WINTER CARNIVAL DAY

Grades 1-3
4 Hours

Thank you for booking our “Winter Carnival Day” program at FortWhyte Alive. This program is designed to teach students how to enjoy themselves in the snow! Students will have the opportunity to learn how to use snowshoes, toboggans and marshmallows to enjoy the cold winter.

Appropriate Dress for Your Field Trip

To ensure that students get the most out of their FortWhyte experience, we ask that they be appropriately dressed for a 4-hour outdoor excursion. All of our programs include time outdoors, regardless of weather. Comfort and safety are key in making this an enjoyable and memorable experience.

Suggestions for Outdoor Dress

Layering of clothing is very important in maintaining body temperature and in remaining dry. Four thin garments may offer the same degree of warmth as one thick overcoat, but the four layers allow much greater flexibility. Layers can be shed or added as temperature, wind, exertion, or other variables dictate.

Waterproof outer layers are also important. Boots in the winter are always important to keep moisture out and heat in. (Use the Pre-Visit Activity: Winter Wear as an entry point for talking about appropriate winter dress.)

*Please share this information with other teachers that are coming to FWA with your group.*
GOAL

To teach students (and teachers) that winter is fun and exciting, and not the time to hibernate!

OBJECTIVES

Students will:

1. Use snowshoes and toboggans as a way to enjoy the snow.
2. Learn basic Inuit games that can be played to keep warm outside.
3. Enjoy a marshmallow snack cooked over a bonfire.
4. Warm up their toes with a lively scavenger hunt inside the Interpretive Centre.
**VOCABULARY**

**Bonfire:** A large fire built in the open air, for warmth, entertainment, or celebration.

**Inuit:** Inuit means “the people” in Inuktitut and refers to the indigenous people of Canada’s north, (particularly central and eastern communities).

**Snowshoes:** Light plastic or wooden racket-shaped items that may be attached to the boot to enable the wearer to walk on deep snow without sinking.

**Toboggan:** A long, narrow, flat-bottomed sled made of a thin board curved upward and backward at the front, often with low handrails on the sides. Used especially in the sport of coasting over snow or ice. FWA uses plastic Pelican SnoGliders which seat three small or two larger children comfortably.

**Toboggan Run:** A large structure with stairs to go up and a slide to come down - built especially for people to climb to the top, climb onto toboggans, and to slide down the slide on the toboggan.

**Scavenger Hunt:** A game in which individuals or teams are sent out to accumulate a series of common objects, the winner being the person or team returning first with all the items checked off on a set list.

**Snow:** Precipitation caused by the condensation of water vapour in the air into ice crystals when air temperatures are at or below the freezing point of water. In short, a solid, crystalline form of water.

**Weather:** What is happening outside right now. Weather is measured as precipitation, temperature, wind, cloud cover and other information, such as humidity.
LITERATURE CONNECTIONS

All of the books listed below relate to the theme of surviving and enjoying a cold and snowy winter. You may wish to make these titles available in your classroom or learning centre surrounding your 'Winter Carnival Day’ trip.

Books and activities with an Inuit perspective are indicated with an inuksuk.

Fiction

- **On Thin Ice** by Jamie Bastedo
  The story of a gifted northern youth struggling to find her true home in a fast-changing Arctic where culture, climate and environment seem to be crumbling all around her.

- **Tuktu** by the National Film Board
  This series of videos is available through the Educational Resources library. Depicts a young Inuit boy learning about aspects of traditional Inuit life. Narrated by the voice of an elder.

- **Never Cry Wolf** by Farley Mowat
  The classic tale of a naturalist in the Arctic learning about wolves and human's place in nature.

- **Ben’s Snow Song** by H. Hutchins (Annick Press)
- **A Prairie Boy's Winter** by W. Kurelek (Tundra Books).
- **The Snowshoeing Adventure of Milton Daub, Blizzard Trekker** by Margaret K. Wetterer.
  In the midst of a terrible blizzard, a young boy straps on a pair of handmade snowshoes and sets off to bring his family and neighbors what they need to survive.

Non-Fiction

- **Winter** by Nicola Baxter.
  A simple discussion of the changes to the weather, plants, and animals that happen during the season of winter. Includes activities.

- **Winter** by Anna Claybourne.
  Explains why seasons change and describes the ways trees, animals, and people react to winter.

- **Days in Winter** by Victoria Parker
  What kinds of clothes to do wear in winter? What types of activities take place in winter? Find out as you explore the many aspects of winter. Learn about nature and the passage of time with the utmost clarity.
PRE-VISIT ACTIVITIES

WINTER WEAR (1 lesson)

Social Studies

What should you wear or bring to the field trip that will be warm enough for a whole day outside?

Discuss appropriate dress for the outdoors with your students. Utilize the cue cards and matching game set out in Attachment #1.1 and #1.2 to help the students understand the winter wear vocabulary that is so necessary in a Winnipeg Winter.

Watch FortWhyte Alive’s How to Dress for Winter video online at www.fortwhyte.org/howtodressforwinter/

Materials: A trunk full of clothing including hats, mitts, gloves, long underwear, jackets, ski pants, fleece pants, boots, sneakers, t-shirts, sweatpants, jeans, wool socks, cotton socks, etc.

Procedure:

1. Split class into small teams. You may choose to have each group use all the clothing, or just focus on one body part (head, legs, torso, hands etc.).
2. Have each team brainstorm the important points of dressing for the outdoors.
3. Have one student from each team be the "dresser".
4. Assign each group a winter activity to dress for.
5. When you say start, with vocal help from teammates, the dressers will hurry and dress themselves.
6. Once a team thinks their outfit is complete, stop the activity and go through each team’s outfit.

Winter Activities:

> Sitting down ice fishing all day
> Being active (eg. cross country skiing)
> Emergency clothes for the back of your car

Helpful Winter Dressing Tips:

> Always dress in layers. Use many thin, warm layers rather than a few thick layers. It will insulate better and allow you to take off layers to avoid sweating.
> Wear a base layer such as long underwear, or other warm, thin clothing that will wick moisture away from your skin.
> Don’t wear cotton. It will get wet and cold.
> Wear a hat. While it’s a myth that most body heat escapes through the head, covering any exposed body part helps retain body heat.
> Dress for the appropriate activity level. Dressing for an active day of skiing will be different than dressing for a sedentary day of ice fishing.
> Buy or find a pair of insulated boots.
Wear warm socks. Wool is best, although good synthetic socks are often quite good. Avoid cotton as it soaks up sweat and will make feet wet and cold. You can layer socks, but be careful that socks aren’t too tight as this will cut circulation.

- Use a good quality parka that breaks the wind. Make sure you wear warm layers underneath too.
- Wear mittens. Fingers and hands are very vulnerable to the cold, so keep them covered. Keeping fingers together in a mitten is warmer than wearing a glove.
- Hand warmers can be useful, but don’t use these as a substitute for dressing warmly.
- Wear more than one layer on your legs. Oddly, some people will wear five layers on their torso, and only one layer on the legs.
- Keep dry with a snow-repelling outer layer. Being wet will cause chill to set in more quickly.

SNOWSHOE SCHOOL (1 lesson)

Social Studies

The snowshoe is a very important invention without which the trappers and explorers of the wilds of Canada could never have gotten around. At FortWhyte, students will be strapping on a plastic beaver-tail style snowshoe and exploring the winter trails. Learn more about the history and development of these fascinating snow-travel devices. Attachment #3 shows different traditional designs invented for different snow conditions. Have students decide on the best snowshoe design for the snow conditions in the schoolyard. Craft miniature snowshoes out of gathered twigs, weight, and test them in different snow conditions outside.

INUIT GAMES (1 lesson)

Physical Education

Inuit games help youth to prepare for the skills they will need as adults such as hunting, navigating, and working as a team. They fall into three main categories: agility, strength, and precision. Though Inuit games have evolved over time to include more contemporary sports, the annual Arctic Games still include many traditional competitions. The websites below, as well as Attachment #2 outline some games you can play with your class.

- Inuit Games:
- Arctic Winter Games:
POST-VISIT ACTIVITIES

FROSTBITE (1 lesson)

Review frostbite and hypothermia, and discuss them in greater detail. Use oral thermometers to establish normal body temperature of humans. At what temperatures do you feel ill? It only takes one or two degrees higher or lower to cause illness. How do we maintain normal temperatures? Compare the burning of food energy to the burning of a fire. What do both "fires" need? Both need some type of fuel. What do we use for fuel?

Use the following links to help your students learn about Wind Chill and Frostbite in Canada:


QUINZHEES (2 or more lessons)

Social Studies/Physical Education

Build quinzhees (snow houses), or mini versions outside of your school. A quinzhee is a simple shelter made by hollowing out a big pile of snow. They can take several hours to build, but are an effective way to stay warm when camping in the winter.

Here’s how to build one:

Step 1: Shovel a pile of snow into a mound 7 to 8 feet high and big enough around to hold two people once it is hollowed out. Mix snow of different temperatures to cause it to harden, or “sinter.” Flip the snow over so it mixes when you pile it into a mound.

Step 2: Shape the mound into a dome and allow it to sinter for about 90 minutes.

Step 3: Begin to hollow out the mound. Dig a small entrance on the downhill side. Smooth out the walls and ceiling. The walls should be 1 to 2 feet thick. Poke measuring sticks through from the outside of the mound, so you will know to stop hollowing out the inside when you see the ends of the sticks. Hollow the shelter out from the top down.

Step 4: Use the last foot of snow to make elevated snowbeds. Dig a narrow trench between the beds all the way to the ground. This allows cold air to flow down and out of the quinzhee. Poke a small ventilation hole near the top of the dome.
Step 5: To keep warm and dry, use a couple of candles, a good sleeping bag and lay on ground sheets and blankets (sheepskins are perfect!). If you sleep in the quinzhee, in the morning, the ceiling would look polished, since it has melted and refrozen from body heat.

These steps have been provided by: http://boyleslife.org/outdoors/outdoorarticles/2992/how-to-build-a-quinzee-snow-shelter/comment-page-5/. Visit this website for great pictures to help your class learn.

MAKE AND BAKE BANNOCK (1 lesson)

Social Studies/Mathematics

What is Bannock? Bannock is a simple and tasty traditional North American flatbread. Before European contact, there is evidence of indigenous groups making bannock from wild root flour and animal fat. Our current recipe was brought to Manitoba by Scottish employees of the Hudson’s Bay Company and by the Selkirk Settlers, and adopted by local indigenous groups. The recipe contains wheat flour, butter, baking powder and salt. We recommend baking your bannock on sticks, over an open fire, but it can also be baked in individual size portions in an oven.

Follow the below recipe. You can develop math skills by changing the number of servings needed, and having the students participate in the measurement and mixing process.

Traditional Bannock

12 servings

- 2 tablespoons baking powder
- 1 teaspoon salt
- 3 cups all-purpose flour
- ¼ cup butter, melted
- 1 ½ cup water, or less, for a dough consistency

Measure flour, salt, and baking powder into a large bowl. Stir to mix. Pour melted butter and water over flour mixture. Mix until the dough forms a consistent ball.

Turn dough out on a lightly floured surface, and knead gently about 10 times (or do this in the bowl). Pat into a flat circle 3/4 to 1 inch thick. Cut into 12 pieces.

To cook on an open fire, wrap the dough around the stick in a tube shape, so the dough is of even thickness all around. Putting a big blob on the end of the stick will mean that the inside of the dough won’t cook, while the outside gets burned. Cook the bannock until it is browned on the outside. Cooked bannock, after letting it cool for a few moments, should slide easily off the stick and into your hand. Enjoy!

To cook in an oven, place flattened pieces on a greased cookie sheet and bake at 350°F for 25-30 minutes.
## Winter Words

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<tr>
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<th>boots</th>
<th>gloves</th>
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<td>earmuffs</td>
<td>jacket/coat</td>
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<td>socks</td>
<td>sweater</td>
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Winter Word Scramble

- jacket/coat
- snowshoes
- snowflake
- sweater
- toboggan
- boots
- socks
- gloves
- hat/toque
- earmuffs
- mittens
- scarf
Attachment #2

INUIT GAMES

1. ARSAARARTUQ
A pulling contest involving different holds:
   1. Wrist lock and pull
   2. Finger lock and pull

2. TU NU MIU
Back to back. The object is to push the opponent over a line using hands and feet.
   1. Elbow lock and pull

3. AC SA RAQ
Thong game. Legs are kept straight while feet are placed against feet. The object is to pull opponent up off the ground.

4. PEED LE TA TUQ
Move from kneeling position to squatting one with a quick jump and then back to kneeling again.
Snowshoe Designs

A) Bearpaw (a.k.a. Otter, Green Mountain, Ski-doo, Squirrel)
Flat, short and wide with no tail, this snowshoe is ideal for dense forest, since there is no tail to catch on trees. The flat toe provides a strong, stable toehold for going up and down hilly terrain. In the mountains, bearpaws are preferred since you can push the toes into the snow to make your own "stairs".

B) Beavertail (a.k.a. Huron, Michigan, Algonquin, Maine, Sport)
This style was designed for wet snow conditions found in the east. It is flat except for a slight upwardly curved toe; it has a distinctive tail. The toe is curved up to allow easier walking, without catching your toe in the snow. Its width provides stability and facilitates hill climbing. The tail acts as a rudder and keeps the snowshoe in a straight line with each step. It also acts as a counterweight at the back of the snowshoe aiding the foot to pivot in the toe hole.

C) Ojibwe (a.k.a. Ski, Cree)
Narrower than other styles, with a toe curved noticeably upward, this snowshoe facilitates running and following dog teams across plains and other flat terrain such as open lakes. The long toe and tail make turning in dense forest difficult. Pom-poms on the snowshoes are partly decorative but they also may prevent snow blindness, by providing colour contrast with the white snow, and they also help to muffle the noisy scraping sound of cold wood.

Taken from: http://rhdistributing.com/snow-shoes/