

Education in Action’s “Capitol Rocks” – Discover Texas Field Trips Social Studies and Science Curriculum Guide by Strand

Fourth grade students will travel to Austin on Education in Action’s “Capitol Rocks” program and explore Inner Space Cavern and the Texas State Capitol. Students will learn about Texas history and government with a focus on early explorers, the Texas Revolution, and the legislative process. Participants continue their day at the Inner Space Cavern in Georgetown, where they actively experience the physical properties of the Earth’s crust including minerals, rocks and soils.

§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 Historical content focuses on Texas history, including the Texas revolution, establishment of the Republic of Texas, and subsequent annexation to the United States.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 enhances 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).

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Name of Activity	TEKS Knowledge and Skills
<ul style="list-style-type: none"> • State Capitol • Bus Activities 	<p>(2) History. The student understands the causes and effects of European exploration and colonization of Texas and North America. The student is expected to:</p> <ul style="list-style-type: none"> (C) explain when, where, and why the Spanish established settlements and Catholic missions in Texas as well as important individuals such as Jose de Escandon; (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. <p>(3) History. The student understands the importance of the Texas Revolution, the Republic of Texas, and the annexation of Texas to the United States. The student is expected to:</p> <ul style="list-style-type: none"> (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 Texians William B. Travis, James Bowie, David Crockett, George Childress, and Sidney Sherman; Tejanos Juan Antonio Padilla, Carlos Espalier, Juan N. Seguin, Placido Benavides, and Jose Francisco Ruiz; Mexicans Antonio Lopez de Santa Anna and Vicente Filisola; and non-combatants Susanna Dickinson and Enrique Esparza; (C) identify leaders important to the founding of Texas as a republic and state, including Jose Antonio Navarro, Sam Houston, Mirabeau Lamar, and Anson Jones; (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. <p>(15) Government. The student understands important ideas in historic documents of Texas and the United States. The student is expected to:</p> <ul style="list-style-type: none"> (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; (B) identify and explain the basic functions of the three branches of government according to the Texas Constitution. <p>(16) Citizenship. The student understands important customs, symbols, and celebrations of Texas. The student is expected to:</p> <ul style="list-style-type: none"> (A) explain the meaning of various patriotic symbols and landmarks of Texas, including the six flags over Texas, the San Jacinto Monument, the Alamo, and various missions. <p>(17) Citizenship. The student understands the importance of active individual participation in the democratic process. The student is expected to:</p> <ul style="list-style-type: none"> (C) explain the duty of the individual in state and local elections such as being informed and voting; (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. Gonzalez, James A. Baker III, Wallace Jefferson, and other local individuals. <p>(18) Citizenship. The student understands the importance of effective leadership in a democratic society. The student is expected to:</p> <ul style="list-style-type: none"> (A) identify leaders in state and local 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 their political parties; and

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	<p>(B) identify leadership qualities of state and local leaders, past and present.</p> <p>(21) Social studies skill. The student applies critical-thinking skills to organize and use information acquired from a variety of valid sources, including electronic technology. The student is expected to:</p> <p>(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;</p> <p>(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.</p>
<ul style="list-style-type: none"> • General 	<p>(22) Social studies skills. The student communicates in written, oral, and visual forms. The student is expected to:</p> <p>(A) use social studies terminology correctly;</p> <p>(B) incorporate main and supporting ideas in verbal and written communication;</p> <p>(C) express ideas orally based on research and experiences;</p> <p>(D) create written and visual material such as journal entries, reports, graphic organizers, outlines, and bibliographies; and</p> <p>(E) use standard grammar, spelling, sentence structure, and punctuation.</p> <p>(23) Social studies skills. The student uses problem-solving and decision-making skills, working independently and with others, in a variety of settings. The student is expected to:</p> <p>(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; and</p> <p>(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.</p>

§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.

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(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
<ul style="list-style-type: none"> • Cavern Activities • Bus Activities 	<p>(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:</p> <p style="padding-left: 40px;">(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.</p> <p>(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:</p> <p style="padding-left: 40px;">(B) describe 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.</p> <p>(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:</p> <p style="padding-left: 40px;">(A) investigate that most procedures need sunlight, water, and carbon dioxide to make their own food, while consumers are dependent on other organisms for food; and</p> <p style="padding-left: 40px;">(B) describe the flow of energy through food webs, beginning with the Sun, and predict how changes in the ecosystem affect the food web.</p>

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Fifth grade students will travel to Austin on Education in Action’s “Capitol Rocks” program and explore Inner Space Cavern and the Texas State Capitol. Students will learn about Texas history and government with a focus on early explorers, the Texas Revolution, and the legislative process. Participants continue their day at the Inner Space Cavern in Georgetown, where they actively experience the physical properties of the Earth’s crust including minerals, rocks and soils.

§113.16. Social Studies, Grade 5.

(a) Introduction.

(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 artwork is encouraged. 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
<ul style="list-style-type: none"> • State Capitol • Bus Activities 	<p>(16) Government. The student understands the framework of government created by the U.S. Constitution of 1787. The student is expected to:</p> <ul style="list-style-type: none"> (A) identify and explain the basic functions of the three branches of government; (C) distinguish between national and state governments and compare their responsibilities in the U.S. federal system. <p>(24) Social studies skills. The student applies critical-thinking skills to organize and use information acquired from a variety of valid sources, including electronic technology. The student is expected to:</p> <ul style="list-style-type: none"> (E) identify the historical context of an event.

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§112.16. Science, Grade 5.

(a) Introduction.

(1) In Grade 5, scientific 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

(B) Within the natural environment, students learn how changes occur on Earth’s surface and that predictable patterns occur in the sky. Students learn that the natural world consists of resources, including nonrenewable and renewable.

(C) Within the living environment, students learn that structure and function of organisms can improve the survival of members of a species. Students learn to differentiate between inherited traits and learned behaviors.

(4) The study of elementary science includes planning and safely implementing classroom and outdoor investigations using scientific processes, including inquiry methods, analyzing information, making informed decisions, and using tools to collect and record information, while addressing the major concepts and vocabulary, in the context of physical, earth, and life sciences.

Name of Activity	TEKS Knowledge and Skills
<ul style="list-style-type: none"> • Cavern Activities • Bus Activities 	<p>(1) Scientific investigation and reasoning. The student conducts classroom and outdoor investigations following home and school safety procedures and environmentally appropriate and ethical practices. The student is expected to:</p> <p style="padding-left: 40px;">(B) make informed choices in the conservation, disposal, and recycling of materials.</p> <p>(3) Scientific investigation and reasoning. The student uses critical thinking and scientific problem solving to make informed decisions. The student is expected to:</p> <p style="padding-left: 40px;">(B) draw or develop a model that represents how something that cannot be seen such as the Sun, Earth, and Moon system and formation of sedimentary rock works or looks.</p> <p>(7) Earth and space. The student knows Earth’s surface is constantly changing and consists of useful resources. The student is expected to:</p> <p style="padding-left: 40px;">(A) explore the processes that led to the formation of sedimentary rocks and fossil fuels.</p> <p>(9) Organisms and environment. The student knows that there are relationships, systems, and cycles within environments. The student is expected to:</p> <p style="padding-left: 40px;">(A) observe the way organisms live and survive in their ecosystem by interacting with the living and nonliving components;</p> <p style="padding-left: 40px;">(B) describe the flow of energy within a food web, including the roles of the Sun, producers, consumers, and decomposers;</p> <p style="padding-left: 40px;">(C) predict the effects of changes in ecosystems caused by living organisms, including humans, such as the overpopulation of grazers or the building of highways; and</p> <p style="padding-left: 40px;">(D) identify fossils as evidence of past living organisms and the nature of the environments at the time using model.</p>