

Teachers Guide

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“Let’s Go Snowshoeing!” Multidisciplinary Classroom Activities

Teachers guide for the Young Naturalists article “Let’s Go Snowshoeing!” by Maureen M. Smith, with illustrations by Ron Finger. Published in the November–December 2004, *Conservation Volunteer*, or visit www.dnr.state.mn.us/young_naturalists/snowshoeing.

Young Naturalists teachers guides are provided free of charge to classroom teachers, parents, and students. This guide contains a brief summary of the article, suggested independent reading levels, word count, materials list, estimates of preparation and instructional time, academic standards applications, preview strategies and study questions overview, adaptations for special needs students, assessment options, extension activities, Web resources (including related Conservation Volunteer articles), copy-ready study questions with answer key, and a copy-ready vocabulary sheet. There is also a practice quiz in Minnesota Comprehensive Assessments format. Materials may be reproduced and/or modified a to suit user needs. Users are encouraged to provide feedback through an online survey at www.dnr.state.mn.us/education/teachers/activities/ynstudyguides/survey.html.



Summary

“Let’s Go Snowshoeing!” introduces young readers to a popular winter outdoor activity. Topics include: a brief history of snowshoes, a snowshoeing hike with a naturalist in a state park, some basic techniques for getting started, styles of traditional and modern snowshoes, proper clothing and safety precautions.

Suggested reading levels: Third grade through middle grades

Total words: 1,552

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Materials: Print resources from your media center, poster board, colored pencils and markers, traditional and modern styles of snowshoes.

Preparation time: One hour (not including extensions)

Estimated instructional time: Two to three 50-minute class periods (not including extensions)

Minnesota Academic Standards applications: “Let’s Go Snowshoeing!” may be applied at third grade through middle grades to the following Minnesota Department of Education Academic Standards:

Language Arts

I. Reading and Literature

- A. Word Recognition, Analysis and Fluency
- B. Vocabulary Expansion
- C. Comprehension
- D. Literature

II. Writing

- A. Types of Writing
- B. Elements of Composition
- C. Spelling
- D. Research
- E. Handwriting and Word Processing

III. Speaking, Listening and Viewing

- A. Speaking and Listening
- B. Media Literacy

Social Studies

I. U.S. History Grades 4–8

- A. Pre-history through 1607: Students will compare

the ways of life of Indian nations from different regions of North America

II. Minnesota History Grades 4–8

- A. Pre-contact to 1650: Students will explain the major historical aspects of Dakota and Ojibwe culture, social organization and history, and compare and contrast them
- B. Contact and fur trade: Students will describe how early explorers and fur traders affected the development of Minnesota

Geography

- D. Interconnections: Students will analyze how the physical environment influences human activities

Arts: Artistic Expression: Visual Arts

Complete academic standards are available at www.education.state.mn.us.

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Preview The best time to read “Let’s Go Snowshoeing!” is late fall or winter when students might have the chance to try snowshoeing. Samples (available on loan from sporting goods retailers and state park naturalists) of traditional and modern snowshoes will help motivate students to learn more about this ancient mode of travel. You may invite a DNR naturalist to visit your classroom to speak to your students about snowshoeing in one of our state parks. Check the list at the end of the article for field trip opportunities near you.

Ask students to preview the illustrations and paragraph headings. Then use the KWL (Ogle, 1986) strategy to find out what students already know (K) about snowshoes and snowshoeing. Perhaps some students are experienced snowshoers. Next discuss what they would (W) like to learn. As you complete the lesson, build a list of what they learned (L). Display your K and W ideas on poster board while you work with the article. Complete the L component as you read the article and engage in extension activities. See www.teach-nology.com/web_tools/graphic_org/kwl/ for a ready-to-use KWL organizer.

Vocabulary overview Use the transparency-ready vocabulary list to preview challenging words. You may wish to provide a copy to every student or to small groups. Students may also write the terms and definitions on flashcards to aid short-term recall. Following your preview of the article, and based on your knowledge of your students’ needs, you may wish to add words to the vocabulary list. Lengthy preview lists, however, can be discouraging for reluctant readers.

Study questions overview Study questions parallel the story (the answer to the first question appears first in the article, followed by the second, and so on). This is an important organizational tool for students and should be emphasized before you begin working on the study questions. Preview the entire study question section with your class before you read the article. You may wish to read the story aloud and complete the study questions in class or in small groups. The questions may be assigned as homework, depending on the reading ability of your students. Inclusion teachers may provide more direct support to special needs students (see Adaptations section). Note that questions 1, 2, 7, 9, and 14 require inferential thinking.

Adaptations Read aloud to special needs students. You may choose to complete selected study questions first and then, if time allows, complete the remaining questions. For example, first do items 1, 8, 10, 11, and 13. Peer helpers, paraprofessionals, or adult volunteers may lend a hand with the study questions. Flashcard drill may help students recall key vocabulary terms. With close teacher supervision, cooperative groups can offer effective support to special needs students, especially for extension activities.

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Assessment You may use all or some of the study questions, combined with vocabulary, as a quiz. Other assessment ideas: (1) Ask students to draw one of the traditional shoe styles and then to write a paragraph detailing its origins and particular advantages. (2) Students may compare and contrast traditional and modern styles. Which do they prefer and why? (3) Students may design their own assessment in the form of a quiz or presentation. Invite each student to submit one question for an assessment and select the best ones. (4) Ask students to write a description of preparations for an all-day snowshoe trek, including choosing the style of shoe best suited to the terrain, snow conditions, and vegetation.

- Extension activities**
1. Plan a field trip to a state or county park near you for a snowshoeing trek. The best way for students to learn about this ancient form of transportation is to experience it firsthand.
 2. Invite a representative from a store that sells snowshoes to bring samples of several styles to your classroom.
 3. Read Jack London’s *Call of the Wild* and *White Fang*. Both stories are set in the far north. Robert Service’s poetry will also make a connection to snowshoeing.
 4. Ask students to design a snowshoe and make a sales poster for it. They can then make a presentation to the class about the advantages of their invented snowshoes.
 5. Write haiku poems about winter, snow, and snowshoeing (see Web resources).
 6. Build your own snowshoes. Kits are available on line and at retail outlets (see Web resources).

Web resources

Snowshoes and Snowshoeing

www.carlheilman.com/snowshoe.html

United States Snowshoe Association

www.snowshoeracing.com

Special Olympics Snowshoeing

www.specialolympics.org (search snowshoeing)

Snowshoes and Kits

www.snowshoe.com/SnowshoeKits

Minnesota DNR

www.dnr.state.mn.us (search snowshoeing)

Haiku poetry

www.gardendigest.com/poetry/haiku4.htm

Related *Conservation Volunteer* articles available online include:

January–February 2003

Hopping With Hares and Rabbits (with teachers guide)

January–February 2000

Life Under Ice and Snow

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- References** Ogle, D.S. K-W-L Group Instructional Strategy. In A.S. Palincsar, D.S. Ogle, B.F. Jones, and E.G. Carr (Eds.), *Teaching Reading as Thinking* (Teleconference Resource Guide, pp.11–17). Alexandria, Va.: Association for Supervision and Curriculum Development, 1986.

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Study Questions

“Let’s Go Snowshoeing!” by Maureen M. Smith

Minnesota Conversation Volunteer, November–December 2004

www.dnr.state.mn.us/young_naturalists/snowshoeing

Name _____ Period _____ Date _____

1. Snowshoes make _____ much easier.

2. When and where were snowshoes probably invented? _____

3. The first snowshoes were made of _____ and _____
or _____

4. When you begin a snowshoe hike, why is it important to take careful note of where you start? _____

5. Why do snowshoers bring plenty of drinking water on hikes? _____

6. Describe some wildlife signs you might see on a snowshoeing trek. _____

7. When renting or buying snowshoes, you must be sure to select the right _____
and _____

8. Why are well-fitting snowshoes so important? _____

9. Why would a snowshoer use ski poles? _____

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10. Match the terms by drawing a line from one column to the other.

Bearpaw

Alaskan

Hills and mountains

Michigan

Running or racing

Claws for better traction

Good for hiking

Best if snow is not too deep

Best for bigger people

Small, lightweight

11. Describe the snowshoes developed by the Ojibwe people of northern Minnesota. _____

12. If you are climbing steep hills, what style of shoe might you need? Why? _____

13. What is “herringboning?” _____

14. Explain how Alaskan shoes differ from the bearpaw style. _____

15. What are the disadvantages and advantages of modern shoes? _____

16. “Dressing in layers” means _____

17. Why is dressing in layers a good idea? _____

18. When snowshoers are “cutting a trail,” what are they doing? _____

Study Questions Answer Key

“Let’s Go Snowshoeing!” by Maureen M. Smith

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1. Snowshoes make **walking through deep snow** much easier.
2. When and where were snowshoes probably invented? **Thousands of years ago in Asia.**
3. The first snowshoes were made of **wood** and **tree bark** or **animal tendons**.
4. When you begin a snowshoe hike, why is it important to take careful note of where you start? **So you can retrace your steps to avoid getting lost.**
5. Why do snowshoers bring plenty of drinking water on hikes? **Snowshoeing is hard work, and drinking water helps keep snowshoers warm and hydrated.**
6. Describe some wildlife signs you might see on a snowshoeing trek. **You may see animal tracks, broken twigs, nests, and scat.**
7. When renting or buying snowshoes, you must be sure to select the right **size** and **style**.
8. Why are well-fitting snowshoes so important? **Your feet are like steering wheels for your snowshoes, so a good grip is important for control.**
9. Why would a snowshoer use ski poles? **For balance or to give arms a workout.**
10. Match the terms by drawing a line from one column to the other.

Bearpaw	Best if snow is not too deep
Alaskan	Best for bigger people
Hills and mountains	Claws for better traction
Michigan	Good for hiking
Running or racing	Small, lightweight
11. Describe the snowshoes developed by the Ojibwe people of northern Minnesota. **They are pointed on both ends. They were used for hunting and walking through forests.**
12. If you are climbing steep hills, what style of shoe might you need? Why? **Aluminum shoes with metal claws for gripping slippery surfaces.**
13. What is “herringboning?” **Herringboning is a way to climb hills with snowshoes or skis. You point your toes out and dig the insides of your feet into the hill.**
14. Explain how Alaskan shoes differ from the bearpaw style. **Alaskan shoes are longer than bearpaws. They work well for bigger people or people carrying heavy packs. Bearpaws are shorter so you can turn in small spaces.**
15. What are the disadvantages and advantages of modern shoes? **Answers may vary, but should include: modern shoes cost more, but need little maintenance.**
16. “Dressing in layers” means **wearing clothing that can be taken off or put on if you are too warm or not warm enough.**
17. Why is dressing in layers a good idea? **Answers should indicate the importance of not sweating so much that clothing becomes wet, which could lead to hypothermia.**
18. When snowshoers are “cutting a trail,” what are they doing? **Making a new trail through snow.**

Minnesota Comprehensive Assessments Practice Items

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www.dnr.state.mn.us/young_naturalists/snowshoeing

Name _____ Period _____ Date _____

1. Early snowshoe builders were probably imitating the _____ and _____ when they designed the first snowshoes.
 - A. wolf and coyote
 - B. owl and ruffed grouse
 - C. lynx and snowshoe hare
 - D. moose and caribou
2. Walking in snowshoes requires you to:
 - A. walk with your legs spread slightly apart.
 - B. speed up your pace.
 - C. keep your arms at your sides.
 - D. stay on your tiptoes
3. Ojibwe snowshoes are the only style with:
 - A. rounded ends
 - B. pointed ends
 - C. nylon webbing
 - D. leather webbing
4. The tighter your bindings fit the:
 - A. faster you can walk.
 - B. lighter the shoes you can wear.
 - C. more comfortable the shoes will feel.
 - D. more control you will have over the shoes
5. Snowshoeing takes more _____ than hiking on foot.
 - A. energy
 - B. balance
 - C. time
 - D. all of the above

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1. Early snowshoe builder were probably imitating the **C. lynx and snowshoe hare** when they designed the first snowshoes.
2. Walking in snowshoes requires you to: **A. walk with your legs spread slightly apart.**
3. Ojibwe snowshoes are the only style with: **B. pointed ends.**
4. The tighter your bindings fit the: **D. more control you will have over the shoes.**
5. Snowshoeing takes more **D. all of the above** than hiking on foot.

Vocabulary

“Let’s Go Snowshoeing!” by Maureen M. Smith

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www.dnr.state.mn.us/young_naturalists/snowshoeing

Bering Strait body of water connecting the Pacific and Arctic oceans

hydrated supplied with water

Inuit native people of the far northern regions of North American and Greenland

lynx wild cat with short tail and large feet that allow it to run on top of snow, native to northern Minnesota

Ojibwe native people of the Lake Superior region

ravine narrow, steep-sided valley

scat animal droppings

terrain physical features of a piece of ground