



Pre-visit: *Cross Country Skiing*

Classroom Activity

Brief Synopsis:

These activities are designed to familiarize students with the changes in ski use and technology over time. Students will also become introduced to a traditional Native American game which uses equipment with many similarities to a cross country ski.

Ages: Grades 5- 8

Vocabulary: chronological, era, evolution, friction, glide, tradition

Outcomes:

1. Students will become familiar with the caloric expenditures of various physical activities.
2. Students will

Activity 1: *The Evolution of Skiing*

Time: Two class periods.

Materials:

- History of Skiing Handout
- Paper
- Pens, Markers, Pencils

Activity 2: *Snow Snake Slide*

Time: Two (2) 45 minute periods.

Materials:

- Snow Snake Kit (one per team)
- Long smooth hallway or Snow-packed outdoor open space.

Minnesota Academic Standards:

Science: 5.II.D.2, 9-12.I.D. 1

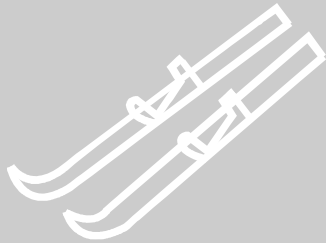
Language Arts: 5.III.A.2, 6.III.A.3, 8.III.A.2

Physical Ed: 5.1.2, 5.2.2, 5.3.2&3, 5.5.3, 5.6.5, 6.1.2,

6.4.1, 6.5.5, 6.6.1&4,

7.4.1, 7.5.1, 7.6.3,

8.3.4, 8.5.1



Activity 1: *The Evolution of Skiing*

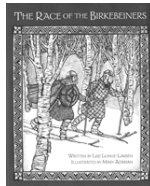
Background: Skiing has been practiced for 4,000 years. From the kind of equipment used to the style of skiing, this activity has changed much over that time.

Procedures:

1. Separate class into 5 groups.
2. Assign students an era in cross country skiing history.
3. Hand out the descriptions for each era to the appropriate group.
4. Each team is responsible for drawing a comic book-style graphic interpretation of the events that took place in the era they were assigned.

Extension:

- Assignment can also be done poster style with each poster displayed in chronological order showing a continuum of the entire history of skiing.



Related Literature:

The Race of the Birkebeiners, by Lisa Lunge-Larson. It is the year 1206, and deep in the snow-covered mountains and valleys of Norway, the fiercest warriors in the land struggle to ski a baby to safety...This is a story of the Birkebeiners and how they saved the infant Prince Hakon by skiing across the mountains in the dead of winter. It is an untold story of bravery and tenderness.

Activity 2: *Snow Snake Slide*

Background: Native Americans living in the snow belts of North America made wooden snake shaped game pieces to play the game, *snow snake*. The game's objective...whoever propelled his snake down a snowy track the farthest times wins the prize. Early Native Americans played the game for entertainment as well as to sharpen critical hunting skills. Snow snakes function much like a cross country ski, therefore students can learn about a uniquely Native American tradition as well as the fundamental of ski design.

Procedures:

- Make or order snow snakes kits for each student or team of students or follow suggested directions for making snakes from your own materials. Avg. cost: \$2.50/snake. See Snowsnake FAQ sheet and Resource section of this lesson plan.

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2. Make Snow snake Competition Area.
3. Race Snakes.

Discussion:

- What materials worked best?
- What tossing techniques worked best?
- What parts of the snow snake are similar to a ski?

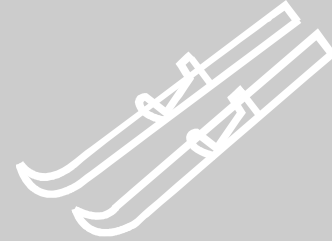
Related Literature:



Cross Country Cat by Mary Calhoun, What kind of cat would go sliding off on skis, and who'd believe it anyway? When the family accidentally leaves Henry, their sassy Siamese, behind at the ski lodge, he takes matters into his own paws in this beguiling adventure

Resources:

- Eagle Bluff Class Outline: <http://www.eagle-bluff.org/documents/CrossCountrySkiing.pdf>
- Snowsnake Racer Site: www.snowsnakeracers.com



Snow Snake FAQ's

What are snow snakes? Snow snakes are pieces of wood carved in the shape of snakes used as game pieces in a game of the same name. The goal of the game is to design your snow snake so that when tossed it travels the farthest down a snowy track.



How do I make a snow snake? Traditionally, a snake is carved out of a straight stick of hardwood about 1.5 meters long and five to 10 cm in diameter at the large end. The bark is stripped off and the snake's head is marked off on the large end to measure about five to 10 cm in length. The rest of the stick is about three cm in diameter. The head of the snake should curve up like a ski. In the past, the snakes were carved and highly decorated on the non-sliding surfaces of the snake. For a quick version of a snow snake, try using an old hockey stick with the bottom cut off and carve one end so that it curves upwards slightly. This will help the snake move along the snowy track. If you want, take some time to make carvings and painted decorations on your snake. Cost for making a snow snake run from 2-5 dollars depending on materials used. *(See following pages for specific directions)*

How do a make a snow snake track? To start, make a clear track for the snow snake to travel along: build a long snow bank, about 1 meter high and 1 meter wide, and 100 meters long. (You can make it longer or shorter depending on how much space you have available.) Carve a long track in the pile, about 6 inches wide, and smooth it over thoroughly. If possible, water it for an icy surface. A sheet of plastic or a hard gym floor/hallway can also be used in areas with no snow.

How do I play the game? To play, take turns with your opponents in throwing the stick down the track. If you want to play as a team, the person who throws the farthest in each round scores a point for his or her team. An additional point goes to the team with the player who has made the longest throw of the whole game. FYI: Athletes at the Arctic Games can throw their snow snakes over 90 meters.

Historically, who played snow snakes?



All of the following tribes are listed in Dr. Walter J. Hoffman's Fourteenth Annual Report of the Bureau of Ethnology to the Smithsonian Institution in 1896 as players: Arapaho, Assiniboine, Cheyenne, Chippewa, Cree, Crows, Dakota (Oglala, Teton, Yankton), Grosventres, Hidatsa, Hurons, Iroquois, Kiowa, Mandan, Menominee, Missisanga, Omaha, Passamaquoddy, Pawnee, Penobscot, Pomo, Ponca, Sauk and Foxes, Seneca, Siouan stock, Takulli, Topinagugim, Tuscarora, and Yokuts. In addition, the Inuit/Eskimo people living in Alaska, Canada, and Greenland and the Dene people living in arctic regions of Canada played snow snake. Children and adults including the women of many tribes played snow snake.

Dr. Hoffman's original sketch of a Menominee Indian playing snow snake at the reservation in Keshena, Wisconsin in the early 1890's.

