

Fourth Grade
Outreach Programs
TEKS

## Fourth Grade Animal Program:

- (2) Scientific investigation and reasoning. The student uses scientific inquiry methods during laboratory and outdoor investigations. The student is expected to:
- (A) plan and implement descriptive investigations, including asking well-defined questions, making inferences, and selecting and using appropriate equipment or technology to answer his/her questions;
- (3) Scientific investigation and reasoning. The student uses critical thinking and scientific problem solving to make informed decisions. The student is expected to:
- (D) connect grade-level appropriate science concepts with the history of science, science careers, and contributions of scientists.
- (4) Scientific investigation and reasoning. The student knows how to use a variety of tools, materials, equipment, and models to conduct science inquiry. The student is expected to:
  (A) collect, record, and analyze information using tools, including calculators, microscopes, cameras, computers, hand lenses, metric rulers, Celsius thermometers, mirrors, spring scales, pan balances, triple beam balances, graduated cylinders, beakers, hot plates, meter sticks, compasses, magnets, collecting nets, and notebooks; timing devices, including clocks and stopwatches; and materials to support observation of habitats of organisms such as terrariums and aquariums; and
- (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
- (10) Organisms and environments. The student knows that organisms undergo similar life processes and have structures that help them survive within their environment. The student is expected to:
- (A) explore how adaptations enable organisms to survive in their environment such as comparing birds' beaks and leaves on plants;

## Fourth Grade Dinosaur Program:

- (2) Scientific investigation and reasoning. The student uses scientific inquiry methods during laboratory and outdoor investigations. The student is expected to:
- (A) plan and implement descriptive investigations, including asking well-defined questions, making inferences, and selecting and using appropriate equipment or technology to answer his/her questions;
- (3) Scientific investigation and reasoning. The student uses critical thinking and scientific problem solving to make informed decisions. The student is expected to:
- (C) represent the natural world using models such as rivers, stream tables, or fossils and identify their limitations, including accuracy and size; and
- (D) connect grade-level appropriate science concepts with the history of science, science careers, and contributions of scientists.
- (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;
- (10) Organisms and environments. The student knows that organisms undergo similar life processes and have structures that help them survive within their environment. The student is expected to:
- (A) explore how adaptations enable organisms to survive in their environment such as comparing birds' beaks and leaves on plants;

# Fourth Grade Geology Program:

### §112.15. Science, Grade 4, Beginning with School Year 2010-2011.

- (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:
- (B) make informed choices in the use and conservation of natural resources and reusing and recycling of materials such as paper, aluminum, glass, cans, and plastic.
- (2) Scientific investigation and reasoning. The student uses scientific inquiry methods during laboratory and outdoor investigations. The student is expected to:
- (A) plan and implement descriptive investigations, including asking well-defined questions, making inferences, and selecting and using appropriate equipment or technology to answer his/her questions;
- (3) Scientific investigation and reasoning. The student uses critical thinking and scientific problem solving to make informed decisions. The student is expected to:
- (C) represent the natural world using models such as rivers, stream tables, or fossils and identify their limitations, including accuracy and size; and
- (D) connect grade-level appropriate science concepts with the history of science, science careers, and contributions of scientists.
- (4) Scientific investigation and reasoning. The student knows how to use a variety of tools, materials, equipment, and models to conduct science inquiry. The student is expected to:
- (A) collect, record, and analyze information using tools, including calculators, microscopes, cameras, computers, hand lenses, metric rulers, Celsius thermometers, mirrors, spring scales, pan balances, triple beam balances, graduated cylinders, beakers, hot plates, meter sticks, compasses, magnets, collecting nets, and notebooks; timing devices, including clocks and stopwatches; and materials to support observation of habitats of organisms such as terrariums and aquariums; and
- (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; and
- (C) 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.

#### §113.15. Social Studies, Grade 4, Beginning with School Year 2011-2012.

(9) Geography. The student understands how people adapt to and modify their environment. The student is expected to:

(B) identify reason and present, such as enhance recreationa	s the use of natural reso	apted to and modified the	neir environment in Texas eds, facilitate transportatio	s, past on, and

## Fourth Grade Fossil Program:

- (2) Scientific investigation and reasoning. The student uses scientific inquiry methods during laboratory and outdoor investigations. The student is expected to:
- (A) plan and implement descriptive investigations, including asking well-defined questions, making inferences, and selecting and using appropriate equipment or technology to answer his/her questions;
- (3) Scientific investigation and reasoning. The student uses critical thinking and scientific problem solving to make informed decisions. The student is expected to:
- (C) represent the natural world using models such as rivers, stream tables, or fossils and identify their limitations, including accuracy and size; and
- (D) connect grade-level appropriate science concepts with the history of science, science careers, and contributions of scientists.

## Fourth Grade Astronomy Program:

- (3) Scientific investigation and reasoning. The student uses critical thinking and scientific problem solving to make informed decisions. The student is expected to:
- (D) connect grade-level appropriate science concepts with the history of science, science careers, and contributions of scientists.
- (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) 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; and revised August 2016 18
- (C) collect and analyze data to identify sequences and predict patterns of change in shadows, tides, seasons, and the observable appearance of the Moon over time.

## Fourth Grade Native American Program:

### §112.15. Science, Grade 4, Beginning with School Year 2010-2011.

- (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:
- (B) make informed choices in the use and conservation of natural resources and reusing and recycling of materials such as paper, aluminum, glass, cans, and plastic.
- (2) Scientific investigation and reasoning. The student uses scientific inquiry methods during laboratory and outdoor investigations. The student is expected to:
- (A) plan and implement descriptive investigations, including asking well-defined questions, making inferences, and selecting and using appropriate equipment or technology to answer his/her questions;
- (3) Scientific investigation and reasoning. The student uses critical thinking and scientific problem solving to make informed decisions. The student is expected to:
- (A) in all fields of science, analyze, evaluate, and critique scientific explanations by using empirical evidence, logical reasoning, and experimental and observational testing, including examining all sides of scientific evidence of those scientific explanations, so as to encourage critical thinking by the student;
- (D) connect grade-level appropriate science concepts with the history of science, science careers, and contributions of scientists

#### §113.15. Social Studies, Grade 4, Beginning with School Year 2011-2012.

- (1) History. The student understands the origins, similarities, and differences of American Indian groups in Texas and North America before European exploration. The student is expected to:
- (A) explain the possible origins of American Indian groups in Texas and North America;
- (B) identify American Indian groups in Texas and North America before European exploration such as the Lipan Apache, Karankawa, Caddo, and Jumano;
- (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
- (D) compare the ways of life of American Indian groups in Texas and North America before European exploration.
- (2) History. The student understands the causes and effects of European exploration and colonization of Texas and North America. The student is expected to:
- (A) summarize motivations for European exploration and settlement of Texas, including economic opportunity, competition, and the desire for expansion;

- (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;
- (9) Geography. The student understands how people adapt to and modify their environment. The student is expected to:
- (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;
- (10) Economics. The student understands the basic economic activities of early societies in Texas and North America. The student is expected to:
- (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;