

Teacher Guide

Ecologist: Death Valley National Park

Covered Concepts:

Reading Comprehension: Sections 1 & 2

Converting Measurements and Calculating Time: Section 3

Story Elements and Fiction Writing: Section 4

Section 1: Ecologists

- **Vocabulary:**
 - Ecologist, National Parks, Death Valley National Park, Ecosystem, Adaptions, International Dark Sky Parks
- **Career Highlight:**
 - Students read about the role of an ecologist.
- **Content Check:**
 - Students answer questions about ecologists.

Section 2: Death Valley National Park

- **Learn:**
 - Students will read about Death Valley National Park, a national park located in California.
- **Content Check:**
 - Students use a word bank to fill in the blanks about Death Valley National Park.

Section 3: Math Practice

- Students are given distances that are in feet or yards and must convert them to miles. Students will also use a formula to determine how long it will take to drive each distance.

Section 4: ELA Practice

- Students will imagine they have found a new animal that lives in Death Valley National Park. They will then draw and write about their animal and how it survives in the park.

Teacher Guide: Answer Keys

Content Check: Ecologists

1. What does an ecologist study?

Ecosystems.

2. What are ecosystems?

Communities of living things, like plants and animals, and non-living things, like rocks and soil. Living and non-living things share an environment and resources within that environment.

3. Name at least one responsibility an ecologist might have.

Answers will vary. Example answers include:

Observe ecosystems and collect data to learn about how plants and animals live together and survive, solve environmental problems by finding out what things are negatively impacting an ecosystem, or prepare scientific reports on how to best protect and restore damaged habitats.

Content Check: Knife River Indian Village

The majority of Death Valley National Park is located in the state of California.

It is the lowest, hottest, and driest place in North America. The first people who lived in Death Valley were the Timbisha Shoshone. From 1849-1915 mining drew people to Death Valley. Because Death Valley is so hot and dry, it is a difficult place for plants and animals to survive. Plants and animals had to adapt in order to live. For example, bighorn sheep can go for days without water and when they are finally able to find water they drink several gallons so they can rehydrate.

Jackrabbits survive in the hot climate by releasing heat from their large ears. Plants also must adapt in order to survive. For example, the mesquite tree has roots that are up to 80 feet long, allowing it to reach water deep underground. Many people visit Death Valley National Park to see geological features and participate in outdoor activities like hiking, camping, and star gazing.

Teacher Guide: Answer Keys

Math Practice

Locations	Distance in Feet or Yards	Distance in Miles
Badwater Basin to Father Crowley Vista Point	427,680 feet	81 miles
Father Crowley Vista Point to Titus Canyon	464,640 feet	88 miles
Titus Canyon to Towne Pass	75,680 yards	43 miles
Towne Pass to Dante's View	116,160 yards	66 miles

1. If you are driving 40 mph, how long will it take you to get from Badwater Basin to Father Crowley Vista Point? **2 hours**

2. If you are driving 40 mph, how long will it take you to get from Titus Canyon to Towne Pass? **1 hour**

1. If it takes you two hours to drive from Father Crowley Vista Point to Titus Canyon, how fast were you driving? **44 MPH**

2. If it takes you three hours to drive from Towne Pass to Dante's View, how fast were you driving? **22 MPH**

ELA Practice

Answers will vary.