5th Grade - Winter
Snowshoeing & Avalanche Awareness

Program Description for Classroom Teachers

Programs are subject to change based on weather, temperature, road conditions, public health and safety concerns.

Synopsis	**Objectives - Students will:**
Students will have the opportunity to enjoy snowshoeing in the National Forest with their classmates while learning about interactions between Earth's systems that cause avalanches in Utah's mountains. By learning about how snow forms in the mountains, the importance of snowpack in our watershed, and examining slope and avalanche conditions, students will leave with more avalanche awareness and an appreciation for the snow that is so vital to our water resources in Utah.	• Explore the National Forest in winter • Participate in group exploration and snowshoeing • **Analyze and interpret data** and avalanche forecasts to determine patterns in avalanche terrain and where most dangerous avalanches occur • **Develop a model** of how Earth's systems interact to create snow (explore the effect of mountains on clouds and snowpack) • Brainstorm **solutions** to reduce the effects of dangerous avalanches on humans and our community

Length of Program: 2 hours
Location: Murray Farm Trail, King Nature Park, or Stokes Nature Center (weather dependent)
Season Offered: Winter
Program Fee: $9 per student (includes snowshoe rental)
Logistics:

- Please plan time to load the bus at your school and drive to the field site.
- Confirm the location of your field experience with the driver before leaving your school.
- Please arrive 5 minutes prior to your program time. Programs will begin and end on time.
- Read over our "Winter Weather Cancellation Policy" prior to your program so you know what to expect in case of severe winter weather or sudden winter weather events.
- Students should wear comfortable clothing that may get dirty and/or wet.
- We will be outside for the entirety of this program, dressing in layers is advised.
- Students should wear snow boots. Please, **no sneakers!**
- We have a limited number of boots, coats, and gloves to loan your students if they need them. If you suspect a student may need necessary snow gear, please request these at least two days in advance of your program.
- Students should wear visible name tags at all times (packing tape over a name tag keeps them from falling off).
- Please bring one adult per five students (there is no charge for teachers or chaperones).
- Running water will not be available at the site, so please plan ahead with water bottles.
- Restrooms may not be available, depending on the field site, so plan ahead accordingly.

Classroom Teacher Pre-Program Preparation

- If multiple classrooms from your school are participating, please ensure that all teachers on your team receive the confirmation email which contains essential information about your scheduled field experience.
- See curriculum connections below.

Curriculum Connections

This program supports learning of **SEEd Strand 5.1: Characteristics and Interactions of Earth's Systems**

- **Standard 5.1.1: Analyze and interpret data** to describe patterns of Earth's features. Emphasize most earthquakes and volcanoes occur in bands that are often along the boundaries between continents and oceans while major mountain chains may be found inside continents or near their edges. Examples of data could include maps showing locations of mountains on continents and the ocean floor or the locations of volcanoes and earthquakes. (ESS2.B)
- **Standard 5.1.4: Develop a model** to describe interactions between Earth's systems including the geosphere, biosphere, hydrosphere, and/or atmosphere. Emphasize interactions between only two systems at a time. Examples could include the influence of a rainstorm in a desert, waves on a shoreline, or mountains on clouds. (ESS2.A)
- **Standard 5.1.5: Design solutions** to reduce the effects of naturally occurring events that impact humans. Define the problem, identify criteria and constraints, develop possible solutions using models, analyze data from testing solutions, and propose modifications for optimizing a solution. Emphasize that humans cannot eliminate natural hazards, but they can take steps to reduce their impacts. Examples of events could include landslides, earthquakes, tsunamis, blizzards, or volcanic eruptions. (ESS3.B, ETS1.A, ETS1.B, ETS1.C)

Science and Engineering Practices	Crosscutting Concepts	Disciplinary Core Ideas
Analyze and interpret data Develop a model Design solutions	Patterns Systems Effects	Plate Tectonics and Large-Scale System Interactions Earth Materials and Systems Natural Hazards Defining and Delimiting an Engineering Problem Developing Possible Solutions Optimizing the Design Solution

Additional Utah Core Curriculum Connections

Subject	Standard	Objective
English Language Arts	5.SL.1	Participate effectively in a range of conversations and collaborations using age-appropriate vocabulary, on topics, texts, and issues
Social Studies	5.1.1	Cite examples to illustrate how the physical geography of North America (for example, landforms, seasons, weather, bodies of water) influenced the lives of Native American tribal groups.

	5.1.2	Identify ideas, innovations, and contributions of Native Americans that have had a lasting impact on human civilization (for example, agriculture, respect for the earth and environment, inventions, fashion, art, government, language, medicines, ritual and ceremony).
PE	Strand 2 Strand 3 Strand 4 Strand 5	-Students will apply knowledge to attain efficient movement and performance. -Students will understand the components necessary to maintain a healthy level of fitness to support physical activity. -Students will develop cooperative skills and positive personal behavior through communication and respect for self and others. -Students will appraise the personal value of physical activity as a tool for wellness, challenges, and interacting with appropriate social skills with friends and family.
SEL	K-12	This program supports students' growth in all 5 CASEL core competencies: Self Awareness, Social Awareness, Responsible Decision Making, Self Management, Relationship Skills.