

CLASSES & ALIGNED TEKS

SKY RANCH SCHOOL PROGRAMS

ALL CLASSES

Reading/Writing 5.1

Communicate ideas effectively through speaking and discussion.

Reading/Writing 5.7E

Interact with sources in meaningful ways such as notetaking, annotating, freewriting, or illustrating.

Reading/Writing 5.13A

Generate and clarify questions on a topic for formal and informal inquiry.

Reading/Writing 6.1

The student develops oral language through listening, speaking, and discussion.

Reading/Writing 6.1A

Listen actively to interpret a message, ask clarifying questions, and respond appropriately.

LIMNOLOGY

PH LAB

Science 3.9 (When describing Lake W, the streams, and the dying fish)

Observe and describe the physical characteristics of environments and how they support populations and communities of plants and animals within an ecosystem.

Science 5.1A (When telling the students to put on PPE and explaining what PPE is)

Demonstrate safe practices and the use of safety equipment as outlined in Texas Education Agency-approved safety standards during classroom and outdoor investigations using safety equipment, including safety goggles or chemical splash goggles, as appropriate, and gloves, as appropriate.

Science 5.2A (When using pH meters to test the pH in each stream sample)

Describe, plan, and implement simple experimental investigations testing one variable.

Science 5.2B (When discussing observations and hypothesis)

Ask well defined questions, formulate testable hypotheses, and select and use appropriate equipment and technology.

Science 5.2C (When recording data from pH meters)

Collect and record information using detailed observations and accurate measuring.

Science 5.2D (When recording and discussing conclusions)

Analyze and interpret information to construct reasonable explanations from direct (observable) and indirect (inferred) evidence.

Science 5.2E (When recording and discussing data and conclusions)

Demonstrate that repeated investigations may increase the reliability of results.

LIMNOLOGY

PH LAB

Science 5.2F (When asking students to read aloud their hypothesis and conclusion)

Communicate valid conclusions in both written and verbal forms.

Science 5.3C (When briefly discussing the book Silent Spring)

Connect grade-level appropriate science concepts with the history of science, science careers, and contributions of scientists.

Science 5.5B (When going through observations of stream samples)

Demonstrate that some mixtures maintain physical properties of their ingredients such as iron filings and sand and sand and water.

Science 5.5C (When discussing stream sample three and vinegar)

Identify changes that can occur in the physical properties of the ingredients of solutions such as dissolving salt in water or adding lemon juice to water.

Science 6.2 (When using the scientific method to determine the health of Lake W)

The student uses scientific practices during laboratory and field investigations.

Science 6.2E (When coming up with conclusions based on the data received in the experiment)

Analyze data to formulate reasonable explanations, communicate valid conclusions supported by the data, and predict trends.

Science 6.3 (When discussing experiment conclusions and the book Silent Spring)

The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions and knows the contributions of relevant scientists.

Science 6.3A (When using the scientific method for uncovering the issue within Lake W's water)

Analyze, evaluate, and critique scientific explanations by using empirical evidence, logical reasoning, and experimental and observational testing, so as to encourage critical thinking by the student.

Science 6.3D (When discussing the book Silent Spring)

Relate the impact of research on scientific thought and society, including the history of science and contributions of scientists as related to the content.

Science 6.4 (When utilizing pH meters and PPE to conduct a one variable experiment)

The student knows how to use a variety of tools and safety equipment to conduct science inquiry.

Science 6.4A (When utilizing pH meters and PPE to conduct a one variable experiment)

Use appropriate tools, including journals/notebooks, beakers, petri dishes, meter sticks, graduated cylinders, hot plates, test tubes, balances, microscopes, thermometers, calculators, computers, timing devices, and other necessary equipment to collect, record, and analyze information.

CLASSES & ALIGNED TEKS

SKY RANCH SCHOOL PROGRAMS

LIMNOLOGY

DRY POND

Science 5.2A (When discussing the food given to the catfish and how to test the claim of the food)

Describe, plan, and implement simple experimental investigations testing one variable.

Science 5.2B (When discussing how to test the claim of the food and during the boat segment)

Ask well defined questions, formulate testable hypotheses, and select and use appropriate equipment and technology.

Science 5.2C (When utilizing the tape measures and spring scales for measuring the fish)

Collect and record information using detailed observations and accurate measuring.

Science 5.2D (When discussing the change in feeding habits)

Analyze and interpret information to construct reasonable explanations from direct (observable) and indirect (inferred) evidence.

Science 5.2F (When discussing the change in feeding habits)

Communicate valid conclusions in both written and verbal forms.

Science 5.3A (When explaining, testing, and evaluating the claim made by the food seller)

Analyze, evaluate, and critique scientific explanations by using evidence, logical reasoning, and experimental and observational testing.

Science 5.4A (When using tape measures and spring scales to record the fish data)

Collect, record, and analyze information using tools, including calculators, microscopes, cameras, computers, hand lenses, metric rulers, Celsius thermometers, prisms, mirrors, balances, spring scales, graduated cylinders, beakers, hot plates, meter sticks, magnets, collecting nets, and notebooks; timing devices; and materials to support observations of habitats or organisms such as terrariums and aquariums.

Science 6.2 (When using proper equipment to accurately determine certain measurements)

The student uses scientific practices during laboratory and field investigations.

Science 6.2E (When deciding whether the claim made by the catfish food company is true)

Analyze data to formulate reasonable explanations, communicate valid conclusions supported by the data, and predict trends.

Science 6.4A (When utilizing measuring tapes and spring scales for precise measurements)

Use appropriate tools, including journals/notebooks, beakers, petri dishes, meter sticks, graduated cylinders, hot plates, test tubes, balances, microscopes, thermometers, calculators, computers, timing devices, and other necessary equipment to collect, record, and analyze information.

LIMNOLOGY

WATER WEB

Science 4.8B (When explaining and playing the water web dice game)

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.

Science 5.8B (When discussing the different ways water goes from one place to another)

Explain how the Sun and the ocean interact in the water cycle.

LIMNOLOGY

TURTLE TOWN

Science 5.3A (When observing the different turtles and writing down their characteristics)

Analyze, evaluate, and critique scientific explanations by using evidence, logical reasoning, and experimental and observational testing.

Science 5.9A (When observing the different turtles and when explaining what a niche is)

Observe the way organisms live and survive in their ecosystem by interacting with the living and nonliving components.

Science 5.9B (When going over producer, primary, secondary, and tertiary consumer)

Describe the flow of energy within a food web, including the roles of the Sun, producers, consumers, and decomposers.

Science 5.10A (When observing the different turtles and when explaining what a habitat is)

Compare the structures and functions of different species that help them live and survive in a specific environment such as hooves on prairie animals or webbed feet in aquatic animals.

Science 5.10B (When discussing the difference between inherited traits and learned behaviors)

Differentiate between inherited traits of plants and animals such as spines on a cactus or shape of a beak and learned behaviors such as an animal learning tricks or a child riding a bicycle.

CLASSES & ALIGNED TEKS

SKY RANCH SCHOOL PROGRAMS

LIMNOLOGY

ADVENTURE POND

Science 3.9A (When discussing observations and during the experiment)

Observe and describe the physical characteristics of environments and how they support populations and communities of plants and animals within an ecosystem.

Science 5.2A (When introducing the problem of pollution/health of adventure pond)

Describe, plan, and implement simple experimental investigations testing one variable.

Science 5.2B (Throughout the entire class)

Ask well defined questions, formulate testable hypotheses, and select and use appropriate equipment and technology.

Science 5.2C (When making observations and performing the experiment)

Collect and record information using detailed observations and accurate measuring.

Science 5.2E (When discussing everyone's observations and/or data)

Demonstrate that repeated investigations may increase the reliability of results.

Science 5.2F (When discussing everyone's hypothesis and conclusion)

Communicate valid conclusions in both written and verbal forms.

Science 5.3A (When going over the data found in the experiment)

Analyze, evaluate, and critique scientific explanations by using evidence, logical reasoning, and experimental and observational testing.

Science 5.4A (When utilizing collecting nets to grab leaves and magnifying glasses to observe)

Collect, record, and analyze information using tools, including calculators, microscopes, cameras, computers, hand lenses, metric rulers, Celsius thermometers, prisms, mirrors, balances, spring scales, graduated cylinders, beakers, hot plates, meter sticks, magnets, collecting nets, and notebooks; timing devices; and materials to support observations of habitats or organisms such as terrariums and aquariums.

Science 5.9A (When discussing pollution and pollution-sensitive macroinvertebrates)

Observe the way organisms live and survive in their ecosystem by interacting with the living and nonliving components.

Science 6.2 (When explaining how to properly waft a smell to one's nose)

The student uses scientific practices during laboratory and field investigations.

Science 6.2E (When coming up with conclusions based on the data received in the experiment)

Analyze data to formulate reasonable explanations, communicate valid conclusions supported by the data, and predict trends.

LIMNOLOGY

ADVENTURE POND

Science 6.3 (When discussing experiment conclusions based on collected datapoints)

The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions and knows the contributions of relevant scientists.

Science 6.3A (When using the scientific method for determining the health of the Adventure Pond)

Analyze, evaluate, and critique scientific explanations by using empirical evidence, logical reasoning, and experimental and observational testing, so as to encourage critical thinking by the student.

Science 6.4 (When utilizing collecting nets and magnifying glasses in the Adventure Pond experiment)

The student knows how to use a variety of tools and safety equipment to conduct science inquiry.

Science 6.4A (When utilizing collecting nets and magnifying glasses in the Adventure Pond experiment)

Use appropriate tools, including journals/notebooks, beakers, petri dishes, meter sticks, graduated cylinders, hot plates, test tubes, balances, microscopes, thermometers, calculators, computers, timing devices, and other necessary equipment to collect, record, and analyze information.

RELEVANT VOCABULARY

LIMNOLOGY

- Community
- Conclusion
- Condensation
- Consumer
- Control
- Cycle
- Dissolve
- Ecosystem
- Environment
- Evaporation
- Experimental Investigation
- Flow of Energy
- Hypothesis
- Inherited Trait
- Learned Behavior
- Mass
- Matter
- Melting
- Niche
- Particle
- Physical Characteristics
- Physical Property
- Precipitation
- Producer
- Runoff
- Substance
- Temperature
- Transfer (Energy)
- Variable
- Water Cycle
- Water Vapor
- Weather

CLASSES & ALIGNED TEKS

SKY RANCH SCHOOL PROGRAMS

FORCES IN NATURE

POTATO ZIPS

Science 5.2A (When explaining control and time trial)

Describe, plan, and implement simple experimental investigations testing one variable.

Science 5.2C (When utilizing stopwatches and journals to write down time trial observations)

Collect and record information using detailed observations and accurate measuring.

Science 5.2D (When concluding the time trial experiment and going over results)

Analyze and interpret information to construct reasonable explanations from direct (observable) and indirect (inferred) evidence.

Science 5.2F (When going over final times for each time trial)

Communicate valid conclusions in both written and verbal forms.

Science 5.3A (When helping students determine how to best send their potato down the zipline)

Analyze, evaluate, and critique scientific explanations by using evidence, logical reasoning, and experimental and observational testing.

Science 5.4A (When utilizing stopwatches for accurate time measurement)

Collect, record, and analyze information using tools, including calculators, microscopes, cameras, computers, hand lenses, metric rulers, Celsius thermometers, prisms, mirrors, balances, spring scales, graduated cylinders, beakers, hot plates, meter sticks, magnets, collecting nets, and notebooks; timing devices; and materials to support observations of habitats or organisms such as terrariums and aquariums.

Science 5.6A (When discussing the different energies used in the experiment)

Explore the uses of energy, including mechanical, light, thermal, electrical, and sound energy.

Science 5.6D (When performing the potato zip experiment)

Design a simple experimental investigation that tests the effect of force on an object.

Science 6.8 (When discussing the different types of energy created within the experiment)

The student knows force and motion are related to potential and kinetic energy.

Science 6.8A (When discussing the different types of energy created within the experiment)

Compare and contrast potential and kinetic energy.

FORCES IN NATURE

ROCKETS

Science 5.2A (When discussing the types of rocket students will make based off desired distance)

Describe, plan, and implement simple experimental investigations testing one variable.

Science 5.2C (When writing down their rocket's distance after the launch)

Collect and record information using detailed observations and accurate measuring.

Science 5.6D (When performing the rocket experiment)

Design a simple experimental investigation that tests the effect of force on an object.

FORCES IN NATURE

ROCK GARDEN & MAKE IT RAIN

Science 3.7B (When discussing how rocks are formed and appear on Earth's surface)

Investigate rapid changes in Earth's surface such as volcanic eruptions, earthquakes, and landslides.

Science 4.7B (When discussing the three agents of weathering and landforms)

Observe and identify slow changes to Earth's surface caused by weathering, erosion, and deposition from water, wind, and ice.

Science 4.7C (When discussing the different outcomes of heat and pressure on dead things)

Identify and classify Earth's renewable resources, including air, plants, water, and animals, and nonrenewable resources, including coal, oil, and natural gas, and the importance of conservation.

Science 5.3A (When observing weathering, erosion, and deposition from the showerhead water)

Analyze, evaluate, and critique scientific explanations by using evidence, logical reasoning, and experimental and observational testing.

Science 5.7A (When discussing the rock cycle and how fossils and fossil fuels are made)

Explore the processes that led to the formation of sedimentary rocks and fossil fuels.

Science 5.7B (When playing the landform game)

Recognize how landforms such as deltas, canyons, and sand dunes are the result of changes to Earth's surface by wind, water, or ice.

Science 5.9D (When showing the class fossilized tree and explaining petrification)

Identify fossils as evidence of past living organisms and the nature of the environments at the time using models.

CLASSES & ALIGNED TEKS

SKY RANCH SCHOOL PROGRAMS

FORCES IN NATURE

ROCK GARDEN & MAKE IT RAIN

Science 6.10B (When explaining the how different types of rocks are made in the rock cycle)

Classify rocks as metamorphic, igneous, or sedimentary by the processes of their formation.

RELEVANT VOCABULARY

FORCES IN NATURE

- Canyon
- Cementation
- Compaction
- Conclusion
- Control
- Delta
- Deposition
- Energy
- Erosion
- Erupt
- Experimental Investigation
- Force
- Fossil
- Fossil Fuel
- Freezing
- Mass
- Mechanical Energy
- Melting
- Motivation
- Motion
- Nonliving
- Nonrenewable Resources
- Organism
- Physical Property
- Pressure
- Renewable Resources
- Sand Dune
- Sediment
- Sedimentary Rock
- Sound Energy
- Thawing
- Thermal Energy
- U-shaped Valley
- Valley
- Variable
- V-shaped Valley
- Weathering

EXPEDITIONS

SKULLS

Science 5.9A (When discussing -ivores and vision types)

Observe the way organisms live and survive in their ecosystem by interacting with the living and nonliving components.

Science 5.10A (When discussing why certain structures and functions exist regarding animals)

Compare the structures and functions of different species that help them live and survive in a specific environment such as hooves on prairie animals or webbed feet in aquatic animals.

Science 5.10B (When discussing how each skull is unique and helps the animal with its niche)

Differentiate between inherited traits of plants and animals such as spines on a cactus or shape of a beak and learned behaviors such as an animal learning tricks or a child riding a bicycle.

EXPEDITIONS

MAMMALS

Science 3.9A (When discussing why a chinchilla has long fur and the emotional nature of sugar gliders)

Observe and describe the physical characteristics of environments and how they support populations and communities of plants and animals within an ecosystem.

Science 5.9A (When discussing the animal's learned behavior and niche/eating habits)

Observe the way organisms live and survive in their ecosystem by interacting with the living and nonliving components.

Science 5.10A (When discussing the eyes, ears, and noses of the animals)

Compare the structures and functions of different species that help them live and survive in a specific environment such as hooves on prairie animals or webbed feet in aquatic animals.

Science 5.10B (When discussing a chinchilla's fur or a hedgehog's hollow hair spines)

Differentiate between inherited traits of plants and animals such as spines on a cactus or shape of a beak and learned behaviors such as an animal learning tricks or a child riding a bicycle.

CLASSES & ALIGNED TEKS

SKY RANCH SCHOOL PROGRAMS

EXPEDITIONS

WATER RETENTION

Science 4.7A (When performing the water retention experiment)

Examine properties of soils, including color and texture, capacity to retain water, and ability to support the growth of plants.

Science 5.2C (When observing and recording how well each type of soil retains water)

Collect and record information using detailed observations and accurate measuring.

Science 5.2F (When discussing the retention and plant growth potential of each type of soil)

Communicate valid conclusions in both written and verbal forms.

EXPEDITIONS

REPTILES

Science 3.9A (When discussing where each animal comes from)

Observe and describe the physical characteristics of environments and how they support populations and communities of plants and animals within an ecosystem.

Science 5.9A (When discussing cold-blooded and how their environment helps regulate temperature)

Observe the way organisms live and survive in their ecosystem by interacting with the living and nonliving components.

Science 5.9B (When discussing the effect of decomposers within a food web)

Describe the flow of energy within a food web, including the roles of the Sun, producers, consumers, and decomposers.

Science 5.10A (When discussing/showing the animal's different structures and functions)

Compare the structures and functions of different species that help them live and survive in a specific environment such as hooves on prairie animals or webbed feet in aquatic animals.

Science 5.10B (When discussing how our animals learn when it is feeding time, snakes especially)

Differentiate between inherited traits of plants and animals such as spines on a cactus or shape of a beak and learned behaviors such as an animal learning tricks or a child riding a bicycle.

EXPEDITIONS

ENVIRONMENTAL IMPACT

Science 3.9A (When discussing how human populations interact with animal populations)

Observe and describe the physical characteristics of environments and how they support populations and communities of plants and animals within an ecosystem.

Science 5.2C (When going on the environmental impact walk)

Collect and record information using detailed observations and accurate measuring.

Science 5.2F (When writing their own conclusions about environmental impact they witnessed)

Communicate valid conclusions in both written and verbal forms.

Science 5.9A (When explaining the difference between natural events and natural disasters)

Observe the way organisms live and survive in their ecosystem by interacting with the living and nonliving components.

Science 5.9C (When defining environmental impact and providing examples of it)

Predict the effects of changes in ecosystems caused by living organisms, including humans, such as the overpopulation of grazers or the building of highways.

EXPEDITIONS

ARTHROPODS

Science 3.9A (When discussing the habitat of each animal)

Observe and describe the physical characteristics of environments and how they support populations and communities of plants and animals within an ecosystem.

Science 3.10B (When discussing how a hermit crab grows out of its shell)

Investigate and compare how animals and plants undergo a series of orderly changes in their diverse life cycles such as tomato plants, frogs, and lady beetles.

Science 5.9A (When discussing a tarantula's web vs. most other spider webs)

Observe the way organisms live and survive in their ecosystem by interacting with the living and nonliving components.

Science 5.10A (When discussing exoskeletons and/or a tarantula's setae)

Compare the structures and functions of different species that help them live and survive in a specific environment such as hooves on prairie animals or webbed feet in aquatic animals.

Science 5.10B (When explaining ability to hiss vs. when to hiss with the cockroaches)

Differentiate between inherited traits of plants and animals such as spines on a cactus or shape of a beak and learned behaviors such as an animal learning tricks or a child riding a bicycle.

CLASSES & ALIGNED TEKS

SKY RANCH SCHOOL PROGRAMS

RELEVANT VOCABULARY

EXPEDITIONS

- Behavioral Adaptation
- Carnivore
- Consumer
- Conservation
- Environment
- Herbivore
- Inherited Trait
- Instinct
- Learned Behavior
- Mimicry
- Niche
- Offspring
- Omnivore
- Parent
- Population
- Predator
- Prey
- Recycle
- Structure

TEXAS HISTORY

RECON/SAM HOUSTON INTRODUCTION

Social Studies 4.3A (When acting out the introduction to the class)

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.

Social Studies 4.3B (When discussing the fall of the Alamo)

Summarize the significant contributions of individuals such as William B. Travis, James Bowie, David Crockett, Juan N. Seguín, Plácido Benavides, Jose Francisco Ruiz, Antonio López de Santa Anna, Susanna Dickinson and Enrique Esparza.

Social Studies 4.3C (When Sam Houston identifies and explains himself to the students)

Identify leaders important to the founding of Texas as a republic and state, including José Antonio Navarro, Sam Houston, Mirabeau Lamar, and Anson Jones.

Social Studies 4.12B (When discussing the newly independent Texas vs. the Mexican government)

Compare characteristics of the Spanish colonial government and the early Mexican governments in Texas.

Social Studies 4.15D (When discussing the Texas declaration of independence)

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, Henry B. González, Wallace Jefferson, and other local individuals.

Social Studies 4.22A (When explaining and doing the map activity)

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.

TEXAS HISTORY

SCOUTING

Social Studies 4.3C (When discussing the newly founded independent country of Texas)

Identify leaders important to the founding of Texas as a republic and state, including José Antonio Navarro, Sam Houston, Mirabeau Lamar, and Anson Jones.

Social Studies 4.22A (When going through the scouting activity)

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.

TEXAS HISTORY

GENERAL STORE

Social Studies 4.2E (When discussing how economics work within the town)

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.

Social Studies 4.10A (When discussing how buying and selling work within a store)

Describe how the free enterprise system works, including supply and demand.

Social Studies 4.10B (When explaining why some things are more/less expensive than other things)

Identify examples of the benefits of the free enterprise system such as choice and opportunity.

Social Studies 4.11A (When discussing how people around town make money to buy things)

Identify how people in different regions of Texas earn their living, past and present

Social Studies 4.22A (When deciding what to purchase for the Runaway Scrape)

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.

Math 4.2E (When doing the math involved in making purchases for the Runaway Scrape)

Represent decimals, including tenths and hundredths, using concrete and visual models and money.

Math 4.4A (When doing the math involved in making purchases for the Runaway Scrape)

Add and subtract whole numbers and decimals to the hundredths place using the standard algorithm.

CLASSES & ALIGNED TEKS

SKY RANCH SCHOOL PROGRAMS

TEXAS HISTORY

BRANDING AND ROPING

Social Studies 4.2E (When discussing cattle owning and cash crops)

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.

Social Studies 4.10C (When discussing the buying and selling of cattle and cash crops)

Describe the development of the free enterprise system in Texas such as the growth of cash crops by early colonists and the railroad boom.

Social Studies 4.11A (When discussing the different types of farming local to the area)

Identify how people in different regions of Texas earn their living, past and present.

TEXAS HISTORY

SHOOTING

None

TEXAS HISTORY

GAMES

None

RELEVANT VOCABULARY

TEXAS HISTORY

- Antonio Lopez de Santa Anna
- Battle of San Jacinto
- Cash Crops
- Compass Rose
- David Crockett
- Empresario
- Independence
- James Bowie
- Legends
- Map
- Revolution
- Runaway Scrape
- Sam Houston
- Spanish
- Stephen F. Austin
- Susanna Dickinson
- Symbols
- Texas Declaration of Independence
- Texas Independence Day, March 2
- Texas Rangers
- United States Constitution
- William B. Travis

NATIVE AMERICANS

EXPLORERS

Social Studies 4.2A (When discussing the different explorers in and around the East Texas region)

Summarize motivations for European exploration and settlement of Texas, including economic opportunity, competition, and the desire for expansion.

Social Studies 4.2B (When discussing each explorer and playing the exploration game)

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.

Social Studies 4.9B (When discussing each explorer and playing the exploration game)

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.

Social Studies 4.11C (When discussing the different trials each explorer faced)

Identify the effects of exploration, immigration, migration, and limited resources on the economic development and growth of Texas.

Social Studies 4.11D (When discussing each explorer's country's involvement in the New World)

Explain how developments in transportation and communication have influenced economic activities in Texas.

NATIVE AMERICANS

DWELLINGS

Social Studies 4.1B (When discussing the different types of homes Native Americans use)

Identify and compare the ways of life of American Indian groups in Texas before European exploration such as the Lipan Apaches, Karankawas, Caddos, and Jumanos.

Social Studies 4.9A (When discussing sedentary vs. nomadic lifestyles)

Explain the economic activities various early American Indian groups in Texas used to meet their needs and wants such as farming, trading, and hunting.

Social Studies 4.11C (When discussing the interactions between explorers and Native Americans)

Identify the effects of exploration, immigration, migration, and limited resources on the economic development and growth of Texas.

CLASSES & ALIGNED TEKS

SKY RANCH SCHOOL PROGRAMS

NATIVE AMERICANS

THREE SISTERS

Social Studies 4.1B (When discussing how sedentary Native Americans farmed)

Identify and compare the ways of life of American Indian groups in Texas before European exploration such as the Lipan Apaches, Karankawas, Caddos, and Jumanos.

Social Studies 4.9A (When discussing how each Native American group provided for their tribe)

Explain the economic activities various early American Indian groups in Texas used to meet their needs and wants such as farming, trading, and hunting.

Social Studies 4.11C (When explaining how the buffalo jump was used for the fur trade)

Identify the effects of exploration, immigration, migration, and limited resources on the economic development and growth of Texas.

NATIVE AMERICANS

TRADING

Social Studies 4.2A (When discussing the fur trade and the hunt for gold)

Summarize motivations for European exploration and settlement of Texas, including economic opportunity, competition, and the desire for expansion.

Social Studies 4.9A (When discussing the beginning of trade between Native Americans and explorers)

Explain the economic activities various early American Indian groups in Texas used to meet their needs and wants such as farming, trading, and hunting.

Social Studies 4.9B (When discussing the early settlers reliance on Native American methodology)

Explain the economic activities early settlers to Texas used to meet their needs and wants.

Social Studies 4.11C (When discussing fur and weapon trading between settlers and Native Americans)

Identify the effects of exploration, immigration, migration, and limited resources on the economic development and growth of Texas.

Social Studies 4.11D (When discussing the importance of oceans and rivers in the trading business)

Explain how developments in transportation and communication have influenced economic activities in Texas.

NATIVE AMERICANS

WEAPONS

Social Studies 4.1B (When discussing the weapons Native Americans used for hunting and fighting)

Identify and compare the ways of life of American Indian groups in Texas before European exploration such as the Lipan Apaches, Karankawas, Caddos, and Jumanos.

Social Studies 4.9B (When discussing the difference between stone and iron tools)

Explain the economic activities early settlers to Texas used to meet their needs and wants.

NATIVE AMERICANS

ARCHERY

Social Studies 4.1B (When discussing the hunting characteristics of nomadic tribes)

Identify and compare the ways of life of American Indian groups in Texas before European exploration such as the Lipan Apaches, Karankawas, Caddos, and Jumanos.

RELEVANT VOCABULARY

NATIVE AMERICANS

- American Indian (Native American)
- Caddo
- Cabeza de Vaca
- Comanche
- Europe
- European Exploration
- Exploration
- Explorers
- Francisco Coronado
- French
- Karankawa
- Kickapoo
- Lipan Apache
- Rene' Robert Cavelier, Sieur de la Salle
- Seven Cities of Gold
- Spanish
- Trade
- Trade Route

CLASSES & ALIGNED TEKS

SKY RANCH SCHOOL PROGRAMS

RANCH LIFE

MA

Social Studies 4.4A (When discussing the impact of home life because of the recent wars)

Describe the impact of the Civil War and Reconstruction on Texas.

Social Studies 4.4D (When describing the situation of the farm to the students)

Explain the effects on American Indian life brought about by the Red River War, building of U.S. forts and railroads, and loss of buffalo.

Social Studies 4.7B (When discussing why the farm was set up in the location it is in)

Identify and explain patterns of settlement such as the location of towns and cities in Texas at different time periods.

Social Studies 4.8B (When explaining the importance of raising livestock and crops)

Explain 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.

Social Studies 4.11D (When discussing the railroad and how Pa is utilizing it for the farm)

Explain how developments in transportation and communication have influenced economic activities in Texas.

RANCH LIFE

JOEY

Social Studies 4.4A (When discussing trading with those in the North)

Describe the impact of the Civil War and Reconstruction on Texas.

Social Studies 4.4C (When discussing how cattle is raised and sold)

Explain the effects of the railroad industry on life in Texas, including changes to the cities and major industries.

Social Studies 4.4B (When explaining the different trails one can go one to sell their cattle)

Explain the growth, development, and impact of the cattle industry, including contributions made by Charles Goodnight, Richard King, and Lizzie Johnson.

Social Studies 4.4D (When discussing how Joey got his limp)

Explain the effects on American Indian life brought about by the Red River War, building of U.S. forts and railroads, and loss of buffalo.

Social Studies 4.7A (When explaining the different benefits and dangers of each cattle trail)

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

RANCH LIFE

JOEY

Social Studies 4.7B (When explaining the location of the farm in comparison to other places in Texas)

Identify and explain patterns of settlement such as the location of towns and cities in Texas at different time periods.

Social Studies 4.8B (When discussing Texas crops and cattle)

Explain 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.

Social Studies 4.11D (When explaining how cattle raising and selling determines survival of the farm)

Explain how developments in transportation and communication have influenced economic activities in Texas.

RANCH LIFE

HORSEBACK RIDING

None

RELEVANT VOCABULARY

RANCH LIFE

- Cattle Industry
- Plains
- Charles Goodnight
- Compass Rose
- Civil War
- Economic Growth
- Legends
- Lipan Apache
- Lizzie Johnson
- Manifest Destiny
- Plains
- Profit
- Quanah Parker
- Railroads
- Reconstruction
- Red River War
- Scales
- Supply and Demand
- Symbols

CLASSES & ALIGNED TEKS

SKY RANCH SCHOOL PROGRAMS

ORIENTEERING

COMPASSES & PACKING

Science 5.8C (When explaining how one can orient themselves)

Demonstrate that Earth rotates on its axis once approximately every 24 hours causing the day/night cycle and the apparent movement of the Sun across the sky.

ORIENTEERING

TREE IDENTIFYING & PLOTTING

Science 3.9A (When identifying the different types of trees by their leaves)

Observe and describe the physical characteristics of environments and how they support populations and communities of plants and animals within an ecosystem.

Math 5.2G (When plotting the trees within a 10m x 10m square)

Construct appropriate simple graphs, tables, maps, and charts using technology, including computers, to organize, examine, and evaluate information.

FISHING

GONE FISHING

Science 3.9A (When discussing the difference between the different types of fish within Sky Lake)

Observe and describe the physical characteristics of environments and how they support populations and communities of plants and animals within an ecosystem.

Science 5.9A (When dissecting a fish)

Observe the way organisms live and survive in their ecosystem by interacting with the living and nonliving components.

Science 5.9B (When discussing what the different types of fish in Sky Lake eat)

Describe the flow of energy within a food web, including the roles of the Sun, producers, consumers, and decomposers.

FISHING

IDENTIFYING FISH PARTS

Science 5.10A (When discussing the different parts of a fish)

Compare the structures and functions of different species that help them live and survive in a specific environment such as hooves on prairie animals or webbed feet in aquatic animals.

FISHING

HOW TO USE A FISHING ROD

None

CHALLENGES

ALL FOLLOWING TEKS ARE HIT DURING THE GAME PORTION OF CLASS

Physical Education 5.1G

Combine weight transfer and balance on mats and equipment.

Physical Education 5.1L

Demonstrate combinations of locomotor and manipulative skills in complex and/or game-like situations such as pivoting and throwing, twisting and striking, and running and catching.

Physical Education 5.6

The student understands basic components such as strategies and rules of structured physical activities including, but not limited to, games, sports, dance, and gymnastics.

Physical Education 5.6B

Explain the concept and importance of teamwork.

Physical Education 5.7

The student develops positive self-management and social skills needed to work independently and with others in physical activity settings.

Physical Education 5.7B

Use sportsmanship skills for settling disagreements in socially acceptable ways such as remaining calm, identifying the problem, listening to others, generating solutions, or choosing a solution that is acceptable to all.

Physical Education 6.1B

Follow and give oral instructions that include multiple action steps.

Physical Education 6.1D

Participate in student-led discussions by eliciting and considering suggestions from other group members, taking notes, and identifying points of agreement and disagreement.