TEKS Cluster: Geography of the United States

5.6   **Geography.** The student understands places and regions in the United States.
5.7   **Geography.** The student understands the location and patterns of settlement and the geographic factors that influence where people live.
5.8   **Geography.** The student understands how people adapt to and modify their environment.

Geographic Regions

❖ 5.6(A)   describe political and economic regions in the United States that result from patterns of human activity   *Spiral Standard*
   5.6(B)   describe regions in the United States based on physical characteristics such as landform, climate, and vegetation   *Spiral Standard*
   5.6(C)   locate on a map important political features such as the five largest cities by population in the United States and the 50 states
   5.6(D)   create a map of important physical features such as the Appalachian Mountains, Great Lakes, Mississippi River, Great Plains, and Rocky Mountains

Human Geography: Settlement and Patterns of Land Use

❖ 5.7(A)   identify and describe the patterns of settlement such as rural, urban, and suburban   *Spiral Standard*
   5.7(C)   analyze the geographic factors that influence the location of the five largest urban areas in the United States and explain their distribution   *Spiral Standard*
   5.7(B)   explain the geographic factors that influence patterns of settlement and the distribution of population in the United States   *Spiral Standard*

Adaptation and Modification of the Environment

❖ 5.8(A)   describe how and why people have adapted to and modified their environment in the United States such as the use of human resources to meet basic needs
   Spiral Standard
   5.8(B)   analyze the positive and negative consequences of human modification of the environment in the United States   *Spiral Standard*

Student Expectations

❖ 5.6(A)   describe political and economic regions in the United States that result from patterns of human activity   *Spiral Standard* (R)

5.6(B)   describe regions in the United States based on physical characteristics such as landform, climate, and vegetation   Spiral Standard (S)

5.6(C)   locate on a map important political features such as the five largest cities by population in the United States and the 50 states (S)

5.6(D)   create a map of important physical features such as the Appalachian Mountains, Great Lakes, Mississippi River, Great Plains, and Rocky Mountains (S)

Academic Vocabulary

Vocabulary	Terms
climate	50 states
economic region	Appalachian Mountains
human activity	five largest cities (by population)
landform	Great Lakes
map	Great Plains
(map) political features	Mississippi River
physical features	Rocky Mountains
political region	United States
vegetation	

Stimulus

Speech/Journal/ Diary	Letter/ Newspaper Article	Government Document	Secondary Source Text
Photograph/ Painting	Political Cartoon/ Advert./Other	Map	Chart/Table
Graph	Graphic Organizer	Bulleted List of Facts	Timeline

Learning from Mistakes

Students may make the following mistakes:
- Not understanding that regions are flexible groupings depending on the characteristic that unites the region
- Confusing regions because regions can be defined by different criteria, the definition of a "region" is not clearly expressed from the beginning, or the type of region or topic is not clearly communicated

Content Builder

The concept of a region is a critical geographic concept. Students should be able to locate and compare characteristics of the regions including landforms, climate, and vegetation. This cluster allows an examination of climate rules related to elevation, nearness to large bodies of water, and latitude. It also introduces types of vegetation (e.g., grasslands, desert vegetation) and the differences between types of growing conditions (e.g., fertile soil with plentiful rainfall compared to dry land farming and the need for irrigation). It is important to define the terms landforms, climate, and vegetation so that students understand how each of those unique physical characteristics could help define a region.

Students need to know:
- Definition of region – an area that shares one or more similar defining characteristics
- Examples of political regions in the United States are the individual states; groups of states designated by the Federal Government (there are 10 federal regions); or time zones
- Population regions designated by the U.S. Census Bureau include the Northeast, the Midwest, the South, and the West (in this organizational structure Texas is considered in the South); or metropolitan regions such as the Washington DC metropolitan area (which includes the District of Columbia and parts of Northern Virginia and Southern Maryland)
- Economic regions might include labels such as The Corn Belt, the Great Plains, or Silicone Valley in California
- Other regions (called perceptual regions) are based on how people view or perceive an area (e.g., the Bible Belt, the Wild West, or the Heartland)
- Places may be in more than one region (e.g., the Rocky Mountain region includes states in which this landform is prominent). The region of the Great Plains is defined by landform (plains) but also to some degree by vegetation – grasslands. The Coastal Plains refers to a region surrounding the Gulf of Mexico in which the defining characteristics that label the region are based on land/water forms; however, this region also has similar climate and vegetation.

Instructional Implications

When you teach Geographic Regions, remember to:
- Define "region" and point out to students that there are a wide variety of ways maps can be divided into regions. Any given place can be in a large number of different regions and regions often overlap. The use of maps is critical to understanding this standard. An online search for regional maps of the U.S. will provide numerous sites that display regional maps (e.g., the Maps Etc site is a good one for comparing regional organization).
- Using Texas as a concrete example, point out that Texas as a state is one form of political region. Texas is also part of numerous other regions, depending on which maps and organizational schema one accesses. Have students look at maps and list several regions in which Texas is included. Ensure that students understand the definition and differences between the types of regions specified in this standard: political regions, population regions, and economic regions. Use the U.S. Census Bureau maps to discuss how the Census Bureau divides the United States into regions for population purposes.
- Conduct an internet search for physical regions of the United States. The Arizona Geographic Alliance has a good PDF blackline master map of the eight major physical regions of the United States. Using this map (or a similar one), have students identify the physical feature for which each region is named. Pose questions such as: *How many of the physical regions are named for specific land or water forms? What other characteristics does the land in each region have in common?* Access a different map of physical regions and have students compare the two maps, describing similarities and differences. Pose the question: *Why are these maps different?* Help students understand that the concept of region can often be defined differently depending on the interpretation.
- Access a climate zone map of the United States and have students compare that map to one with physical features. What comparisons do they observe?
- Finally, access a vegetation map and have students describe the types of vegetation they see within various climate or landform regions.

Student Expectations

❖ 5.7(A)   identify and describe the patterns of settlement such as rural, urban, and suburban   *Spiral Standard* (R)

5.7(C)   analyze the geographic factors that influence the location of the five largest urban areas in the United and explain their distribution   *Spiral Standard* (R)

5.7(B)   explain the geographic factors that influence patterns of settlement and the distribution of population in the United States   *Spiral Standard* (S)

Academic Vocabulary

Vocabulary	Terms
distribution	five largest urban areas
human resources	
patterns of settlement	
population distribution	
rural	
suburban	
urban	

Stimulus

Speech/Journal/ Diary	Letter/ Newspaper Article	Government Document	Secondary Source Text
Photograph/ Painting	Political Cartoon/ Advert./Other	Map	Chart/Table
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Learning from Mistakes

Students may make the following mistakes:

• Being able to locate places using maps but not being skilled in map interpretation or in comparing two or more maps to reach conclusions about a given place

• Not having practice in looking for patterns on maps

Content Builder

Students need to understand the concept that geographic factors influence where settlements are located (where people live) and that these settlements often illustrate predictable patterns.

Students need to know:

• Geographic factors that influence settlement – access to water, availability of economic opportunities and/or ability to use the land, proximity to trade and transportation routes, and climate that has favorable conditions

• Types of settlements – cased on the U.S. Census Bureau, settlement patterns in the United States can be divided into categories based on the number of people: urban areas (cities of more than 50,000 with population density of at least 1,000 people per square mile), rural (non-urban places), and suburban (urban fringe - areas surrounding cities)
  – the difference between dense or sparse population – places with many people per square mile are densely populated and areas with few people per square mile are sparsely populated
  – land use includes agriculture, industry, residential, recreational, and other

• Geographic factors influencing the five largest urban areas

• Many large cities in the United States were located on a coastline with close access to ports or natural harbors (Boston, Houston, New York, San Francisco)

• Other large cities developed along transportation lines as America grew West (railroads – Chicago)

• All large urban areas have these similarities: they have close access to transportation/trade routes and have economic opportunities for a large population

This cluster reinforces the concept that physical factors influence settlement patterns and population distributions. Students need to further understand that as technology improves, the influence of landforms and/or climate is less than those physical factors had in the past (e.g., air conditioning has significantly changed how comfortably people can live in hot climate regions). Improved transportation systems have drastically changed where people can live and be productive. Today, internet access means someone could live at the top of a mountain and still do business with many places in the world. In the past, the physical environment had much more influence over settlement patterns than it does in the 21st century.

Instructional Implications

When you teach Human Geography: Settlement and Patterns of Land Use, remember to:

• Define the vocabulary terms "dense" and "sparse." Provide students with a series of characteristics and have them vote (thumbs up/thumbs down) whether that characteristic would encourage people to settle in that place. Characteristics might include: mountains, coastlines, along rivers, very dry, very hot, lots of natural resources, lots of industry, fertile soil, and so on. Only about 3% of the earth's surface is ideal for people to live on, the rest is covered by water (70%), deserts/forests/mountains (16%), or is too cold or poor land not suitable for growing food (11%). That severely limits where people can live and survive comfortably.

• Use a population density map of the United States to examine which areas are densely populated and which areas are sparsely populated. Use an internet image search to find multiple examples. Have students work with a partner to identify and describe patterns they observe and draw conclusions about reasons why some areas of the United States are more densely populated than other areas. Comparing the population density map and a physical map of the U.S. will help students reach some conclusions.

Adaptation and Modification of the Environment

Student Expectations

❖ 5.8(A) describe how and why people have adapted to and modified their environment in the United States such as the use of human resources to meet basic needs *Spiral Standard* (R)

5.8(B) analyze the positive and negative consequences of human modification of the environment in the United States *Spiral Standard* (S)

Academic Vocabulary

Vocabulary	Terms
adaptation environment human modification positive/negative consequences	

Stimulus

Speech/Journal/ Diary	Letter/ Newspaper Article	Government Document	Secondary Source Text
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Learning from Mistakes

Students may make the following mistakes:
- Confusing adaptation with modification
- Not recognizing that adaptations, modifications, and technology play a tremendous role in some less-inhabitable regions becoming more densely populated over time

Content Builder

This cluster examines specific examples of ways Americans have adapted to and modified the environment. Students need to understand the differences between the two concepts.
- Adapting to one's environment means to change something about yourself, or what you do depending on where you are (e.g., during the summer people wear lighter-weight clothing, use an umbrella in the rain, or eat different types of foods depending on availability).
- Modifying the environment means to somehow change the environment to make life easier or more productive (e.g., timber clearing for housing and roads, adding pipelines to drill and transport natural gas, or constructing a dam to create a water reservoir or prevent flooding).
- In a combined example, adaptation to the environment would be choosing to plant different types of crops appropriate for the climate. Modification of the environment would be clearing land and tilling soil for agricultural production.

People adapt to or modify their physical environment to transform human settlement patterns and economic activity based on available resources and levels of technological development. As technology becomes available, humans begin to modify their environment to improve their lifestyle and to enhance safety, utility, and/or accessibility.

Instructional Implications

When you teach Adaptation and Modification of the Environment, remember to:
- Teach the vocabulary terms "adapt" and "modify" using real-world examples. One easy way to help students understand "modify" is to have them look out the school window and identify all of the things they see that were not there before people lived in the area (those are modifications to the environment). Give students the list of examples specified in the standard: timber clearing, agricultural production, wetlands drainage, energy production, and construction of dams, clarifying any unfamiliar terms. Then pose the following questions for each example: *Why might it be necessary for people to make that modification? What benefit would people get?* Have students describe ways they believe people have adapted to the environment (e.g., eating local produce in season rather than paying high prices for out of season fruits and vegetables, growing a garden, carrying an umbrella when it rains, planting trees that can survive in a given climate, or historically building log cabins or dugout sod homes using available environmental product).
- Show students how to conduct an internet search for population distribution maps. Use both historic and contemporary maps to explain how population distributions and the location of cities have changed over time. Point out that even in 2010 (census data), there were parts of Texas with less than 2 people per square mile. Use the vocabulary terms "dense" and "sparse population." Form generalization statements based on analysis of the population distribution maps such as: The majority of people in Texas live in _____. The largest cities in Texas are _____. Historically, most people lived in the _____ part of Texas; and so on. Add a layer of thinking by comparing landforms and natural resources in densely populated and sparsely populated regions and drawing conclusions about the relationship between the physical geographic factors and population distribution.
- Consistently ask why certain adaptations/modifications are needed and what positive and negative consequences are possible (economic development, meeting basic needs, impact on habitats, air or water quality). Compare different solutions with subsequent consequences (positive and negative). Use a decision-making process to evaluate the best response to a need.
- Categorize adaptations and modifications as meeting basic needs, facilitating transportation, enhancing recreational activities, or other.