown to brainstorm about some of the reasons why humans live where they do. On each of the spokes radiating from the center circle, write one factor that might influence someone to move to a city in Texas.



Critical Thinking

1. On a sheet of paper, write three questions about population distribution patterns in Texas. Exchange papers with a partner and answer each other's questions.
2. Describe how life in the Rio Grande Valley might differ from life in the northern part of the Panhandle. How might it be similar?

3. Explain how the West Texas economy differs from that of Central and East Texas. How do you think these areas differ in terms of political and social development?

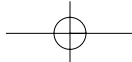
Interact with History

Review your response to *Interact with History* in your Texas Notebook. As a class, discuss how the city will pay for all the expenses you listed.

ACTIVITY

Culture

Using a Texas map, locate your town and five surrounding towns. Research the ethnic heritage of each town. On a map, mark each town and write this information next to it.



SKILLBUILDER

Social Studies

Reading a Bar Graph

LEARNING *the Skill*

A bar graph is similar to a line graph; both compare facts that involve numbers. Bar graphs often compare different facts from the same time period. Sometimes, they compare more than one set of facts.

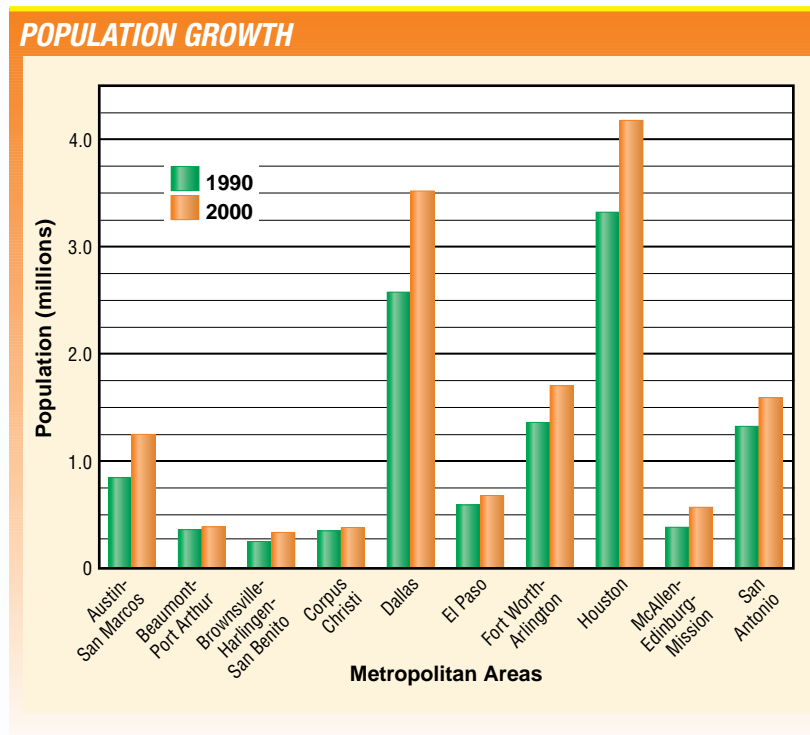
Bar graphs have a horizontal (*x*) axis and a vertical (*y*) axis that convey information about the graph, such as what each bar represents. Quantities, or totals, are represented by the lengths or heights of the bars.

To read a bar graph, use the following steps:

- Read the title to understand the subject or theme of the graph.
- Read the horizontal and vertical axes to understand what the different bars represent.
- Study and compare the lengths of the bars in the graph.
- Interpret the information that the graph provides and form your own conclusions.

PRACTICING *the Skill*

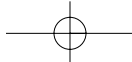
Read the following bar graph. Then answer the questions that follow.



1. What is the theme of this graph?
2. According to this graph, which metropolitan areas had the greatest increase in population during this ten-year period?
3. Why do you think the graph looks at metropolitan areas instead of just cities?
4. Why do you think the populations of these metropolitan areas grew over this ten-year period?

APPLYING *the Skill*

Choose six different counties, each from a different region or subregion of Texas. Research the population of each county. From your findings, draw a bar graph comparing the population for the different counties. Then exchange graphs with a partner. Read your partner's graph and analyze the data. Which county has the smallest population? the highest? Why do you think some counties have a higher population than others?



CHAPTER 3 ASSESSMENT



VISUAL Summary

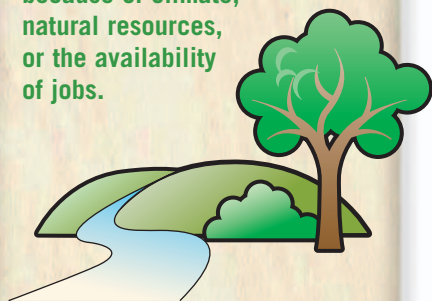
Mapping Texas Lands

Texas can be divided into regions of similar landforms, climate, and precipitation.



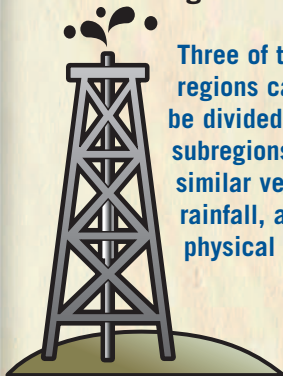
Mapping Texas People

People are drawn to some regions more than others because of climate, natural resources, or the availability of jobs.



Identifying the Four Regions of Texas

Three of the four regions can also be divided into subregions with similar vegetation, rainfall, and other physical features.



TERMS & NAMES

Explain the significance of each of the following:

1. Rio Grande
2. Coastal Plains region
3. North Central Plains region
4. Great Plains region
5. Mountains and Basins region
6. census

REVIEW QUESTIONS

Mapping Texas Lands (pages 46–50)

1. Which is likely to change more over a ten-year period, an area's physical geography or its human geography? Explain.
2. Why do you think average temperatures decrease as elevation increases?

Identifying the Four Regions of Texas (pages 52–57)

3. Rank the four regions of Texas in order from largest to smallest. How might life in Texas differ if this order were reversed?
4. Based on your knowledge of Texas regions, what type of physical geography would you expect to see in northern Mexico? in eastern New Mexico? in southern Oklahoma? in western Louisiana?

Mapping Texas People (pages 61–67)

5. Why do you think a city's main form of industry might change over time?
6. How have economic factors led to the growth of Texas cities? Explain how this has changed many Texans' jobs and occupations over time.

READING SOCIAL STUDIES

After You Read

Review your completed chart. Using the information in each column, write your own definitions for physical geography and human geography. Then, with a partner, discuss the following questions: Which key words reflect the physical geography and human geography of your town or city? How has the physical geography had an impact on the human geography?

GEOGRAPHY	
Physical Geography	Human Geography

CRITICAL THINKING

Drawing Conclusions

1. What do you think is the value of understanding the physical geography of Texas?

Drawing Conclusions

2. What do you think is the value of understanding the human geography of Texas?

Making Predictions

3. How do you think the physical and human geography of Texas would be different if the state did not sit on the Gulf of Mexico?



MAP & GEOGRAPHY SKILLS

Applying Skills

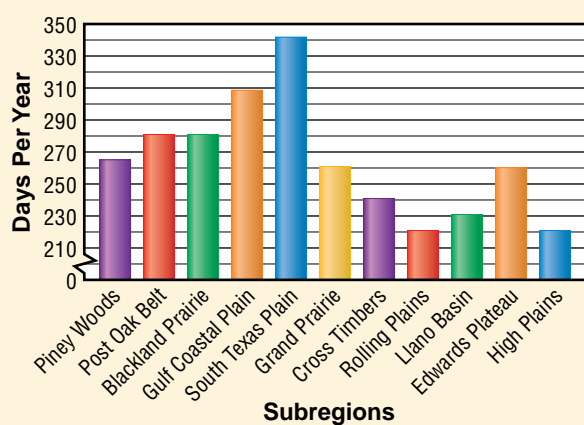


1. The map above shows natural regions. How might you divide Texas differently to show population regions?
2. What if the four regions of Texas were not yet named? Create a descriptive name for each region based on its unique physical geography.

SOCIAL STUDIES SKILLBUILDER

Reading a Bar Graph

ESTIMATED MAXIMUM GROWING SEASONS



1. What is the theme of this graph?
2. Which subregion has the longest growing season?
3. On the basis of these differences in growing seasons, what might you infer about climate and precipitation in the different subregions of Texas?



CHAPTER PROJECT

Visual Presentation Divide into groups of three or four students. Each group should select one of the four regions of Texas. Using presentation software or poster board and markers, work with your group to create a visual presentation about your assigned region. Include information about your region's climate, important weather events, notable landforms, natural resources, important cities and industries, interesting trivia, and so on. Be sure to include visuals with your data. When you have finished profiling your region, work as a class to give a cumulative presentation on the four regions of Texas.



SCIENCE, TECHNOLOGY & SOCIETY ACTIVITY

High-Tech Regions

Silicon Valley in California is a region known for its heavy concentration of high-tech industries. Working with a partner, use the Internet and other resources to research where high-tech industries are located in Texas. Indicate these places on an outline map of the state. Then identify the regions where these industries seem to be concentrated and give each region a name to describe the businesses there. Present your information to the class, explaining how you determined each region and name.



CITIZENSHIP ACTIVITY

Keep Texas Clean

Texas is special because of its variety of physical features. Sometimes people not only use the land around them but also harm it by littering and polluting. Working in groups of three or four, create a public service campaign to keep Texas clean. First, research the litter and pollution laws in Texas for background information. Next, think of a slogan for your campaign. Finally, write a 30-second public service announcement to air on television or radio to deliver your message.



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

