















GRANDFATHER MOUNTAIN® CLASSROOM IN THE CLOUDS





SCHOOL FIELD TRIP PROGRAMS

Field trip leaders are saying...

learn about N.C. history and geography, how
animals use their adaptations
to survive in changing environments and how the earth
changes due to erosion and
weathering. This field trip
[helped] students by allowing
them to personally experience
and discover more about our
great state."

- Lori Prevette, Hillcrest Elementary

I appreciate how
helpful and kind all of
Grandfather Mountain's
staff was to our group, from the
employees at the gate to the bus
drivers and the naturalists."

- N.C. Teacher



Grandfather's outdoor wonders can provide real-world lessons about concepts learned in your classroom. We offer citizen science experiences beyond what students find on Google!

- One hour programs tailored to state curriculum standards for your grade level
- · Shuttles available to Swinging Bridge upon request at time of booking
- Offered Monday through Friday, April 1 to June 15 and Sept. 1 to Nov. 15

To help plan for inclement weather, programs are identified as indoor (), outdoor (), or both (). If all or part of your program is not able to be held inside during inclement weather, we can offer a different program to better suit the weather.

Habitat Tours for All Age Groups

If you would like a guided Habitat Tour, they are offered for all ages and are tailored to be grade-level appropriate. Fourth- and seventh-grade tours have their own program designed to fit your curriculum standards. Please see our complete program listing below for other opportunities for your class!

Pricing and Reservations

\$7 per student (1 teacher/chaperone FREE per 8 students, \$14 for each additional adult)

Tuition includes admission to the park, an hour-long program and shuttle to and from the Mile High Swinging Bridge. If your group arrives in a bus, a shuttle to the top must be reserved at time of booking. A \$6 per student self-guided option is also available, including shuttle transportation but no program.

Meals are not included in price, but be sure to inquire about our Express Eats and Mildred's Grill lunch options.

Financial assistance is available! See *grandfather.com* for info on scholarships.

Reservations for all programs must be made at least two weeks in advance.

KINDERGARTEN to EIGHTH-GRADE PROGRAMS

Choose from our programs by grade, subject and essential standard. We strive to meet "Science as Inquiry" Essential Standards:

- Conduct investigations
- · Make careful observations and measurements
- Work in small groups and share findings with the larger group
- Use data to create explanations of results
- · Use appropriate safety procedures

	K	1st	2 nd	3 rd	4 th	5 th	6 th	7 th	8 th
Animals	Creepy Critters (K.L.1)	Animal Investigators (1.L.1.1, 1.L.2.2)	Life Cycle Discovery (2.L.1)		Animal Adaptation Habitat Tour (4.L.1)	Niches & Habitats - (5.L.2, 5.L.2.2, 5.L.2.3)	Mission: Decomposition (6.L.2)	Project Punnett: Animal Genetics Habitat Tour (7.L.2.2, 7.L.2.3)	Ecosystem Interactions (8.L.3)
Plants		Woods Walk (1.L.1.1, 1.L.2.1)		Plant Explorers (3.L.2, 3.L.2.1)			Plant Strategies (6.L.1)		
Weather	Cloud Detectives (K.E.1)		Weather Wizards (2.E.1, 2.E.1.2)			Junior Forecasters (5.E.1.2)		Weather Indicators (7.E.1)	
Geology/ Geography				Limitless Landforms (3.E.2.2)	Rock Detectives (4.P.2) Mineral Detectives (4.P.2, 4.P.2.2)				The Makings of Mountains (8.E.2.2)



Kindergarten

- Creepy Critters Students use discovery tools to examine the similarities and differences between living organisms. They will get to meet real-life animals in this exciting program. (Essential Standards covered: K.L.1)
- Cloud Detectives Students examine clouds and discuss their favorite kinds of weather and observe weather changes from place to place and season to season. They will make a cloud viewer and observe different types of clouds. Their discoveries will help them attain a deeper knowledge of weather. (Essential Standards covered: K.E.1)

About GRANDFATHER

Inspiring conservation of the natural world by helping guests explore, understand and value the wonders of Grandfather

Mountain.

- Grandfather Mountain Mission Statement

Towering 5,946 feet above sea level in northwest North Carolina, Grandfather Mountain is a nonprofit nature park recognized by the United Nations as a nature preserve of global importance.

The mission of Grandfather Mountain is to steward the land in a way that protects the natural wonder of this geographic landmark and offers the public access to its fantastic scenery.

The Grandfather Mountain Stewardship Foundation owns and operates the park, while engaging in research, education and conservation activities.

For more information, visit www.grandfather.com.



First Grade

- Animal Investigators Students use discovery tools to determine what all animals need: air, water, space, food and shelter. They will get to meet real-life animals in this exciting program. (Essential Standards covered: 1.L.1.1, 1.L.2.2)
- Woods Walk Students participate in activities that help them understand
 what plants need: air, water, space, light and food. They will get to explore a
 natural area of the park and meet grasses, shrubs and trees, while applying
 their natural curiosity. (Essential Standards covered: 1.L.1.1, 1.L.2.1)

Second Grade

- Life Cycle Discovery Students use discovery tools to examine animal life cycles. They will get to meet real-life animals and make observations about them in this exciting program. (Essential Standards covered: 2.L.1)
- Weather Wizards Students discover why we have weather and how we measure weather in this program. Participants will have the opportunity to use tools that meteorologists use in the field to record the unique weather on the mountain. (Essential Standards covered: 2.E.1, 2.E.1.2)

Third Grade

- Plant Explorers Students use discovery tools to learn more about the
 parts of a plant: roots, stems, leaves and flowers. They will get to explore a
 natural area of the park and meet grasses, shrubs and trees, observing the
 soil characteristics and other environmental factors. (Essential Standards
 covered: 3.L.2, 3.L.2.1)
- Limitless Landforms What better place to learn about landforms than
 the top of Grandfather Mountain where mountains and valleys are in abundance? Students will explore different viewpoints and maps and apply their
 knowledge by making their own diagrams. (Essential Standards covered:
 3.E.2.2)

Fourth Grade

- Animal Adaptations (Habitat Tour)

 Students use Grandfather's
 animal habitats as a place to explore the structural and behaviorial
 adaptations of bears, eagles, otters,
 cougars and elk. Through their discovery, they will create explanations
 of the benefits of the structures and
 behaviors of organisms. (Essential
 Standards covered: 4.L.1)
- Mineral Detectives This student-centered exploration routine provides ways for students to observe, research and share discoveries about minerals. (Essential standards covered: 4.P.2.2)



• Rock Detectives Students review the rock cycle and use Grandfather's immense rock collection to examine different types of rock. (Essential Standards covered: 4.P.2)



Fifth Grade

- Niches and Habitats Students examine components of the thriving ecosystem at Grandfather Mountain. Students will identify organisms in the ecosystem as producers, consumers and decomposers and participate in the Web of Life activity to determine how they relate to others within the food web. (Essential standards covered: 5.L.2, 5.L.2.2, 5.L.2.3)
- Junior Forecasters Students will learn how we measure weather.
 Participants will have the opportunity to use tools that meteorologists use in the field to record the unique weather on the mountain and have a chance to make weather predictions. (Essential Standards covered: 5.E.1.2)

GRANDFATHER by the numbers

124 mph

Highest recorded wind gust atop Grandfather Mountain, recorded Feb. 25, 2019

5,946 ft.

Elevation of Calloway Peak, Grandfather Mountain's apex

16

distinct ecological communities can be found on Grandfather Mountain, each supporting its own unique web of life.

73

rare or endangered species call Grandfather Mountain home, 32 of which are globally imperiled.

MOUNTAINS of facts

Black bears
can smell a food
source from over a
mile away!

The highest temperature ever recorded on top of Grandfather is 83° F.

The Appalachian
Mountains are about
480 million
years old.

River otters
can hold their breath
underwater for up to
8 minutes!



Sixth Grade

- Plant Strategies Students use discovery tools to learn the basic structures and functions of plants required for survival, reproduction and defense. They will get to explore a natural area of the park and meet grasses, shrubs and trees, while applying their natural curiosity. (Essential Standards covered: 6.L.1)
- Mission Decomposition A Investigate how decromposers return nutrients to the environment by exploring a "disappearing log." Students will make possible explanations for what might be causing the log to disappear by utilizing the scientific process and exploration tools. (Essential Standards covered: 6.L.2)

Seventh Grade

• Weather Indicators
Students have the opportunity to use tools that meteorologists use in the field to record the unique weather on the mountain and use charts to examine cloud types and elevations.
Students will learn



about lichen characteristics and how they are "bio-indicators" for air pollution. (Essential Standards covered: 7.E.1)

• Project Punnett: Animal Genetics (Habitat Tour) Students will use Grandfather's animal habitats as a place to explore the inherited adaptations of bears, eagles, otters, cougars and elk. They will have an opportunity to use a Punnett Square to determine the likelihood of a cinnamon-colored black bear. (Essential Standards covered: 7.L.2.2)

Eighth Grade

- The Makings of Mountains Students review the rock cycle and examine different types of rock to answer the question of why the Appalachian Mountains look different than other mountain ranges. We will use the unique structure of Grandfather Mountain to observe the effects of tectonic plate activity. (Essential Standards covered: 8.E.2.2)
- Ecosystem Interactions Students examine components of the thriving ecosystem at Grandfather Mountain. Students will categorize interactions in the ecosystem as parasitism, competition and mutualism and participate in the Web of Llfe activity to determine how they relate to others within the food web. (Essential Standards covered: 8.L.3)



HIGH SCHOOL PROGRAMS

Let Grandfather be your classroom where students can watch science come alive using the scientific method and critical thinking skills for an in-depth investigation of the mountain's biodiversity. We strive to meet "Science as Inquiry" Essential Standards:

- Collections of relevant evidence
- Use of logical reasoning
- Application of imagination to devise hypotheses
- Explanations to make sense of collected evidence
- Habitat Tour While touring Grandfather Mountain's animal habitats, students will identify adaptations that affect survival and reproductive success.
 They define and discuss predation, competition, parasitism, mutualism and how they relate to the animals.

FIELD TRIP scholarship

In spring 2015, Grandfather Mountain launched its Field Trip Scholarship Fund to benefit school groups in need of financial assistance to defray the cost of an educational field trip to the park.

The Scholarship Fund honors the memory of Nathan Pribble of Apex, N.C., who died unexpectedly in 2014 at age 18. Nathan and his family were frequent visitors to Grandfather Mountain, and, after his death, his family requested that memorials be made to the Grandfather Mountain Stewardship Foundation.

"Nathan was a nature-lover all his life, so it was only natural that we asked for memorials to go somewhere that would mean something to Nathan," said his mother, Robin Pribble. "Helping students that otherwise might not have an opportunity to go to Grandfather Mountain is definitely something that would matter to him."

For more information, and to download an application, visit https://bit.ly/2qI5VqZ.

