## Denali Dog Sled Journal

#### Saturday, December 8:

Lesson

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Today is Saturday, but we Denali National Park rangers have to patrol our part of the park's six million acres every day, so I climbed onto the sled runners and my dog team took off. Sled dogs, also known as Alaskan huskies, are strong runners. They have two layers of thick fur to keep them warm, and they follow orders well.

We have a week-long patrol ahead of us. The dogs looked as excited as I feel when I start on patrol. The dog team patrols started in the 1920s, soon after Denali became Alaska's first park. We can't take cars or snowmobiles into the park, so the dogs pulling the sleds are our transportation. The dogs allow us to take care of visitors, haul supplies, and

watch to be sure all is well. We glide over the snowcovered ground. The ground under the snow is called permafrost. It stays frozen throughout the year.



We were lucky today because there had been no snowstorm. The trail was clear. We easily traveled the thirty miles to the first patrol cabin. I was glad to get a fire going and heat up soup. My traveling companions were tail-wagging happy to see full dog food bowls!

Sled dogs eat a special dry dog food that is made just for hardworking dogs. During the winter, they get extra fats and vitamins.

#### Sunday, December 9:

A snowstorm kicked up during the night. All day today I walked ahead of the team to clear the trail. As I shoveled snow out of the way, I uncovered a small bush. I marvel at the plants that manage to survive these frigid temperatures.

While there are only eight types of trees in Denali National Park, there are many types of shrubs, like alders. Alders thrive in ground that has been disturbed by rockslides. Hundreds of other plants survive the winters, including wildflowers such as fireweed.

As I cleared the trail, a wolf howled in the distance, and the dogs howled back.



Thirty-nine types of mammals in the park also manage to survive the cold. Mice tunnel under the snow where they can stay warmer. Moose, caribou, and sheep search for food all winter. Grizzly bears hibernate. A long snooze sounds good to me, too!

### Monday, December 10:

When I radioed in my report to park headquarters, I learned there was an earthquake early this morning. As with most of our earthquakes, I never even noticed it. The quakes are the result of the Denali Fault which cuts through the park.

The Denali is North America's largest fault. On either side of this deep crack, the plates of Earth's crust move a tiny bit all the time. Over millions of years, the plates shaped the 400-

mile sweep of mountains called the Alaska Range.

Today in the patrol cabin, I had a chess partner! No, I haven't taught one of the dogs the game. My partner was Dr. Chang, a scientist who is studying the park's winter wildlife. The dogs and I bring him supplies. In return, he feeds us stew and popcorn, and we share his cozy fire.



Dinosaurs once roamed the Denali National Park area. In 2005, dinosaur footprints were found in the park.



### Tuesday, December 11:

As I left Dr. Chang's cabin today, I received a radio call. Two snowshoers, Andy and Marla Perez, had not checked in at the Wilderness Access Center. I passed Wonder Lake, where visitors often go for the view of Mount McKinley. At 20,320 feet it is North America's tallest mountain. Native Americans called it Denali, which means "the high one."

People have climbed Mount McKinley since 1910. Every year, between May and the first week in July, more than one thousand people try to reach the top of the mountain. About one of every two climbers reaches the top.

There was no sign of the Perezes, so the dogs and I moved on toward the patrol cabin. I saw moose tracks, but no snowshoe tracks. At the cabin, I talked to headquarters. There had been no word from Andy and Marla Perez. Tonight we are all worried about them. Where are they? Are they okay?

## Wednesday, December 12:

This morning I traveled to Muldrow Glacier, searching for the Perezes. I only hoped the Perezes hadn't hiked on a glacier. Glaciers have cracks called crevasses that can be big enough to swallow an entire dog sled. Crevasses are hard to see under snow, so they are very dangerous.

Suddenly the dogs yipped and growled. We were face to face with a moose! He didn't look glad to see us—in fact, he looked angry. I quickly turned the dogs around. We zoomed off across a frozen river. I could see a small cabin on the far shore. I headed toward it.

As we approached the cabin, I was surprised to see a kerosene lamp glowing through the window. Even better were the two sets of snowshoes next to the door. The Perezes were as excited to see me as I was to see them! They had gotten lost and weren't able to make their way back to the Wilderness Access Center. They were lucky to find the cabin.

A glacier is made when snow falls over many years and turns into ice. A glacier flows very slowly, like a river in slow motion.





It was a treat to share our stories. It gets lonely out on patrol. Andy and Marla gladly agreed to my offer of a ride in my dog sled for the next two days. They were tired from all that snowshoeing. As I write this, they're playing with the dogs, who enjoy company as much as I do.

#### Thursday, December 13:

Marla and Andy and I talked about how little Denali National Park has changed over the years. Traveling through it by dog sled feels the way it must have felt in the old days, complete with the dangers and pleasures. Dog sled travel maintains a tradition important to the park.

The Perezes were amazed when I told them the south side of the park is completely different from the north. It's a panorama of lofty, sharp mountain peaks and dark, thick forests. I told them they should fly over it. Flying is the best way to see the area, which is too densely wooded to travel by foot.



The park kennels

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## Friday, December 14:

Marla and Andy are on their way home, but they say they will be back to visit.

I spent the morning doing paperwork. In the afternoon, I gave my report to the ranger who will cover my area next. Before I headed home, I visited the dogs' kennels. I patted each of the dogs I'd just spent a week with, thanking them for taking such good care of me.

I have a few days off now. All the better to rest up for my next adventures on dog sled patrol!

Native Athabaskans have lived in the Denali area for about eleven thousand years. They lived off the land, eating game, berries, and fish. When winter came, they sheltered in low valleys.

Today, many Athabaskans still depend on the land's bounty. They grow gardens and pick berries, hunt and fish, and harvest wood for fuel and building material.

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# A HARSH LAND OF BEAUTY

Death Valley National Park in southern California is one of the hottest places in the world. In 1913, temperatures in Death Valley reached a record 134 degrees Fahrenheit. Today, summer temperatures are often above 120 degrees Fahrenheit.

The shape of the valley contributes to its hot, dry weather. High mountains surround the valley and act like walls to hold in the heat. The heat evaporates water quickly, making the air and soil very dry. The valley once held a lake, but the water evaporated over time, leaving behind a thick crust of salt. Within this salty area is the lowest point in North America.



Plants and animals have different adaptations for surviving in this harsh environment. Some plants have long roots that reach down more than ten times the height of a person to search for water. Other plants have shallow roots that reach in many directions to gather water quickly after winter rains. Most plants have thick stems and leaves that prevent water from evaporating. Many animals survive the heat by being active at night and hiding under rocks and in burrows during the day.

n 1849, a group of pioneers barely survived their journey across what is now Death Valley. The pioneers thought the valley was a shortcut to California, where they hoped to make their fortunes panning for gold. They faced water shortages and great hardship as they traveled. Afterwards, the region was named Death Valley.

A bitter gale Over frozen snow Burns the skin like hail. It is twelve below.

Too cold to live Too cold to die Warm animals wait And make no cry.

Their feathers puff Their eyes are bright Their fur expands. Warm animals wait.

They make no sign They waste no breath In this cold country Between life and death.

By May Sarton

## DESERT DAY

By Marilyn Singer

Denizens of the desert understand under, inside, between, below.
Each rattlesnake, wren, rabbit, fox, or spider
lays claim to every scrubby tree and cactus, arroyo, burrow, boulder, branch
to sleep, or sit out the sun.
And when moving is a must, they wheel, flap, sidewind, scuttle, run across the blistering sand.
Denizens of the desert learn to balance the stillness and the scramble.
Few amble.



Hottest and coldest. Wettest and driest. Highest and lowest. These are examples of extremes.

You've just been hired as a member of a team in charge of a new museum called the Extreme Museum. You must decide on what extremes to exhibit. Working in small groups or pairs, follow the steps below to get your museum ready for its grand opening.

- Plan your museum. Make a list of as many extremes as you can think of. Each member of your team should then choose one set of extremes to put on display.
- Find your objects. Cut up old magazines or print out pictures from a computer. For example, if your extremes are most furry and least furry, you might look for pictures of a sheepdog and a hairless cat.
- 3. Display your collection. Glue your pictures to a piece of cardboard. Write a sentence explaining the pairs. Prop up or hang your extremes around your classroom.



An anagram is a word or phrase formed by rearranging the letters of another word or phrase. Rearrange the following anagrams to find some words that you read in "Denali Dog Sled Journal." Use the clue below the anagram if you need help with the answer.

#### Example

#### county milkmen

Clue: highest mountain in North America answer: Mount McKinley

#### Anagrams

- 1. ace girl Clue: slow-moving river of ice
- 2. lasagna rake Clue: 400 miles of mountains in Denali
- 3. nailed

Clue: "the high one" in Athabaskan

4. whose sons

Clue: used to walk on snow without sinking

5. farmer spot

Clue: layer of soil and ice that is always frozen



- 6. a snake hauls ski Clue: another term for sled dogs
- 7. a keen world Clue: body of water with a wonderful view
- log paddles rot
   Clue: team of huskies on the job

Answers 1. glacier • 2. Alaska Range • 3. Denali • 4. snowshoes • 5. permatrost • 6. Alaskan huskies • 7. Wonder Lake • 8. sled dog patrol What does it take to survive the frozen tundra or a hot desert? Animals and plants have special adaptations that allow them to survive in harsh environments. But how do people deal with extreme cold or heat? Working with a partner or in small groups, imagine you've been chosen to write a survival guide for a research team going to a very hot or a very cold place for a month. Your guide will help the team survive whether in the Sahara or Antarctica.

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First, research your destination. Gather information on its climate, vegetation, and animal life. Next, create a section in your guide for each of these areas. Be sure to note what kind of clothing is necessary, where to find food, and the dangers that nature may pose. Finally, summarize the most important points for survival.