

Comparing Desert Habitats



Death Valley National Park

Extreme Living in Death Valley Post Trip Lesson Plan 1 hour session

Essential Question: How are the habitats at Salt Creek and the Mesquite Sand Dunes different?

Standard(s):

Next Generation Science Standard: Standard: 4-LS1-1 Construct an argument that plants and animals have internal and external structures that function to support survival, growth, behavior, and reproduction.

Common Core Standards:

W.3.6, W.4.6, W.5.6 With some guidance and support from adults, use technology to produce and publish writing as well as to interact and collaborate with others.

W.3.7, W.4.7, W.5.7 Conduct short research projects that build knowledge through investigation of different aspects of a topic.

W.3.8, W.4.8, W.5.8 Recall relevant information from experiences or gather relevant information from print and digital sources; take notes and categorize information, and provide a list of sources.

Objectives:

Students will be able to:

- present information they learned through experience and research.
- recall knowledge gained from an experience and apply it to make new understandings.
- compare and contrast two habitats and make a generalized conclusion about the two habitats.

Overview:

Students will reflect on their field trip to Death Valley. Drawing from their experience in the park, students will compare and contrast two habitats. Utilizing the information collected through a graphic organizer, the students will write a compare and contrast essay on the Mesquite Sand Dunes and Salt Creek.

Teacher Background Information:

There are many different habitats in Death Valley including canyons, streams, pinyon-juniper woodlands, sand dunes, salt flats, and mountain cliff sides. There are many similarities and differences between the habitats in Death Valley. Habitats provide food, water, shelter, and space for living things. These are essential for survival. Many plants and animals have adaptations for living in their habitat.

Materials:

- Computer with access to the internet
- Copies of Habitats T-Chart Worksheet

Procedure:

Anticipatory Set

Ask students to think of at least one word that comes to their mind when they think about habitats in Death Valley. Next, the students should type the words into Wordle.net to make a word cloud. After all the students have had a chance to enter their words into the word cloud, lead a discussion based on the words that they see. Let students discuss either in small groups or with the whole class.

- What is the biggest word? Why?
- What are some words that are similar?
- What are some words that are different?
- Why didn't we all think of the same words?

T-Chart Compare and Contrast Activity

Ask the students about what they learned from the field trip to Salt Creek and the Mesquite Sand Dunes. Make a T-Chart, and label one side Salt Creek and the other side Mesquite Sand Dunes. The teacher can choose a student to record environmental features on the T-Chart while students discuss the two. An example T-chart is included with this lesson plan.

After the discussion is recorded, leave the chart on the board for future reference. Students will receive their own graphic organizer to fill in information. The electronic version of the T-chart includes text boxes, so the students could also complete the activity using a computer. Students will need the graphic organizer to write an essay, which is also the assessment.

Extensions:

While this post trip activity was developed for the sand dunes and Salt Creek field trip program, this activity could be done with any program. Most field trips will visit two habitats in Death Valley that can be compared.

Vocabulary:

Habitat: the natural home or environment of an animal, plant, or other organism.

Adaptation: a change or the process of change by which an organism or species becomes better suited to its environment.

Thrive: (of a child, animal, or plant) grow or develop well or vigorously.

Assessment:

Students will write a compare and contrast essay about two desert habitats, the Mesquite Sand Dunes and Salt Creek. Students should follow regular conventions of written communication. Compare and contrast words should be reviewed before students are expected to complete this task. Final copy of the essay should be computer generated with few errors.

References:

Death Valley National Park- Sand Dunes

https://www.nps.gov/deva/learn/nature/sand-dunes.htm

Death Valley National Park- Springs

https://www.nps.gov/deva/learn/nature/springs.htm

This lesson plan was developed through the Teacher-Ranger-Teacher program.