



Denali Science School: Program Overview

You're registered for Denali Science School!

Congratulations! Your class has been selected to attend Denali Science School (DSS). This unique hands-on program allows students to learn about scientific research in one of Alaska's premier living laboratories, Denali National Park and Preserve.

Here's how to prepare, starting today.

This info packet provides **teachers, students, guardians, and chaperones** the information needed to prepare for a safe, fun, and educational experience at DSS. This information should be distributed and reviewed soon after registration in spring and again before arrival (May for two groups; fall for all other groups).



What is Denali Science School?

Denali Science School is an immersive program serving Alaskan students in Grades 5 and 6. During three-day, two-night programs, students and their teachers and chaperones learn through hands-on activities, science research, and outdoor immersion in the best classroom of all: Denali National Park and Preserve! While conducting investigations, participating in discussions and collaborative activities, playing games, hiking, and growing as individuals and as a team, students learn how park managers use science to protect and showcase this special place.

The three primary goals of DSS are:

- Learn about and experience the four primary habitats found in Denali – taiga, tundra, riparian, and rocky alpine. Through classroom and field-based activities, students explore how these habitats are connected and impacted by change.
- Use tools and scientific methods to understand the natural world.
- Grapple with the National Park Service's paradoxical mission of simultaneously protecting and providing access to protected lands and resources.

Who instructs Denali Science School?

DSS is a collaborative effort by educators from the National Park Service and Alaska Geographic, as well as teachers from across Alaska. Park educators provide logistical support and lead most learning sessions, while teachers and chaperones focus on student support, supervision, and synthesis. All adults are encouraged to be creative and use their experiences and skills to create new and meaningful opportunities for students to challenge themselves and connect with Denali.

Where is Denali Science School?

Students learn in what is now known as Denali National Park and Preserve. Denali's original caretakers are the Athabascan People of Alaska who call themselves Den'a ("the people").

Denali Science School takes place at the Murie Science and Learning Center (MSLC), which inspires the public to understand and care about science and stewardship in Denali and other Alaskan national parks by providing high-quality educational programs and products, with an emphasis on serving youth.

The MSLC is located at Mile 1.2 of the Denali Park Road at Mile 237 of the George Parks Highway (Alaska Highway 3). All DSS activities take place in the first 15 miles of the Denali Park Road.



What will we do during Denali Science School?

DSS sessions include classroom lessons, outdoor science activities, hikes, a visit to the park's sled dog kennels, team-building activities, and evening science explorations. A typical schedule is included below; we provide each group with an updated version upon arrival. Flexibility is key to balance the needs of the group with weather and environmental conditions.

Day One

- 1:00 – 1:30 Arrive in Denali! Duffle Shuffle – bring things inside
- 1:30 – 1:45 Habitat Game and Chaperone Talk (outside)
- 1:45 – 2:15 Welcome and Orientation (inside)
- 2:15 – 2:30 Snack and Get Ready for Hike
- 2:30 – 3:15 Denali's Habitats and Ecosystem (outside)
- 3:15 – 5:00 Taiga Time Travel Hike (outside)
- 5:00 – 5:15 Get Ready for Dinner
- 5:15 – 5:45 Dinner (inside)
- 5:45 – 8:00 Reflection Time/Teacher Choice
- 8:00 – 8:30 Get Ready for Bed
- 8:30 – 9:00 Lights Out

Day Two

- 7:30 – 8:30 Breakfast, Set up Chairs, Prepare for Outdoor Field Work
- 8:30 – 10:15 Permafrost Monitoring and Impact (outside)
- 10:15 – 10:30 Snack, Bathrooms (inside)
- 10:30 – 11:15 Sled Dogs in Times of Change (inside)
- 11:15 – 12:00 Lunch, Bathrooms, Get Ready for Kennels and Mountain Vista, Load Bus
- 12:00 – 12:15 Bus to Kennels
- 12:15 – 1:00 Kennels (outside)
- 1:00 – 1:15 Bathrooms, Load Bus
- 1:15 – 1:45 Bus Ride to Mountain Vista
- 1:45 – 2:45 Mountain Vista Walk (outside)

- 2:45 – 3:00 Bathrooms, Load Bus
- 3:00 – 3:45 Bus Ride, Snack on Bus, Transition to Classroom, Bathrooms
- 3:45 – 5:00 Manage a National Park Activity (inside)
- 5:00 – 5:15 Get Ready for Dinner
- 5:15 – 5:45 Dinner at Murie Hall
- 5:45 – 8:00 Reflection Time/ Teacher Choice
- 8:00 – 8:30 Get Ready for Bed
- 8:30 – 9:00 Lights Out

Day Three

- 7:30 – 8:30 Breakfast at Murie Hall, Set Up to Work on National Parks
- 8:30 – 9:45 Manage a National Park Activity (inside)
- 9:45 – 10:15 National Park Presentations (inside)
- 10:15 – 10:40 Postcards/Thank You Notes (inside)
- 10:40 – 11:00 Pack Up, Duffle Shuffle
- 11:00 – 11:30 Classroom and Bathroom Clean-Up
- 11:30 Lunch Outside or On the Bus

Where will we sleep?

Students, teachers, and chaperones sleep in the MSLC classroom. The classroom has a divider wall that can be closed if desired. The MSLC is equipped with drinking fountains and restrooms with sinks and toilets. Showers are not available.

Where, when, and what will we eat?

DSS groups eat in the Murie Hall adjacent to the MSLC. A sample menu is below. Please let us know of any allergies at least two weeks ahead of time so accommodations can be made.

	Day One	Day Two	Day Three
Breakfast		Scrambled eggs, bacon, sausage, potatoes, fresh fruit, cereal, juice	Pancakes, French toast, bacon, sausage, fresh fruit, cereal, juice
Lunch	Sack lunch from home (eat on the way to the park)	<u>Sack Lunch</u> Sandwich (turkey and cheddar or peanut butter and jelly) chips, carrot sticks, and cookie	<u>Sack Lunch</u> Sandwich (turkey and cheddar or peanut butter and jelly) chips, carrot sticks, and cookie
Dinner	<u>Pizza Party</u> Cheese, veggie, and pepperoni pizza, Caesar salad, dessert	<u>Spaghetti</u> Spaghetti, meatballs, marinara sauce, steamed veggies, breadsticks, dessert	

Should students bring their own snacks?

All food and snacks will be provided, so aside from the first lunch, groups do not need to bring their own food. If desired, teachers may allow students to bring snacks, or bring group snacks to share, but it will be the group's responsibility to ensure equity, cleanliness, and happy tummies.

What about allergies and special food needs?

With advance notice we can accommodate special food needs related to many allergies and other health issues; please let us know at least two weeks ahead of time. However, we cannot guarantee that we can accommodate all requests, so participants with specific dietary needs are encouraged to bring meal supplements.

What should participants bring?

We do lots of outdoor activities regardless of the weather, and students learn best when they are warm and comfortable. In May, September, and early October, Denali tends to have average high temperatures in the 40s and 50s and average lows in the 20s and 30s. Students should come prepared for rain – or maybe even snow! – and cold weather. As your DSS session approaches, please check the forecast for zip code 99755.

Pack clothes that can be layered to accommodate variable weather conditions and indoor/outdoor transitions. Clothes and shoes should be comfortable and easy to walk in for long periods of time. Cotton is cold and heavy when wet, so synthetic or wool layers are best. Students and adults must always wear long pants, socks, and closed-toed shoes when outside. Participants will likely be most comfortable wearing long sleeves, a sweatshirt, and a light jacket.

Required Items

Please bring ONE bag and ONE daypack with the following items. All overnight items should pack into the bag and all day items should fit into the daypack.

Day Items

- Daypack for carrying lunch, water bottle, rain gear, and extra layers
- Enough water bottles to fit 2 liters of water (non-leaking and closeable)
- Sweatshirt or fleece jacket – **not** cotton, preferably wool or synthetic/wool blend
- Sneakers or hiking boots (no sandals or open-toed shoes)
- Warm jacket
- Warm hat
- Mittens or gloves
- Rain jacket
- Rain pants
- Lunch for the first day, on your way to Denali
- Face mask

Overnight Items

- Sleeping bag
- Sleeping pad
- Two sets of clothes appropriate for learning and moving outside – wear one, pack the other
- Extra warm socks – **not** cotton, preferably wool or synthetic/wool blend
- Pajamas

- Underwear and socks
- Extra face masks
- Personal items: toothbrush, toothpaste, comb, small hand towel, etc. Put your liquid items in a plastic bag in case they leak.
- Optional: Small pillow
- Optional: Stuffed animal OR book OR journal
- All medicine is labeled, in a plastic bag, and given to your teacher.

Double Check

- Do all of your overnight items pack into one bag?
- Do all of your day items pack into one daypack?
- Except for your lunch on the first day, no extra snacks in bags.
- No music players, electronic games, or toys are allowed.
- Items prohibited at school are also not permitted at Denali Science School.

Are students allowed to bring electronics and cell phones?

This is your chance to unplug from electronics and plug in to 6 million acres of nature! Your teacher will let you know if you may bring a camera or phone. The rest of your electronic devices should stay home.

What about homesick students?

It can be tough to be away from home and familiar routines! We've found that for most students, a busy schedule full of engaging activities doesn't leave much time to feel homesick. We try to relieve the anxiety of new routines and expectations by frontloading students with information about what to expect, giving lots of time to ask questions, exploring at a comfortable pace, and incorporating fun into all we do. Students have a chance to grow interpersonal and self-care skills through everyday activities like packing and carrying their own daypacks and supporting each other. Adults are sometimes surprised by students and the remarkable capacity they demonstrate while caring for each other!

What if there are emergencies at home?

If there is an emergency at home and guardians need to get an urgent message to a student, guardians should call the teacher's cell phone (or other designated chaperone cell phone numbers) first. In true emergency situations, the 24-hour Alaska Region Communication Center can communicate messages to the group (907-683-9555).

What can I do to respect Denali and all the wild things that live here?

Denali is an exciting place! This land has been protected for generations. Because people before you have protected the wildlife, plants, and other features, you will be able to enjoy them during your trip. Many years in the future, when you are an adult – perhaps with students of your own – you will be the people that kids talk about! They will be glad you took care of this special place.

While you are in Denali, we expect that you will:

- **Choose the Right Path.** Stay on the main trail to protect nature. Stay with your group. Steer clear of flowers and other living things that can be damaged. Once hurt, they may not grow back! What can you do to remind yourself and others to be careful with the nature that is in Denali?

- **Trash Your Trash.** Put litter, even crumbs, in trash cans or carry it back to a trash can or recycling bin. What would you do if you had a delicious but slimy banana for lunch and there was no trash can nearby?
- **Leave What You Find.** Leave plants, rocks, and historical items as you find them so the next person can enjoy them. Treat living plants with respect. Breaking or peeling plants can kill them. What are some other ways that you might show respect to parts of the park that are not animals?
- **Respect Wildlife.** Observe animals from a distance and never approach, feed, or follow them. Wildlife in Denali may behave differently than where you live. In Denali, we give bears at least 300 yards of space, and we give all other animals 25 yards of space. With a partner, figure out how far 25 yards and 300 yards is. What object might fit in that space? A bus? A classroom? Why do you think there are rules about respecting wildlife in Denali?
- **Be Kind to Other Visitors.** Make sure that the fun you have in Denali does not bother anyone else. Remember that other visitors are there to enjoy the outdoors. Listen to nature. Avoid making loud noises or yelling unless the ranger lets you know that it's time to make loud noises or yell! How do you think human voices might affect other people and animals in Denali?

What should I do to be a safe and respectful scholar in Denali?

You'll be in school when you are in Denali! While you are here, we expect that you will:

- **Be Curious.** Learn about the areas you will visit. Read books and talk to people before you go. Ask questions about the things around you when you are in Denali. The more you know, the more fun you'll have. What are things that you wonder about Denali?
- **Participate and be a Respectful Listener.** Be thoughtful. Think about the answers you would give to a question, and then raise your hand. Listen when someone else is talking. If an adult is talking or a student is answering a question, everyone should listen. What are some other ways to show respect when talking in a group?
- **Respect Yourself and Other People.** Hands are for helping, not for hurting! What are some ways that you can show others that you respect them? How could you show respect to other people visiting the park at the same time as you?
- **Stay With Your Team.** You will be in a group with about six students and one adult. Make sure that you always know where you, your team, and your adult are. What important or exciting things might happen when you stay with your team? What would you do if you accidentally lost your team?
- **Know Before You Go!** Remember clothes to protect you from cold, heat, and rain. We might be walking through some brushy or squishy places. Everyone must wear long pants, socks, and closed toed shoes when we are outside. You will be responsible for packing and carrying your own daypack. What could you do to make sure that you are ready for the next activity?
- **Be a Good Steward.** Stewards help to take care of the places they visit. You will get to sleep overnight in the MSLC, a place that is used by other visitors, rangers, park workers, and students just like you. The MSLC will be tidy and clean when you get here. What can you and your class do to show that you are excellent stewards of the MSLC? Others will know that you and your school were the last ones to use the building. What would you want to do before you leave the building?

I'm so excited to visit Denali! Where can I learn more about the park?

It's fun to learn about a place you will visit ahead of time! You can ask an adult if it's okay to visit the Educational Resources page on the Denali website at <https://www.nps.gov/dena/learn/education/education-resources.htm>. There are links organized by topic that include student readings, websites, videos, activities, and more.