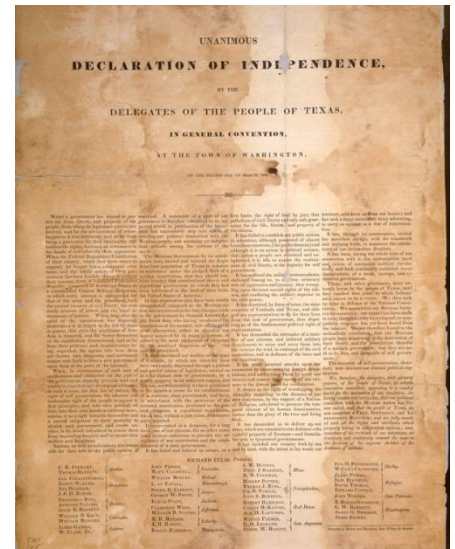
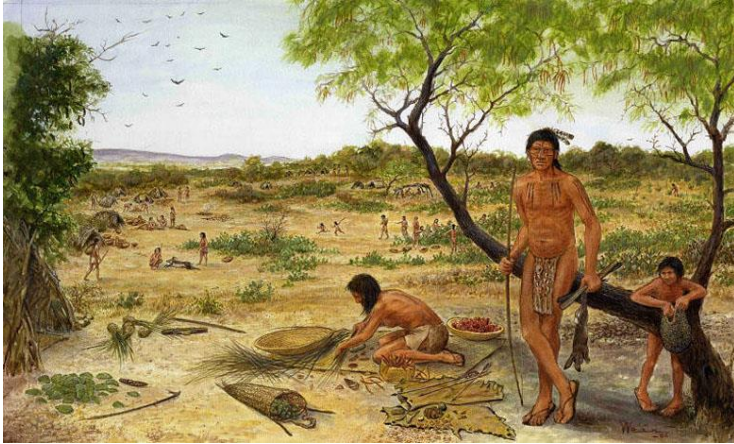


TEKS & Handbook Alignment

Fourth Grade



TEKS & *Handbook* alignment for Fourth Grade

This curriculum alignment tool for fourth grade teachers provides easy access to the resources in the [The Handbook of Texas Online](#). Links to appropriate articles in the *Handbook* are shown with the complete Texas Essential Knowledge and Skills document text (The provisions of this §113.15 adopted to be effective August 23, 2010, 35 TexReg 7232).

(4.1) History. Students identify and discuss how the actions of U.S. citizens and the local, state, and federal governments have either met or failed to meet the ideals espoused in the founding documents.

A: explain the possible origins of American Indian groups in Texas and North America;

- [Prehistory](#)
- [Overview of Archeological Chronology in Texas \(chart\)](#)
- [Indians \(overview essay\)](#)
- [Indian Relations](#)

B: identify American Indian groups in Texas and North America before European exploration such as the Lipan Apache, Karankawa, Caddo, and Jumano;

- [Apache Indians](#)
- [Atakapa Indians](#)
- [Alabama-Coushatta Indians](#)
- [Caddo Indians](#)
 - [Hasinai Indians](#)
 - [Caddoan Mounds State Historic Site](#)
- [Cherokee Indians](#)
 - [Cherokee War](#)
- [Coahuiltecan Indians](#)
- [Comanche Indians](#)
- [Jumano Indians](#)
- [Karankawa Indians](#)
- [Pueblo Indians](#)
- [Tigua Indians](#)
- [Tonkawa Indians](#)

C: describe the regions in which American Indians lived and identify American Indian groups remaining in Texas such as the Ysleta Del Sur Pueblo, Alabama-Coushatta, and Kickapoo; and

- [Folk Arts and Crafts](#)
- [Coushatta Indians](#)
- [Kickapoo Indians](#)

D: compare the ways of life of American Indian groups in Texas and North America before European exploration.

- See list at 4.1 B

(4.2) History. The student understands the causes and effects of European exploration and colonization of Texas and North America.

A: summarize motivations for European exploration and settlement of Texas, including economic opportunity, competition, and the desire for expansion

- [Exploration](#)
- [Spanish Texas \(extract\)](#)

B: identify the accomplishments and explain the impact of significant explorers, including Cabeza de Vaca; Francisco Coronado; and René Robert Cavelier, Sieur de la Salle, on the settlement of Texas;

- [Álvarez de Pineda, Alonso](#)
- [Cabeza de Vaca, Álvar Núñez](#)
 - [Seven Cities of Cibola](#)
- [Vázquez de Coronado, Franciso](#)
 - [Coronado Expedition](#)
- [La Salle, René Robert Cavelier, Sieur de](#)
 - [La Salle Expedition](#)
- [Narváez, Pánfilo de](#)
 - [Niza, Marcos de](#)
 - [Estevanico \(Esteban\)](#)
- [Oñate, Juan de](#)
- [Spanish Mapping of Texas \(extract\)](#)

C: explain when, where, and why the Spanish established settlements and Catholic missions in Texas as well as important individuals such as José de Escandón;

- [Catholic Church](#)
- [Spanish Missions \(extract\)](#)
- [Presidios](#)
- [Mission Architecture](#)
- [Jose de Escandon](#)

D: identify Texas' role in the Mexican War of Independence and the war's impact on the development of Texas;

- [Empresario](#)
- [Land Grants \(extract\)](#)
- [Mexican Colonization Laws \(extract\)](#)

- [Anglo-American Colonization](#)
- [Austin, Moses](#)
- [Austin, Stephen Fuller](#)
- [San Felipe de Austin, Tx](#) unofficial capital of Stephen F. Austin's colony

E: identify the accomplishments and explain the economic motivations and impact of significant empresarios, including Stephen F. Austin and Martín de León, on the settlement of Texas.

- [Mexican War of Independence](#)
- [Mexican Texas](#)
- [Mexican Government of Texas](#)
- [Texas in the Age of Mexican Independence](#)
- [Austin, Stephen Fuller](#)
- [Martin de Leon](#)

(4.3) History. identify the accomplishments and explain the economic motivations and impact of significant empresarios, including Stephen F. Austin and Martín de León, on the settlement of Texas.

A: analyze the causes, major events, and effects of the Texas Revolution, including the Battle of the Alamo, the Texas Declaration of Independence, the Runaway Scrape, and the Battle of San Jacinto;

- [Law of April 6, 1830](#)
- [Texas Revolution](#)
 - [Gonzales, Battle of](#)
 - [Alamo, Battle of the](#)
 - [Runaway Scrape](#)
 - [Goliad Massacre](#)
 - [San Jacinto, Battle of](#)
- [Black Bean Episode](#)
- [Texas Declaration of Independence](#)

B: summarize the significant contributions of individuals such as Texians William B. Travis, James Bowie, David Crockett, George Childress, and Sidney Sherman; Tejanos Juan Antonio Padilla, Carlos Espalier, Juan N. Seguín, Plácido Benavides, and José Francisco Ruiz; Mexicans Antonio López de Santa Anna and Vicente Filisola; and non-combatants Susanna Dickinson and Enrique Esparza;

- [Zavala, Lorenzo de](#)
- [Seguín, Juan José María Erasmo](#)
- [Smith, Erastus \[Deaf\]](#)
- [William B. Travis](#)
- [James Bowie](#)
- [David Crockett](#)
- [George Childress](#)

- [Juan Antonio Padilla](#)
- [Carlos Espalier](#)
- [Placido Benavides](#)
- [Jose Francisco Ruiz](#)
- [Antonio Lopez de Santa Anna](#)
- [Vicente Filisola](#)
- [Susanna Dickinson](#)
- [Enrique Esparza](#)

C: identify leaders important to the founding of Texas as a republic and state, including José Antonio Navarro, Sam Houston, Mirabeau Lamar, and Anson Jones;

- [Houston, Samuel](#)
- [Lamar, Mirabeau Buonaparte](#)
- [Jones, Anson](#)
- [Jose Antonio Navarro](#)

D: describe the successes, problems, and organizations of the Republic of Texas such as the establishment of a constitution, economic struggles, relations with American Indians, and the Texas Rangers;

- [Republic of Texas](#)
- [Constitution of the Republic of Texas](#)

E: explain the events that led to the annexation of Texas to the United States, including the impact of the U.S.-Mexican War.

- [Mexican War](#)
- [Annexation](#)
- [Second United States Cavalry](#)
- [Late Nineteenth-Century Texas](#)

(4.4) History. The student understands the political, economic, and social changes in Texas during the last half of the 19th century.

A: describe the impact of the Civil War and Reconstruction on Texas;

- [Abolition](#)
- [African Americans](#)
- [Civil War](#)
- [Mexican Texans in the Civil War](#)
- [Slavery](#)
- [Slavery, Urban](#)
- [Texas Troubles](#)
- [Association of Southern Women for the Prevention of Lynching](#)
- [Free Blacks](#)

- [Reconstruction](#)
- [Fort Concho](#)
- [Buffalo Soldiers](#)
- [Agriculture \(for impact of Civil War on\)](#)
- [Battle of Sabine Pass](#)
- [Battle of Galveston](#)
- [Battle of Palmito Ranch](#)
- [Gordon Granger](#)
- [Juneteenth](#)

B: explain the growth, development, and impact of the cattle industry, including contributions made by Charles Goodnight, Richard King, and Lizzie Johnson;

- [Ranching in Spanish Texas](#)
- [Cattle Trailing](#)
- [Cattle Brands](#)
- [Ranching](#)
- [Texas and Southwestern Cattle Raisers Association](#)
- [Cattle Rustling](#)
- [Barbed Wire](#)
- [Fence Cutting](#)
- [Charles Goodnight](#)
- [Richard King](#)
- [Lizzie Johnson](#)

C: identify the impact of railroads on life in Texas, including changes to cities and major industries

- [Railroads](#)
- [Manufacturing Industries](#)
- [Urbanization](#)

D: examine the effects upon American Indian life resulting from changes in Texas, including the Red River War, building of U.S. forts and railroads, and loss of buffalo.

- [Buffalo Hunting](#)
- [Indian Relations](#)
- [Cherokee War](#)
- [Red River War](#)
- [Palo Duro Canyon, Battle of](#)
- [Indian Reservations](#)
- [Comanche Indian Reservation](#)

(4.5) History. The student understands important issues, events, and individuals of the 20th century in Texas.

A: identify the impact of various issues and events on life in Texas such as urbanization, increased use of oil and gas, the Great Depression, the Dust Bowl, and World War II;

- [Great Depression](#)
- [World War II](#)
- [Texas in the 1920s](#)
- [Texas Since World War II](#)
- [Civil-Rights Movement](#)
- [Education](#)
- [Women and Education](#)
- [Health and Medicine](#)
- [Aerospace Medicine, Lyndon B. Johnson Space Center](#)
- [Urbanization](#)
- [Oil and Gas Industry](#)
- [Oil Exploration](#)
- [Aeronautics and Aerospace Industry](#)
- [Lyndon B. Johnson Space Center](#)
- [Electronics Industry](#)
- [Texas Instruments](#)
- [Dell Computer Corporation](#)
- [Manufacturing Industries](#)
- [Dust Bowl](#)

B: explain the development and impact of the oil and gas industry upon industrialization and urbanization in Texas, including important places and people such as Spindletop and Pattillo Higgins;

- [Spindletop Oilfield](#)
- [Oilfield Strike of 1917](#)
- [Oil and Gas Industry](#)
- [Pattillo Higgins](#)

C: identify the accomplishments of notable individuals such as John Tower, Scott Joplin, Audie Murphy, Cleto Rodríguez, Stanley Marcus, Bessie Coleman, Raul A. Gonzalez Jr., and other local notable individuals.

- [Ferguson, Miriam Amanda Wallace \[Ma\]](#)
- [Jordan, Barbara Charline](#)
- [Murphy, Audie Leon](#)
- [Rodríguez, Cleto L.](#)
- [Tower, John Goodwin](#)
- [Scott Joplin](#)
- [Bessie Coleman](#)

(4.6) Geography. The student uses geographic tools to collect, analyze, and interpret data

A: apply geographic tools, including grid systems, legends, symbols, scales, and compass roses, to construct and interpret maps;

[Spanish Mapping of Texas \(extract\)](#)

B: translate geographic data, population distribution, and natural resources into a variety of formats such as graphs and maps.

(4.7) Geography. The student understands the concept of regions.

A: describe a variety of regions in Texas and the United States such as political, population, and economic regions that result from patterns of human activity;

[Natural Regions of Texas](#)

B: identify, locate, and compare the geographic regions of Texas (Mountains and Basins, Great Plains, North Central Plains, Coastal Plains), including their landforms, climate, and vegetation;

- Central and High Plains
 - [Caprock](#)
 - [Panhandle](#)
 - [Edwards Plateau](#)
 - [Llano Estacado](#)
 - [Playas](#)
 - [Palo Duro Canyon](#)
 - [Enchanted Rock](#)
 - [Hill Country](#)
- Gulf Coastal Plains
 - [Gulf of Mexico](#)
 - [East Texas](#)
 - [Texas Forest Service](#)
 - [Rio Grande Valley](#)
- Mountains and Basins
 - [Davis Mountains](#)
 - [Big Bend National Park](#)
 - [Avery Canyon](#)
 - [Chisos Mountains](#)
- Other
- [Mammals](#)

C: compare the geographic regions of Texas (Mountains and Basins, Great Plains, North Central Plains, Coastal Plains) with regions of the United States and other parts of the world.

See 4.7 B

(4.8) Geography. The student understands the location and patterns of settlement and the geographic factors that influence where people live.

A: identify and explain clusters and patterns of settlement in Texas at different time periods such as prior to the Texas Revolution, after the building of the railroads, and following World War II;

- [Land Grants](#)
- [Mexican Colonization Laws](#)
- [Anglo-American Colonization](#)
- [Czechs](#)
- [English](#)
 - (Includes how the English came to Texas, although English empresarios failed to develop communities.)
- French
 - [Willow Creek](#)
- German
 - [Sunday Houses](#)
 - [Germans](#)
 - [German Music](#)
- [Irish](#)
- [Poles](#)
- [Swedes](#)
 - [Palm Valley, Tx](#)
 - [Swede Hill, Tx](#)
- [Swiss](#)
- [Chinese](#)
- [Japanese](#)

B: describe and explain the location and distribution of various towns and cities in Texas, past and present; and

- [Census and Census Records](#)
- [Metropolitan Statistical Areas](#)

SEARCH TIP: For population and growth data on specific towns or cities, type into the search box: #uw25 (population city's name). For example, #uw25 (population corsicana) will find articles that meet these guidelines, including the article about Corsicana that contains the data most helpful for population patterns and reasons for growth or decline

C: explain the geographic factors such as landforms and climate that influence patterns of settlement and the distribution of population in Texas, past and present.

- [Texas Weather](#)
- [Natural Regions](#)
- [Texas Prairies](#)

- [Hill County](#)
- [East Texas](#)
- [South Texas Plains](#)
- [Rio Grande Valley](#)
- [Coastal Plains](#)

(4.9) Geography. The student understands how people adapt to and modify their environment.

A: describe ways people have adapted to and modified their environment in Texas, past and present, such as timber clearing, agricultural production, wetlands drainage, energy production, and construction of dams;

- [Electrical Power](#)
- [Air Conditioning](#)
- [Refrigeration](#)
- [Windmills](#)
- [Water Improvement Districts](#)
- [Mineral Resources and Mining](#)
- [Agriculture](#)
- [Agricultural Research](#)
- [Camels](#)
- [Stagecoach Lines](#)
- [Urbanization](#)
- [Texas Forest Service](#)
- [Houston Ship Channel](#)
- [Inland Waterways](#)
- Construction of Highways and Roads
 - [Highway Development](#)
 - [Greer, Dewitt Carlock](#)
- Development of State Parks
 - [Civilian Conservation Corps](#)
- [Civil Engineering](#) (Includes these sub-headings: Environmental Engineering [water supply and protection]; Transportation Engineering [harbor, railroad, highway and airport development]; Structural Engineering [bridges/tall buildings]; Hydraulic Engineering [flood control]; Geotechnical Engineering [characterizing soils and rocks for the design of various structures])
- [Folk Arts and Crafts](#) (Includes information about the natural resources that were used to build houses, furniture and meet other basic needs.)

B: identify reasons why people have adapted to and modified their environment in Texas, past and present, such as the use of natural resources to meet basic needs, facilitate transportation, and enhance recreational activities;

- [Electrical Power](#)
- [Windmills](#)
- [Stagecoach Lines](#)

- [Urbanization](#)
- [Houston Ship Channel](#)
- [Highway Development](#)
- [Texas Highways](#)
- [Texas Department of Transportation](#)

C: compare the positive and negative consequences of human modification of the environment in Texas, past and present, both governmental and private, such as economic development and the impact on habitats and wildlife as well as air and water quality.

- [Buffalo Hunting](#)
- [Range Conservation Experimental Station at Abilene](#)
- SEARCH TIP: For endangered species, type into the search box: #od1(endangered species) and choose the one you want to know more about.
- [Rare and Endangered Plants](#)
- [Petrochemical Industry](#)

(4.10) Economics. The student understands the basic economic activities of early societies in Texas and North America.

A: explain the economic activities various early American Indian groups in Texas and North America used to meet their needs and wants such as farming, trading, and hunting;

- [Indians \(overview essay\)](#)
- [Indian Relations](#)
- [Apache Indians](#)
- [Atakapa Indians](#)
- [Alabama-Coushatta Indians](#)
- [Caddo Indians](#)
 - [Hasinai Indians](#)
 - [Caddoan Mounds State Historic Site](#)
- [Cherokee Indians](#)
- [Coahuiltecan Indians](#)
- [Comanche Indians](#)
- [Jumano Indians](#)
- [Karankawa Indians](#)
- [Pueblo Indians](#)
- [Tigua Indians](#)
- [Tonkawa Indians](#)

B: explain the economic activities early immigrants to Texas used to meet their needs and wants.

- [African Americans](#)
- [Czechs](#)
- [English](#)

- (Includes how the English came to Texas, although English empresarios failed to develop communities.)
- French
 - [Willow Creek](#)
- German
 - [Sunday Houses](#)
 - [Germans](#)
 - [German Music](#)
- [Irish](#)
- [Poles](#)
- [Swedes](#)
 - [Palm Valley, Tx](#)
 - [Swede Hill, Tx](#)
- [Swiss](#)
- [Chinese](#)
- [Japanese](#)

(4.11) Economics. The student understands the characteristics and benefits of the free enterprise system in Texas.

A: describe the development of the free enterprise system in Texas;

- [Land Grants \(extract\)](#)
- [Empresario](#)
 - SEARCH TIP: Go to county or community articles for possible information about the background of an area, and why and how communities were established.
- [Mexican Colonization Laws \(extract\)](#)
- [Law of April 6, 1830](#)
- [Agriculture](#)
- [Ranching in Spanish Texas](#)
- [Cattle Trailing](#)
- [Ranching](#)
- [Oil and Gas Industry](#)
- [Cotton Ginning](#)
- [Wool and Mohair Industry](#)

B: describe how the free enterprise system works, including supply and demand;

- [Anglo-American Colonization](#)
- [Oil and Gas Industry](#)
- [Petrochemical Industry](#)

C: give examples of the benefits of the free enterprise system such as choice and opportunity.

(4.12) Economics. The student understands patterns of work and economic activities in Texas.

A: explain how people in different regions of Texas earn their living, past and present, through a subsistence economy and providing goods and services;

- [American Enterprise Forum](#)
- [Texas Association of Business](#)
- [Dr Pepper Company](#)
- [H-E-B](#)

B: explain how geographic factors such as climate, transportation, and natural resources have influenced the location of economic activities in Texas;

- [Natural Regions of Texas](#)
- [Mineral Resources and Mining](#)

C: analyze the effects of exploration, immigration, migration, and limited resources on the economic development and growth of Texas;

[Labor Organizations](#)

D: describe the impact of mass production, specialization, and division of labor on the economic growth of Texas;

[Manufacturing Industries](#)

E: explain how developments in transportation and communication have influenced economic activities in Texas;

- [Telegraph Service](#)
- [Radio](#)
- [Telephone Service](#)
- [Television](#)
- [Railroads](#)
- [Highway Development](#)

F: explain the impact of American ideas about progress and equality of opportunity on the economic development and growth of Texas.

[Texas Equal Rights Amendment](#)

(4.13) Economics. The student understands how Texas, the United States, and other parts of the world are economically interdependent

A: identify ways in which technological changes in areas such as transportation and communication have resulted in increased interdependence among Texas, the United States, and the world;

- [Telegraph Service](#)
- [Radio](#)
- [Telephone Service](#)
- [Television](#)
- [Railroads](#)
- [Highway Development](#)

B: identify oil and gas, agricultural, and technological products of Texas that are purchased to meet needs in the United States and around the world;

- [Agriculture](#)
- [Texas Since World War II](#)
- [Oil and Gas Industry](#)

C: explain how Texans meet some of their needs through the purchase of products from the United States and the rest of the world.

- [Trade Tokens](#)
- [Sugar Production](#)
- [Cattleman](#)
- [Texas and Southwestern Cattle Raisers Association](#)
- [Dairy Industry](#)
- [Sheep Ranching](#)
- [Sheep Wars](#)
- [Cotton Culture](#)
- [Cotton Ginning](#)
- [Rice Culture](#)
- [Wheat Culture](#)
- [Sorghum Culture](#)
- [Shipbuilding](#)
- [Shrimping Industry](#)
- [Lumber Industry](#)

(4.14) Economics. The student understands how people organized governments in different ways during the early development of Texas.

A: compare how various American Indian groups such as the Caddo and the Comanche governed themselves;

- [Caddo Indians](#)
 - [Hasinai Indians](#)
 - [Caddoan Mounds State Historic Site](#)
- [Comanche Indians](#)

B: identify oil and gas, agricultural, and technological products of Texas that are purchased to meet needs in the United States and around the world;

- [Oil and Gas Industry](#)
- [Petrochemical Industry](#)
- [Texas Instruments](#)
- [Dell Computer Corporation](#)
- [Agriculture](#)

C: identify and compare characteristics of the Spanish colonial government and the early Mexican governments and their influence on inhabitants of Texas.

- [Presidios](#)
- [Spanish Texas \(extract\)](#)
- [Mexican Colonization Laws \(extract\)](#)
- [Mexican Government of Texas](#)
- [Texas in the Age of Mexican Independence](#)
- [Mexican Texas](#)

(4.15) Government. The student understands important ideas in historical documents of Texas and the United States.

A: identify the purposes and explain the importance of the Texas Declaration of Independence, the Texas Constitution, and other documents such as the Meusebach-Comanche Treaty;

- [Texas Declaration of Independence](#)
- [Washington-on-the-Brazos State Historical Park](#)
- [Constitution of the Republic of Texas](#)
- [Treaties of Velasco](#)
- [Constitution proposed in 1874](#)
- [Constitution of 1876](#)

B: identify and explain the basic functions of the three branches of government according to the Texas Constitution;

- [Texas Legislature](#)
- [Governor](#)
- [Texas Court of Criminal Appeals](#)

C: identify the intent, meaning, and importance of the Declaration of Independence, the U.S. Constitution, and the Bill of Rights (Celebrate Freedom Week).

(4.16) Government. The student understands important customs, symbols, and celebrations of Texas.

A: explain the meaning of various patriotic symbols and landmarks of Texas, including the six flags that flew over Texas, the San Jacinto Monument, the Alamo, and various missions;

- [Flags of Texas](#)

- [State Tree](#)
- [State Motto](#)
- [San José y San Miguel de Aguayo Mission](#)
- [San Jacinto Monument and Museum](#)
- [The Alamo](#)

B: sing or recite "Texas, Our Texas";

[Texas, Our Texas](#)

C: recite and explain the meaning of the Pledge to the Texas Flag;

[Flags of Texas](#)

D: describe the origins and significance of state celebrations such as Texas Independence Day and Juneteenth.

- [Independence Day](#)
- [Juneteenth](#)
- [Fiestas Patrias](#) (Cinco de Mayo & Diez y Seis de Septiembre)

4.17) Citizenship. The student understands the importance of active individual participation in the democratic process.

A: identify important individuals who have participated voluntarily in civic affairs at state and local levels such as Adina de Zavala and Clara Driscoll;

- [Adina de Zavala](#)
- [Clara Driscoll](#)

B: explain how individuals can participate voluntarily in civic affairs at state and local levels through activities such as holding public officials to their word, writing letters, and participating in historic preservation and service projects;

[Election Laws](#)

C: explain the duty of the individual in state and local elections such as being informed and voting;

- [Mayor-Council Form of City Government](#)
- [Texas Federation of Women's Clubs](#)
- [Ladies LULAC](#)

D: identify the importance of historical figures and important individuals who modeled active participation in the democratic process such as Sam Houston, Barbara Jordan, Lorenzo de

Zavala, Ann Richards, Sam Rayburn, Henry B. González, James A. Baker III, Wallace Jefferson, and other local individuals;

- [Houston, Samuel](#)
- [Zavala, Lorenzo de](#)
- [Jordan, Barbara Charline](#)
- [Ann Richards](#)
- [Sam Rayburn](#)
- [Henry B. Gonzalez](#)

(4.18) Citizenship. The student understands the importance of effective leadership in a constitutional republic.

A: identify leaders in state, local, and national governments, including the governor, local members of the Texas Legislature, the local mayor, U.S. senators, local U.S. representatives, and Texans who have been president of the United States; and

- [Eisenhower, Dwight David](#)
- [Johnson, Lyndon Baines](#)

B: identify leadership qualities of state and local leaders, past and present.

Governor

(4.19) Citizenship. The student understands the contributions of people of various racial, ethnic, and religious groups to Texas.

A: identify the similarities and differences among various racial, ethnic, and religious groups in Texas;

- [Czechs](#)
- [English](#)
 - Includes how the English came to Texas, although the English empresarios failed to develop communities.
- French
 - [Willow Creek](#)
- German
 - [Sunday Houses](#)
 - [Germans](#)
 - [German Music](#)
- [Irish](#)
- [Poles](#)
- [Swedes](#)

B: identify customs, celebrations, and traditions of various cultural, regional, and local groups in Texas such as Cinco de Mayo, Oktoberfest, the Strawberry Festival, and Fiesta San Antonio;

- [Folk Arts and Crafts](#)
- [Folk Belief](#)
- [Folk Building](#)
- [Folk Dance](#)
- [Folk Games](#)

C: summarize the contributions of people of various racial, ethnic, and religious groups in the development of Texas such as Lydia Mendoza, Chelo Silva, and Julius Lorenzo Cobb Bledsoe.

- [African Americans and Politics](#)
- [Tejano Politics](#)
- [Mexican Americans](#)
- [Woman Suffrage](#)

(4.20) Culture. The student understands the impact of science and technology on life in Texas.

A: identify famous inventors and scientists such as Gail Borden, Joseph Glidden, Michael DeBakey, and Millie Hughes-Fulford and their contributions;

- [Borden, Sidney Gail](#)
- For Joseph Glidden see: [Frying Pan Ranch](#)
- [Higgins, Patillo](#)
- [Patents in the Republic of Texas](#)
- For Michael DeBakey see: [Heart Transplant](#)

B: describe how scientific discoveries and innovations such as in aerospace, agriculture, energy, and technology have benefited individuals, businesses, and society in Texas;

- [Electrical Power](#)
- [Air Conditioning](#)
- [Refrigeration](#)
- [Chemical Industries](#)
- [Aerospace Medicine, Air Force](#)
- [Lyndon B. Johnson Space Center](#)

C: predict how future scientific discoveries and technological innovations might affect life in Texas.

(4.21) Science, technology, and society. The student applies critical-thinking skills to organize and use information acquired from a variety of valid sources, including electronic technology.

A: differentiate between, locate, and use valid primary and secondary sources such as computer software; interviews; biographies; oral, print, and visual material; documents; and artifacts to acquire information about the United States and Texas;

B: analyze information by sequencing, categorizing, identifying cause-and-effect relationships, comparing, contrasting, finding the main idea, summarizing, making generalizations and predictions, and drawing inferences and conclusions;

C: organize and interpret information in outlines, reports, databases, and visuals, including graphs, charts, timelines, and maps;

D: identify different points of view about an issue, topic, historical event, or current event; and

E: use appropriate mathematical skills to interpret social studies information such as maps and graphs.

(4.22) Social studies skills. The student communicates in written, oral, and visual forms.

A: use social studies terminology correctly;

B: incorporate main and supporting ideas in verbal and written communication;

C: express ideas orally based on research and experiences;

D: create written and visual material such as journal entries, reports, graphic organizers, outlines, and bibliographies;

E: use standard grammar, spelling, sentence structure, and punctuation.

(4.23) Social studies skills. The student uses problem-solving and decision-making skills, working independently and with others, in a variety of settings.

A: use a problem-solving process to identify a problem, gather information, list and consider options, consider advantages and disadvantages, choose and implement a solution, and evaluate the effectiveness of the solution;

B: use a decision-making process to identify a situation that requires a decision, gather information, identify options, predict consequences, and take action to implement a decision.