



Spring 2015 5th Grade Lesson Objectives



College of Natural Sciences
THE UNIVERSITY OF TEXAS AT AUSTIN

Lesson 1 Week of February 23rd, 2015

Title: Artic Adaptations

Skills TEKS: 5.1A, F and 5.4A

Knowledge TEKS:

5.10 Organisms and environments. The student knows that organisms undergo similar life processes and have structures that help them survive within their environments. The student is expected to:

(A) compare the structures and functions of different species that help them live and survive such as hooves on prairie animals or webbed feet in aquatic animals.

Objectives:

1. Students will explore how different artic adaptations help organisms live and survive in their environment.
2. Students will compare the structures and functions of different species that help them survive in harsh arctic environments.

Lesson 2 - Week of March 2nd, 2015

Title: Inherited Traits and Learned Behaviors

Skills TEKS: 5.1A, F

Knowledge TEKS:

5.10 Organisms and environments. The student knows that organisms undergo similar life processes and have structures that help them survive within their environments. The student is expected to:

(B) 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.

Objectives:

1. Students will be able to correctly identify examples of inherited traits vs. learned behaviors.
2. Students will relate the role that some of these traits and behaviors play in species survival.

Lesson 3 - Week of March 9th, 2015

Title: Desert Interactions and Adaptations

Skills TEKS: 5.2D, F, 5.4A

Knowledge TEKS:

5.9 Organisms and environments. The student knows that there are relationships, systems, and cycles within environments. The student is expected to:

(A) observe the way organisms live and survive in their ecosystem by interacting with the living and non-living elements.

(B) describe how the flow of energy derived from the Sun, used by producers to create their own food, is transferred through a food chain and food web to consumers and decomposers.

3.9 Organisms and environments. The student knows that organisms have characteristics that help them survive and can describe patterns, cycles, systems, and relationships within the environments. The student is expected to:

(A) observe and describe the physical characteristics of environments and how they support populations and communities within an ecosystem

Objectives:

1. Students will explore how different desert organisms interact with their living and non-living environment.
2. Students will explain some desert organisms adaptations which help them survive in their environment and identify them as inherited traits or learned behaviors.
3. Students will describe how the energy is transferred through a food web.

Week of March 16th, 2015 – Spring Break

Lesson 4 - Week of March 23rd, 2015

Title: Carbon Dioxide - Oxygen Cycle

Skills TEKS: 5.1A, 5.4B

Knowledge TEKS:

5.9 Organisms and environments. The student knows that there are relationships, systems, and cycles within environments. The student is expected to:

(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.

(D) identify the significance of the carbon dioxide-oxygen cycle to the survival of plants and animals.

Objectives:

1. Students will examine the significance of carbon in the carbon dioxide/oxygen cycle as critical to the survival of plants and animals.
2. Students will conduct investigations to visualize that all living things are made of carbon.
3. Students will identify adaptations, which allow organisms to thrive in their carbon dioxide/ oxygen environment.

Week of March 30th, 2015 - No school visits - STARR Reading and Mathematics

Lesson 5 - Week of April 6th, 2015

Title: Science Olympics Review Week (may modify based on MOY)

1. Rotation Revolution 5.8C
2. Weathering and Erosion 5.7A & B
3. Sun 5.8D
4. Comparing Earth/Moon 5.8D
5. Using the Tools of Science 5.4A
6. Plant Adaptations – CO2 5.9D, 5.10A & B

Lesson 6 - Week of April 13th, 2015

Title: Science Olympics Competition Week (may modify based on MOY)

1. Rotation Revolution 5.8C
2. Weathering and Erosion 5.7A & B
3. Sun 5.8D
4. Comparing Earth/Moon 5.8D
5. Using the Tools of Science 5.4A
6. Plant Adaptations – CO2 5.9D, 5.10A & B

Week of April 20th, 2015 - No school visits - STARR Science

Lesson 7 - Week of April 27th, 2015

Title: Wind Energy – Experimental Design

Skills TEKS: 5.2A, B, E, F and 5.4A

Knowledge TEKS:

5.7 Earth and space. The student knows Earth's surface is constantly changing and consists of useful resources. The student is expected to:

(C) identify alternative energy resources such as wind, solar, hydroelectric, geothermal, and biofuels.

Objectives:

1. Students will gather quantitative data from a variety of wind blade designs to determine the most productive version.
2. Students will demonstrate a general comprehension of the process of harnessing the wind to generate electricity.
3. Students will define alternative energy and discuss renewable vs. non-renewable resources.

Week of May 4th, 2015 - Make up week for lesson missed due to testing or holidays