Fourth grade students will travel to Austin on Education in Action's "Texas Rocks!" program and explore the Bob Bullock Texas State History Museum and the Natural Bridges Cavern or Inner Space Cavern. Students will learn about Texas history and government with a focus on early explorers, the Texas Revolution, and the rock cycle.

§113.15. Social Studies, Grade 4.

(a) Introduction.

(1) In Grade 4, students examine the history of Texas from the early beginnings to the present within the context of influences of North America. Historical content focuses on Texas history, including the Texas Revolution, establishment of the Republic of Texas, and subsequent annexation to the United States. Students discuss important issues, events, and individuals of the 19th, 20th, and 21st centuries. Students conduct a thorough study of regions in Texas and North America resulting from human activity and from physical features. The location, distribution, and patterns of economic activities and settlement in Texas further enhance the concept of regions. Students describe how early American Indians in Texas and North America met their basic economic needs. Students identify motivations for European exploration and colonization and reasons for the establishment of Spanish settlements and missions. Students explain how American Indians governed themselves and identify characteristics of Spanish colonial and Mexican governments in Texas. Students recite and explain the meaning of the Pledge to the Texas Flag. Students identify the contributions of people of various racial, ethnic, and religious groups to Texas and describe the impact of science and technology on life in the state. Students use critical-thinking skills to identify cause-and-effect relationships, compare and contrast, and make generalizations and predictions.

(2) To support the teaching of the essential knowledge and skills, the use of a variety of rich primary and secondary source material such as documents, biographies, novels, speeches, letters, poetry, songs, and artworks is encouraged. Where appropriate, local topics should be included. Motivating resources are available from museums, historical sites, presidential libraries, and local and state preservation societies.

(5) Throughout social studies in Kindergarten-Grade 12, students build a foundation in history; geography; economics; government; citizenship; culture; science, technology, and society; and social studies skills. The content, as appropriate for the grade level or course, enables students to understand the importance of patriotism, function in a free enterprise society, and appreciate the basic democratic values of our state and nation as referenced in the Texas Education Code (TEC), §28.002(h).

Name of Activity	TEKS Knowledge and Skills
 Bullock Museum Bus Activities 	 (b) Knowledge and skills. (1) History. The student understands the origins, similarities, and differences of American Indian groups in Texas before European exploration. The student is expected to: (A) explain the possible origins of American Indian groups in Texas; and (B) identify and compare the ways of life of American Indian groups in Texas before European exploration such as the Lipan Apache, Karankawa, Caddo, and Jumano. (2) History. The student understands the causes and effects of European exploration and colonization of Texas. The student is expected to: (A) explain the possible receives and effects of European exploration and colonization of Texas. The student is expected to: (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; (C) explain when, where, and why the Spanish established settlements and Catholic missions in Texas as well as important individuals; (D) identify Texas' role in the Mexican War of Independence and the war's impact on the development of Texas; and (E) identify the accomplishments and explain the economic motivations and impact of significant empresarios, including Stephen F. Austin and Martin de León, on the settlement of Texas, and the annexation of Texas to the United States. The student is expected to: (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; (B) summarize the significant contributions of individuals such as Villiam B. Travis, James Bowie, David Crockett, Juan N. Seguin, Placido Benavides, José Francisco Ruiz, Antonio López de Santa Anna, Susanna Dickinson, and Enrique Esparza; (D) describe the successes, protewers, and effects of the Texas as a

 War II and notable individuals such as Audie Murphy, Cleto Rodríguez, and Bessie Coleman and other local individuals; and (B) explain the development and impact of the oil and gas industry on industrialization and urbanization in Texas, including Spindletop and important people such as Pattillo Higgins. (6) Geography. The student understands the concept of regions. The student is expected to: (A) identify, locate, and describe the physical regions of Texas (Mountains and Basins, Great Plains, North Central Plains, Coastal Plains), including their characteristics such as landforms, climate, vegetation, and economic activities; and (B) compare the physical regions of Texas (Mountains and Basins, Great Plains, North Central Plains). (7) Geography. The student understands the location and patterns of settlement and the geographic factors that influence where people live. The student is expected to: (A) explain the geographic factors such as landforms and climate that influence patterns of settlement and the distribution of population in Texas, past and present; and
 (B) explain the development and impact of the oil and gas industry on industrialization and urbanization in Texas, including Spindletop and important people such as Pattillo Higgins. (6) Geography. The student understands the concept of regions. The student is expected to: (A) identify, locate, and describe the physical regions of Texas (Mountains and Basins, Great Plains, North Central Plains, Coastal Plains), including their characteristics such as landforms, climate, vegetation, and economic activities; and (B) compare the physical regions of Texas (Mountains and Basins, Great Plains, North Central Plains). (7) Geography. The student understands the location and patterns of settlement and the geographic factors that influence where people live. The student is expected to: (A) explain the geographic factors such as landforms and climate that influence patterns of settlement and the
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 Central Plains, Coastal Plains), including their characteristics such as landforms, climate, vegetation, and economic activities; and (B) compare the physical regions of Texas (Mountains and Basins, Great Plains, North Central Plains, Coastal Plains). (7) Geography. The student understands the location and patterns of settlement and the geographic factors that influence where people live. The student is expected to:
economic activities; and (B) compare the physical regions of Texas (Mountains and Basins, Great Plains, North Central Plains, Coastal Plains). (7) Geography. The student understands the location and patterns of settlement and the geographic factors that influence where people live. The student is expected to: (A) explain the geographic factors such as landforms and climate that influence patterns of settlement and the
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where people live. The student is expected to: (A) explain the geographic factors such as landforms and climate that influence patterns of settlement and the
(A) explain the geographic factors such as landforms and climate that influence patterns of settlement and the
(B) identify and explain patterns of settlement such as the location of towns and cities in Texas at different time
periods.
(9) Economics. The student understands the basic economic activities of early societies in Texas. The student is expected
to:
(A) explain the economic activities various early American Indian groups in Texas used to meet their needs and
wants such as farming, trading, and hunting; and
(B) explain the economic activities early settlers to Texas used to meet their needs and wants.
(11) Economics. The student understands patterns of work and economic activities in Texas. The student is expected to:
(A) identify how people in different regions of Texas earn their living, past and present;
(B) explain how geographic factors such as climate, transportation, and natural resources have influenced the
location of economic activities in Texas.
(12) Government. The student understands how people organized governments in different ways during the early
development of Texas. The student is expected to:
(A) compare how various American Indian groups such as the Caddo and the Comanche governed themselves;
and
(B) compare characteristics of the Spanish colonial government and the early Mexican governments in Texas.
(14) Citizenship. The student understands important customs, symbols, and celebrations of Texas. The student is
expected to:
(A) explain the meaning of various patriotic symbols and landmarks of Texas, including the six flags that flew over Texas, the Alamo, and the San Jacinto Monument.
(18) Science, technology, and society. The student understands the impact of science and technology on life in Texas.
The student is expected to:
(A) identify famous inventors and scientists such as Gail Borden, Joseph Glidden, Michael DeBakey, and Millie
Hughes-Fulford and their contributions; and
(B) describe how scientific discoveries and innovations such as in aerospace, agriculture, energy, and technology
have benefited individuals, businesses, and society in Texas.
(19) Social studies skills. The student applies critical-thinking skills to organize and use information acquired from a variety
of valid sources, including technology. The student is expected to:

	 (A) differentiate between, locate, and use valid primary and secondary sources such as technology; interviews; biographies; oral, print, and visual material; documents; and artifacts to acquire information about Texas; and (B) analyze information by applying absolute and relative chronology through sequencing, categorizing, identifying cause-and-effect relationships, comparing, contrasting, finding the main idea, summarizing, making generalizations and predictions, and drawing inferences and conclusions.
• General	 (21) Social studies skills. The student communicates in written, oral, and visual forms. The student is expected to: (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; and (D) create written and visual material such as journal entries, reports, graphic organizers, outlines, and bibliographies. (22) Social studies skills. The student uses problem-solving and decision-making skills, working independently and with others. The student is expected to use problem-solving and decisionmaking processes 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.

§112.15. Science, Grade 4.

(a) Introduction.

(1) In Grade 4, investigations are used to learn about the natural world. Students should understand that certain types of questions can be answered by investigations and that methods, models, and conclusions built from these investigations change as new observations are made. Models of objects and events are tools for understanding the natural world and can show how systems work. They have limitations and, based on new discoveries, are constantly being modified to more closely reflect the natural world.

(B) Within the natural environment, students know that earth materials have properties that are constantly changing due to Earth's forces. The students learn that the natural world consists of resources, including renewable and nonrenewable, and their responsibility to conserve our natural resources for future generations. They will also explore Sun, Earth, and Moon relationships. The students will recognize that our major source of energy is the Sun.

(C) Within the living environment, students know and understand that living organisms within an ecosystem interact with one another and with their environment. The students will recognize that plants and animals have basic needs, and they are met through a flow of energy known as food webs. Students will explore how all living organisms go through a life cycle and have structures that enable organisms to survive in their ecosystem.

Name of Activity	TEKS Knowledge and Skills
 Cavern Activities Bus Activities 	 (5) Matter and energy. The student knows that matter has measurable physical properties and those properties determine how matter is classified, changed, and used. The student is expected to: (A) measure, compare, and contrast physical properties of matter, including mass, volume, states (solid, liquid, gas), temperature, magnetism, and the ability to sink or float. (7) Earth and space. The students know that Earth consists of useful resources and its surface is constantly changing. The student is expected to: (B) observe and identify slow changes to Earth's surface caused by weathering, erosion, and deposition from water, wind, and ice (8) Earth and space. The student knows that there are recognizable patterns in the natural world and among the Sun, Earth, and Moon system. The student is expected to: (B) observe and illustrate the continuous movement of water above and on the surface of Earth through the water cycle and explain the role of the Sun as a major source of energy in this process. (9) Organisms and environments. The student knows and understands that living organisms within an ecosystem interact with one another and with their environment. The student is expected to:: (A) investigate that most producers need sunlight, water, and carbon dioxide to make their own food, while consumers are dependent on other organisms for food; and (B) describe the flow of energy through food webs, beginning with the Sun, and predict how changes in the ecosystem affect the food web.

Seventh grade students will travel to Austin on Education in Action's "Texas Rocks!" program and explore the Bob Bullock Texas State History Museum and the Natural Bridges Cavern or the Inner Space Cavern. Students will learn about Texas history and science with a focus on early explorers, the Texas Revolution, and the rock cycle.

§113.19. Social Studies, Grade 7.

(1) In Grade 7, students study the history of Texas from early times to the present. Content is presented with more depth and breadth than in Grade 4. Students examine the full scope of Texas history, including Natural Texas and its People; Age of Contact; Spanish Colonial; Mexican National; Revolution and Republic; Early Statehood; Texas in the Civil War and Reconstruction; Cotton, Cattle, and Railroads; Age of Oil; Texas in the Great Depression and World War II; Civil Rights and Conservatism; and Contemporary Texas eras. The focus in each era is on key individuals, events, and issues and their impact. Students identify regions of Texas and the distribution of population within and among the regions and explain the factors that caused Texas to change from an agrarian to an urban society. Students describe the structure and functions of municipal, county, and state governments, explain the influence of the U.S. Constitution on the Texas Constitution, and examine the rights and responsibilities of Texas citizens. Students use primary and secondary sources to examine the rich and diverse cultural background of Texas as they identify the different racial and ethnic groups that settled in Texas to build a republic and then a state. Students analyze the impact of scientific discoveries and technological innovations on the development of Texas in various industries such as agricultural, energy, medical, computer, and aerospace. Students use primary and secondary sources to acquire information about Texas.

(2) To support the teaching of the essential knowledge and skills, the use of a variety of rich primary and secondary source material such as biographies, autobiographies, novels, speeches, letters, diaries, poetry, songs, and images is encouraged. Motivating resources are available from museums, historical sites, presidential libraries, and local and state preservation societies.

(3) The eight strands of the essential knowledge and skills for social studies are intended to be integrated for instructional purposes. Skills listed in the social studies skills strand in subsection (c) of this section should be incorporated into the teaching of all essential knowledge and skills for social studies. A greater depth of understanding of complex content material can be attained when integrated social studies content from the various disciplines and critical-thinking skills are taught together. Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(5) Throughout social studies in Kindergarten-Grade 12, students build a foundation in history; geography; economics; government; citizenship; culture; science, technology, and society; and social studies skills. The content, as appropriate for the grade level or course, enables students to understand the importance of patriotism, function in a free enterprise society, and appreciate the basic democratic values of our state and nation as referenced in the Texas Education Code (TEC), §28.002(h).

(6) Students understand that a constitutional republic is a representative form of government whose representatives derive their authority from the consent of the governed, serve for an established tenure, and are sworn to uphold the constitution.

(8) Students discuss how and whether the actions of U.S. citizens and the local, state, and federal governments have achieved the ideals espoused in the founding documents.

Name of Activity	TEKS Knowledge and Skills
Bullock Museum Bus Activities	 Knowledge and Skills (c) Knowledge and skills. (1) History. The student understands traditional historical points of reference in Texas history. The student is expected to: (A) identify the major eras in Texas history, describe their defining characteristics, and explain the purpose of dividing the past into eras, including Natural Texas and its People; Age of Contact; Spanish Colonial; Mexican National; Revolution and Republic; Early Statehood; Texas in the Civil War and Reconstruction; Cotton, Cattle, and Railroads; Age of Oil; Texas in the Great Depression and World War II; Civil Rights; and Contemporary Texas; and (B) explain the significance of the following dates: 1519, mapping of the Texas coast and first mainland Spanish settlement; 1718, founding of San Antonio; 1821, independence from Spain; 1836, Texas independence; 1845, annexation; 1861, Civil War begins; 1876, adoption of current state constitution; and 1901, discovery of oil at Spindletop. (2) History. The student understands how individuals, events, and issues through the Mexican National Era shaped the history of Texas. The student is expected to: (A) compare the cultures of American Indians in Texas prior to European colonization such as Gulf, Plains, Puebloan, and Southeastern; (B) identify important individuals, events, and issues related to European exploration of Texas such as Alonso Álvarez de Pineda, Álvar Núñez Cabeza de Vaca, the search for gold, and the conflicting territorial claims between France and Spain; (C) identify important individuals, events, and issues related to European colonization of Texas, including the establishment of Catholic missions, towns, and ranches, and the contributions of individuals such as Fray Damián Massanet, Antonio Margil de Jesús, and Francisco Hidalgo;
	 (D) identify the individuals, issues, and events related to Mexico becoming an independent nation and its impact on Texas, including Father Miguel Hidalgo, Texas involvement in the fight for independence, José Gutiérrez de Lara, the Battle of Medina, the Mexican federal Constitution of 1824, the merger of Texas and Coahuila as a state, the State Colonization Law of 1825, and slavery; (E) identify the contributions of significant individuals, including Moses Austin, Stephen F. Austin, Erasmo Seguín, Martín De
	 León, and Green DeWitt, during the Mexican settlement of Texas; and (F) contrast Spanish, Mexican, and Anglo purposes for and methods of settlement in Texas. (3) History. The student understands how individuals, events, and issues related to the Texas Revolution shaped the history of Texas. The student is expected to:
	 (A) describe the chain of events that led to the Texas Revolution, including the Fredonian Rebellion, the Mier y Terán Report, the Law of April 6, 1830, the Turtle Bayou Resolutions, and the arrest of Stephen F. Austin; (B) explain the roles played by significant individuals during the Texas Revolution, including George Childress, Lorenzo de Zavala, James Fannin, Sam Houston, Antonio López de Santa Anna, Juan N. Seguín, and William B. Travis; and

(C) explain the issues surrounding significant events of the Texas Revolution, including the Battle of Gonzales; the siege of the
Alamo, William B. Travis's letter "To the People of Texas and All Americans in the World," and the heroism of the diverse
defenders who gave their lives there; the Constitutional Convention of 1836; Fannin's surrender at Goliad; and the Battle of
San Jacinto.
(4) History. The student understands how individuals, events, and issues shaped the history of the Republic of Texas and early
Texas statehood. The student is expected to:
(A) identify individuals, events, and issues during the administrations of Republic of Texas Presidents Houston, Lamar, and
Jones such as the Texas Navy, the Texas Rangers, Jack Coffee Hays, Chief Bowles, William Goyens, Mary Maverick, José
Antonio Navarro, the Córdova Rebellion, the Council House Fight, the Santa Fe Expedition, slavery, and the roles of racial
and ethnic groups;
(B) analyze the causes of and events leading to Texas annexation such as security and public debt; and
identify individuals, events, and issues during early Texas statehood, including the U.SMexican War, the Treaty of
Guadalupe-Hidalgo, slavery, and the Compromise of 1850.
(5) History. The student understands how events and issues shaped the history of Texas during the Civil War and Reconstruction.
The student is expected to:
(A) explain the central role the expansion of slavery played in the involvement of Texas in the Civil War;
(C) explain the political, economic, and social effects of the Civil War and Reconstruction in Texas.
(6) History. The student understands how individuals, events, and issues shaped the history of Texas from Reconstruction
through the beginning of the 20th century. The student is expected to:
(A) identify significant individuals, events, and issues, including the factors leading to the expansion of the Texas frontier, the
effects of westward expansion on American Indians, the buffalo soldiers, and Quanah Parker;
(B) identify significant individuals, events, and issues, including the development of the cattle industry from its Spanish
beginnings and the cowboy way of life;
(C) identify significant individuals, events, and issues, including the effects of the growth of railroads and the contributions of
James Hogg; and
(D) explain the political, economic, and social impact of the agricultural industry and the development of West Texas resulting
from the close of the frontier.
(7) History. The student understands how individuals, events, and issues shaped the history of Texas during the late 19th, 20th,
and early 21st centuries. The student is expected to:
(A) explain how the oil industry led to the industrialization of Texas;
(B) define and trace the impact of "boom-and-bust" cycles of leading Texas industries throughout the 20th and early 21st
centuries such as farming, oil and gas production, cotton, ranching, real estate, banking, and computer technology;
(C) describe and compare the impact of reform movements in Texas in the 19th and 20th centuries such as progressivism,
populism, women's suffrage, agrarianism, labor reform, and the conservative movement of the late 20th century;
(8) Geography. The student understands the location and characteristics of places and regions of Texas. The student is expected to:
(A) locate and compare the Mountains and Basins, Great Plains, North Central Plains, and Coastal Plains regions;
(C) locate and compare places of importance in Texas in terms of physical and human characteristics such as major cities,

waterways, natural and historic landmarks, political and cultural regions, and local points of interest; and
(D) analyze the effects of physical and human factors such as climate, weather, landforms, irrigation, transportation, and
communication on major events in Texas.
(9) Geography. The student understands the effects of the interaction between humans and the environment in Texas. The student is expected to:
 (A) identify ways in which Texans have adapted to and modified the environment and explain the positive and negative consequences of the modifications; and
(B) explain ways in which geographic factors such as the Galveston Hurricane of 1900, the Dust Bowl, limited water resources, and alternative energy sources have affected the political, economic, and social development of Texas.
(11) Economics. The student understands the factors that caused Texas to change from an agrarian to an urban society. The student is expected to:
 (A) explain economic factors and the development of major industries that led to the urbanization of Texas such as transportation, oil and gas, and manufacturing; and
(B) explain the changes in the types of jobs and occupations that have resulted from the urbanization of Texas.
(12) Economics. The student understands the interdependence of the Texas economy with the United States and the world. The student is expected to:
 (A) explain the impact of national and international markets on the production of goods and services in Texas, including agriculture and oil and gas;
(C) analyze the impact of significant industries in Texas such as aerospace, medical, and computer technologies on local, national, and international markets.
(19) Science, technology, and society. The student understands the impact of scientific discoveries and technological innovations on the political, economic, and social development of Texas. The student is expected to:
(A) compare types and uses of technology, past and present;
(B) identify Texas leaders in science and technology such as Walter Cunningham, Michael DeBakey, Denton Cooley, Benjy Brooks, Michael Dell, and Howard Hughes Sr.;
(C) analyze the effects of various scientific discoveries and technological innovations on the development of Texas such as advancements in the agricultural, energy, medical, computer, and aerospace industries;
 (D) evaluate the effects of scientific discoveries and technological innovations on the use of resources such as fossil fuels, water, and land; and
(E) analyze how scientific discoveries and technological innovations have resulted in an interdependence among Texas, the United States, and the world.

• General	 (20) Social studies skills. The student applies critical-thinking skills to organize and use information acquired through established research methodologies from a variety of valid sources, including technology. The student is expected to:
	 (A) differentiate between, locate, and use valid primary and secondary sources such as media and news services, biographies, interviews, and artifacts to acquire information about Texas;
	 (B) analyze information by applying absolute and relative chronology through 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 from outlines, reports, databases, and visuals, including graphs, charts, timelines, and maps: (D) identify bias and points of view from the historical context surrounding an event that influenced the participants; (22) Social studies skills. The student communicates in written, oral, and visual forms. The student is expected to:
	(A) use social studies terminology correctly;(23) Social studies skills. The student uses problem-solving and decision-making skills, working independently and with others. The student is expected to:
	(A) describe governmental and democratic processes such as voting, due process, and caucuses using simulations and models; and
	(C) use problem-solving and decision-making processes 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.

§112.27. Science, Grade 7.

(1) In Grades 6 through 8 Science, content is organized into recurring strands. The concepts within each grade level build on prior knowledge, prepare students for the next grade level, and establish a foundation for high school courses. In Grade 7, the following concepts will be addressed in each strand.

- (D) Earth and space. Students explore characteristics and organization of objects and the role of gravity within our solar system. Earth has a specific set of characteristics that allows life to exist. Students further their understanding of the geosphere by illustrating how Earth's features change over time through tectonic movement. Students investigate how humans depend on and affect the hydrosphere.
- (E) Organisms and environments. Students further their understanding of organisms as systems made up of cells organized into tissues, tissues into organs, and organs into organ systems by identifying the main functions of the organs within the human body. During both sexual and asexual reproduction, traits are passed on to the next generation. Students understand how traits in populations can change through the processes of natural and artificial selection. Students analyze how energy flows through trophic levels and how biodiversity impacts an ecosystem's sustainability. Students gain an understanding of the taxonomic classifications of organisms and how characteristics determine their classification.

 Natural Bridges 	(b) Knowledge and skills.
 Natural Bridges Cavern or Inner Space Cavern 	 (10) Earth and space. The student understands the causes and effects of plate tectonics. The student is expected to: (A) describe the evidence that supports that Earth has changed over time, including fossil evidence, plate tectonics, and superposition; and (11) Earth and space. The student understands how human activity can impact the hydrosphere. The student is expected to: (A) analyze the beneficial and harmful influences of human activity on groundwater and surface water in a watershed; and (B) describe human dependence and influence on ocean systems and explain how human activities impact these systems. (14) Organisms and environments. The student knows how the taxonomic system is used to describe relationships between organisms. The student is expected to: (B) describe the characteristics of the recognized kingdoms and their importance in ecosystems such as bacteria aiding digestion or fungi decomposing organic matter.