# **Chapter 18: Activities**

# **Taking Physical Education Outside**

### **Andrew Foran**

# Winter Activities

# 1. Blizzard

Blizzard is a winter adaptation of the much-loved group juggle.

***Age or Grade Level***

Any age or grade level

***Number of Participants***

Any number of participants

***Equipment***

Snowballs or soft throwables (one per person)

***Setup***

Choose a level playing area.

***How to Play***

1. Form the group into circles of 10 to 12 participants.
2. Each circle should have a leader who will help the group start their blizzard.
3. Help the group establish a toss sequence to use throughout the activity (each person throws and catches once in the sequence). This is usually done by tossing a snowball underhanded across the circle until each group member has had a chance to both catch and throw it.
4. The goal is for the group to create a blizzard by keeping as many snowballs in the air as possible using the sequence established in the first round.
5. You can add a snowball into the blizzard at regular intervals as participants master throwing and catching the ones they have (e.g., once the group is comfortable with three snowballs, you can add a fourth, then a fifth, and so on).
6. The usual maximum is one fewer snowball than the number of participants (e.g., nine snowballs in the air for 10 participants).

***Variations***

* Blizzard can be played with soft throwables instead of snowballs.
* Use extra winter hats or mittens rolled into balls as props.

***Safety Consideration***

If snow conditions do not allow for the formation of snowballs, or if snowballs would be too hard or icy, risking injury with a misthrow, use other throwables.

From Foran, Redmond, & Loeffler, 2017

# 2. Blizzard Forecast

Blizzard can be progressed into a name game version, blizzard forecast, by having participants call each other by name before tossing the snowball as well as thanking those who pass them snowballs. For example, Participant 1: “Hey, Frosty, here’s a snowball.” Participant 2: “Thanks, Snowy Owl, for that great toss.” You can also progress this activity further by asking participants to make sounds when tossing and catching snowballs. This often results in a cacophony of sights and sounds as snowballs are tossed amid much whirring, clicking, and swooshing. Participants could also be asked to make the sounds of winter-active wildlife or birds to tie the icebreaker even more strongly to the winter environment.

***Age or Grade Level***

Any age or grade level

***Number of Participants***

Any number of participants

***Equipment***

Snowballs or soft throwables (one per person)

***Setup***

Choose a level playing area.

***How to Play***

1. Form the group into circles of 10 to 12 participants.
2. Each circle should have a leader who will help the group start their blizzard.
3. Have everyone in each circle say his or her name aloud.
4. Help the group establish a toss sequence to use throughout the activity (each person throws and catches once in the sequence).
5. As participants toss snowballs across the circle, they call out the names of the people to whom they are tossing.
6. The receivers, in turn, thank the throwers for the toss.
7. The goal is for the group to create a blizzard forecast by keeping as many snowballs and names flying through the air as possible using the sequence established in the first round.
8. You can add a snowball to the blizzard at regular intervals as participants master throwing and catching the ones they have (e.g., once the group is comfortable with three snowballs, you can add a fourth, then a fifth, and so on).
9. The usual maximum is one fewer snowball than the number of participants (e.g., nine snowballs in the air for 10 participants).

***Variations***

* Blizzard forecast can be played with soft throwables instead of snowballs.
* Use extra winter hats or mittens rolled into balls as props.
* In place of calling out names, participants can make two sounds, one as they toss and one as they receive. These can be silly sounds to act as a deinhibitizer. These sounds could also be winter-themed sounds (such as those made by active winter birds or animals) to introduce winter adaptations.

***Safety Consideration***

If snow conditions do not allow for the formation of snowballs, or if snowballs would be too hard or icy, risking injury with a misthrow, use other throwables.

***Snowball Fight!***

The biggest snowball fight ever took place in Seattle in 2013. This fundraiser event for the Boys and Girls Clubs of Seattle included 5,834 participants!

From Foran, Redmond, & Loeffler, 2017

# 3. Shoveling Machine

Because we frequently use shovels in the winter environment, this icebreaker is a fun and creative way to get moving. The goal is for small groups to make themselves into a machine that can shovel snow, with as many parts (gears, levers, etc.) as they can devise with their bodies. The machine should have motion and sound and include all group members. The machine often takes the form of an assembly line, but it can be anything participants dream up, such as a snow lifting machine or snow throwing machine.

***Age or Grade Level***

Any age or grade level

***Number of Participants***

Any number of participants

***Equipment***

None

***Setup***

Choose a level playing area.

***How to Play***

1. Divide the large group into even-numbered teams (a size of four to eight participants is ideal).
2. Give the teams five minutes to prepare their machines.
3. Once the time is up, the teams take turns presenting their machines to the large group.

***Variations***

* If you have buckets, shovels, sleds, or other such props, the groups could incorporate them into their designs.
* If snow and terrain conditions allow, the shoveling machines could actually move or shovel snow as part of the demonstration.

***So That’s Why It’s So Heavy!***

A typical shovelful of snow includes over a million snowflakes!

From Foran, Redmond, & Loeffler, 2017

# 4. Sherpa Winter Walk

Sherpas often guide climbers through rugged terrain in the mountains of Nepal. This icebreaker is a blindfolded winter adventure in which “sherpas” guide the group through and around obstacles found or made in the environment.

***Age or Grade Level***

Any age or grade level

***Number of Participants***

Any number of participants

***Equipment***

None

***Setup***

Choose a location that has access to several kinds of obstacles such as snow banks, trees, or park benches.

***How to Play***

1. Break the participants into groups of 8 to 10, each of which has a sherpa. (If there are 10 or fewer participants, you will be the sherpa.)
2. Line up the players in each group, one behind the other, with their hands on the shoulders of the person in front of them.
3. If players are comfortable, they can close their eyes, wear a blindfold, or drop their hats down over their eyes.
4. The sherpa is sighted and guides the group through, around, and over obstacles such as snow banks, snow trenches, and trees. The group follows the sherpa in a line.
5. Sherpas can describe the obstacles as part of a winter adventure story such as crevasses, icefalls, glaciers, and the like.
6. The group follows along and listens to the sherpa’s descriptions for clues about what to expect and what to do (e.g., crawl over something, duck under a branch, roll in the snow).
7. The players soon learn that they need to depend on, support, and communicate with each other to negotiate the obstacles.

***Safety Considerations***

* This activity requires participants to trust each other and work as a team to ensure everyone’s safety while traversing the course. Make sure that your group is ready for this responsibility.
* If an obstacle requires players to be off the ground, have adequate sighted spotters at the obstacle to assist.

From Foran, Redmond, & Loeffler, 2017

# 5. Polar Bears and Sled Dogs

In the Arctic, many expeditions use sled dogs to traverse the snow and ice. Some sled dogs are known for their talent in spotting polar bears and alerting expedition members. Occasionally, polar bears and sled dogs have been seen playing together, chasing each other to and fro. This active icebreaker involves the polar bears chasing the sled dogs, and vice versa, whenever their team name is mentioned in a story.

***Age or Grade Level***

Any age or grade level

***Number of Participants***

Any number of participants

***Equipment***

Ski poles, cones, or Kool-Aid for marking the boundaries of the playing area

***Setup***

* Choose a level playing area.
* Mark the boundaries of the playing area.

***How to Play***

1. Split the group into two teams: polar bears and sled dogs.
2. In the middle of the playing area, have the polar bears line up parallel to the sled dogs (facing each other), with about 3 feet (1 m) between them.
3. Tell a story about polar exploration. Whenever you say polar bear in the story, the polar bears have to run back to their boundary line.
4. The sled dogs try to tag the polar bears before they reach the boundary line.
5. A polar bear tagged by the sled dogs becomes a sled dog and joins that team.
6. When you say sled dog in your story, the polar bears try to tag the sled dogs before they reach their boundary line.
7. Play for a set amount of time or until one team has tagged everyone of the opposing team.

***Variation***

Polar bears and sled dogs can be played on snowshoes as a warm-up or to practice changing direction in an active, engaging way.

***Safety Consideration***

Based on surface conditions, decide whether the game will be played at walking, jogging, or running speed.

From Foran, Redmond, & Loeffler, 2017

# 6. Owl Hop

The owl hop is a test of strength and muscular endurance.

***Age or Grade Level***

Any age or grade level

***Number of Participants***

Any number of participants

***Equipment***

None

***Setup***

Select a relatively level area with snow that is consistent in both depth and hardness/softness.

***How to Play***

1. The object of this activity is to outlast opponents in continuously hopping on one foot.
2. Only one leg is used throughout the activity.
3. Participants stand on one foot with the instep of the opposite foot behind the standing knee; the nonhopping foot must remain in place.
4. On your cue, participants hop (foot must come off the snow) continuously on one foot.
5. The winner is the person who outlasts all the others.

***Variations***

* Use upbeat music and a judge.
* Allow participants to gently bump each other.

***Safety Consideration***

Start the lesson with a warm-up activity (such as a large group game), and have participants stretch all major muscle groups before and after the activity (with emphasis on calves, hamstrings, buttocks, quads, shoulders, and fingers).

From Foran, Redmond, & Loeffler, 2017

# 7. Labrador Hurdles

The object of this activity is to jump as many hurdles as possible using two-foot hops over a series of hurdles laid out in a straight line. Once they have completed the series of hurdles, competitors turn and repeat the line of hurdles without breaking the rhythm. Competitors must clear the hurdle with a two-foot hop and land on the other side with both feet touching the snow at the same time. They must continue with the same rhythm until they knock a hurdle down, break rhythm, or become exhausted and cannot continue. There is no time restriction for this event.

***Age or Grade Level***

Any age or grade level

***Number of Participants***

Any number of participants

***Equipment***

None

***Setup***

Participants make the hurdles from snow; they should be approximately 2 feet (60 cm) wide, 6 inches (15 cm) thick, and 18 inches (45 cm) high (you can adjust the height based on the age or size of your participants). Six to ten hurdles in a straight line are suitable, with approximately 15 inches (38 cm) to 2 feet (60 cm) between hurdles depending on the age or size of your participants. Testing participants’ vertical and horizontal hopping distance can help determine the best dimensions for the course.

***How to Lead***

1. To begin, have participants experiment by hopping over a single hurdle to coordinate their arm swings with the two-foot hopping motion.
2. Next, have them hop over a series of hurdles without changing direction.
3. Now have the participant hop over two hurdles, change direction, and hop back.
4. This is a good time to discuss strategies for hopping longer (e.g., using the arms for momentum, swinging the legs to the side or over the top).
5. Review the rules and give examples of what judges should look for (break of rhythm, the turn of direction). In pairs (one performing and one judging and recording), participants take turns hopping over hurdles.
6. Set up a chart, or have the participants chart their own improvements over the season.

***Safety Consideration***

Ensure that the hopping surface is not slippery.

From Foran, Redmond, & Loeffler, 2017

# Schoolyard Activities

# 1. Itsy-Bitsy Spider

***Equipment***

* White bristol board with spider cut-outs at least 9 by 13 centimeters (one per student)
* Package of sticky wall putty for hanging posters and pictures
* Class-sized assortment of crayons, markers, colored pencils, and pastels

***Setup and Formation***

* Give students the basic story line: They are spiders who have just moved to this area and are looking for new homes.
* Put students in pairs, with one student identified as A and the other as B.
* Give each student a spider (and wall putty).
* Divide the school grounds into an A location and a B location; try to ensure that the A’s and B’s cannot see each other.

***How to Play***

1. Give the class 10 to 12 minutes to explore the school grounds: A’s in the A location and B’s in the B location.
2. While exploring, students need to decide where they think their new home will be and make a real effort to observe the surroundings.
3. On your signal, students return to the common meeting area, select their camo tools (e.g., crayons, markers), and begin coloring their spider for camouflage. This step will require about 10 minutes.
4. Allow the students to return to their hiding site and place their spider; give the wall putty to those who may want to stick their spider on a wall or tree.
5. Remind students that they cannot bury their spider or hide it behind an object; in other words, it must be visible on approach.
6. On your signal, the students return and break into their A and B groupings.
7. The A’s now bring the B’s to their spider home area, whereupon the B’s act as spider-eating birds searching for a meal. As they search for spiders, the A’s give “hot” and “cold” responses.
8. Once a spider is found, that pair of students returns to the common area, where they reverse the roles of hunter and prey. When all the students have returned, reset the activity with the new roles.

***Variations and Differentiation***

* If the habitat around your school is appropriate, use a different invertebrate or a bird or snake.
* If movement presents a challenge, confine the activity to areas of barrier-free transporting surfaces, such as paths and walkways.

***Assessment Look-Fors***

* As the students are coloring, look for blending, complexity, and shading.
* Ask students to describe the home site they selected and see if what they are coloring is a logical match. Consider with them the natural features of the site that might help them mask their spider; if needed, use leading questions.
* When the students complete the second round, allow them to discuss their camouflage techniques. Was their spider found quickly or did it take time for the prey to discover the hiding spot? After the presentations, ask a few follow-up questions: How close were you able to get as a bird in order to grab your lunch? What would you do differently to hide your spider better? What are some other examples in nature where animals uses camouflage for survival? What is the strongest camo characteristic of your spider?

***Safety***

* Make sure that students clearly understand their boundaries in locations A and B.
* Make sure that all students know where the common meeting area is located.
* Before class, scan locations A and B with an eye toward potential hazards.

# 2. Walk the Line!

***Equipment***

* Class set of compasses (at least one for every two students)
* Cleaned, circular, ice-cream carton lids to be used as field markers
* Permanent marker to label each container lid (A, B, C, D, and so on)
* 7.5-centimeter nails, or tent pegs, or garden spikes
* Rope with indicators at 5 meters, 10 meters, 15 meters, and 20 meters
* 1-meter stake or orange spray paint to mark the centre start point
* Hammer
* Open field (grassy open area)

***Setup and Formation***

* Mark the centre of the open space with the stake or a spot of orange spray paint.
* From this starting point, head out on various bearings (0 to 360 degrees), and, using the rope, place field markers at different distances.
* Use the nail or tent peg to pin each lid to the ground. These will blow away in the slightest breeze. You can use a small dot of spray paint to mark these locations for quick setup the next day (painted marks will remain for a few weeks, and rain will not eliminate them, though mowing will).
* Make note of the letter on each lid,as well as the bearing and the distance, for your master sheet.
* Try to design the course to allow for three or four marked bearing lines for each pair of students.
* On a question sheet, list just the bearings and meters (distance out). The distance should not be the same for different pairs; instead, stagger the start bearings to allow every pair its own starting point and prevent congestion.
* Before students arrive, set up the rope off to the side as a pacing line.

***How to Play***

1. Have the student pairs pace the 20-meter rope and count how many paces it takes for them to cover this distance (count one pace for every second step). Have them do this a few times to get a good estimate.
2. Review how to set a bearing on the compass and how to shoot a bearing in the field.
3. Give each pair its own bearing sheet (each with a different start bearing).
4. All pairs start at the centre of the field, shoot their bearing, and “walk the line” for the required distance.
5. When students arrive at their spot, they can record their letter.
6. Students should then return to the centre and walk their next line.
7. When the bearings are all complete and the correct lids are found with their corresponding letter recorded, the pair is done.

***Variations and Differentiation***

* For greater challenge, use smaller lids, different-shaped markers, or stakes that cannot easily be seen in the open space.
* From the start point, give each student pair a lid and a peg and have them pace out 20 meters on their own bearing and place their marker.
* Have pairs swap bearings and walk the other line to see if they can find the letter in the field (make sure that students record their bearings).
* To make it more difficult, place the marker one to three meters within a tree line.

***Assessment Look-Fors***

* Are students progressing with the letters?
* Are you seeing a lot of restarts due to inability to find the assigned lid? If yes, check their pacing or their process for taking a bearing.
* Make sure that students are holding the compass properly when shooting a bearing.

***Safety***

* Make sure that students understand the boundaries where the field of action ends.
* Make sure that all students know what the distance into the tree line looks like; hearing a number is not the same as seeing what the distance looks like.
* Before class, scan the field and tree line to look for hazards.
* This is not a running activity; however, you still need to use the space to spread out the bearing lines in order to prevent congestion.

# 3. Mini-Orienteering

***Equipment***

* Class set of compasses (at least one per two students)
* Cleaned, circular, ice-cream lids to be used as orienteering markers
* Permanent marker to label each container lid with a letter and a number and a corresponding code (e.g., A-001, B-002, C-003)
* String to hang each marker
* Create an orienteering card (sample below)

**Sample Orienteering Card**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Bearing** | **Maker** | **Code** | **Bearing** | **Maker** | **Code** |
| 310° | A | 001 (students record this code in the allotted space) | 24° | B | 002 (students record this code in the allotted space) |
| **Bearing** | **Maker** | **Code** | **Bearing** | **Maker** | **Code** |
| 160° | C | 003 (students record this code in the allotted space) | 250° | D | 004 (students record this code in the allotted space) |

* Rope marked with indicators at 5 meters, 10 meters, 15 meters, and 20 meters

***Setup and Formation***

* Draw a rough map of your school grounds, including natural features and human-made objects.
* Find the best starting point at your school—that is, the one that enables the best overall supervision of the class.
* From this starting point, head out on a determined bearing (anywhere from 0 to 360 degrees) and place a marker at a sensible distance at a good control (i.e., obvious feature).
* Hang the marker in a spot where it does not blow around in the wind.
* Make note of the letter on the marker and the bearing and the distance for your master sheet.
* Move on to the next marker; continue this process until you have a mini-orienteering course laid out around the school.
* Before the students arrive, set the rope up off to the side as a pacing line.

***How to Play***

1. Have student pairs pace the 20-meter rope and count how many paces it takes for them to cover this distance (count one pace for every second step). Have them do this a few times to get a good estimate.
2. Review how to set a bearing on the compass and how to shoot a bearing in the field.
3. Give each pair its own orienteering card (see above sample).
4. All pairs start at the designated area; stagger the starts to allow some distance between pairs.
5. When students arrive at their marker, indicated by the assigned letter (A, B, C, D, and so on), they can record their corresponding number (001, 002, 003, 004, and so on).
6. Students should then proceed to the next letter in the course sequence.
7. The end marker letter should be close to the starting point, thus allowing you to check in the pairs as they finish.

***Variations and Differentiation***

* For greater challenge, use smaller lids, different-shaped markers, or stakes that cannot easily be seen in the space you are setting up the activity.
* From the start point, give each pair a lid and a peg and have them pace out 20 meters on their own bearing and place their marker.
* Have pairs swap bearings and walk the other line to see if they can find the letter in the field (make sure that students record their bearings).
* To make it more difficult, place the marker one to three meters within a tree line.
* If there are mobility issues in the class, confine the controls to walkable, wheelable paths and keep them accessible to students.

***Assessment Look-Fors***

* Are students progressing with the numbers?
* Are you seeing a lot of restarts due to inability to find their assigned lid? If yes, check their pacing or their process for taking a bearing.
* Make sure that students are holding the compass properly when shooting a bearing.
* Are students using their maps properly to isolate the control and help them find the marker?

***Safety***

* Make sure that students understand the boundaries marking where they are not to go.
* Make sure that all students know the boundaries of the zone where the course is located; review the rough map of your school grounds and be sure to include the starting area and end area. You may even want to walk students through these boundaries.
* Before class, scan the field, and the controls, where the markers are hanging to look for hazards.
* This is not a running activity; however, you still need to use the space to spread out the bearing lines. Consider staggered starts in order to prevent congestion.

# 4. Tree Friends

***Equipment***

* Class set of laminated pictures of tree leaves (at least one per three students), each with a small tree biography (i.e., description of prominent characteristics) on the back side
* Clipboards
* Pencils
* Sheets of paper labeled Field Notes
* Leader pack would be required if the activity occurs off school grounds (for a complete list of contents consult chapter 18 of the text)

***Setup and Formation***

* Set up clear boundaries for exploration (onsite or off school grounds).
* Give each group one to three leaf pictures.
* Allow about 30 minutes for finding three types of leaves in the designated space.

***How to Play***

1. Students work in their groups to explore the designated area.
2. When they think they have found their tree, they draw their find on their Field Notes paper. Have them try to capture what the leaves look like when clustered on a branch rather than just drawing a single leaf.
3. Students record other observations (e.g., height, bark description, number of that type of tree in the area, root structure, leaf behavior in the breeze).

***Variations and Differentiation***

* Have students develop the biography of the tree rather providing it to them.
* In winter, when leaves are absent, have students identify trees based on what they have learned about bark types.
* Swap Field Notes and write-ups among the student groups and see if they can find the tree observed by other student groups.

***Assessment Look-Fors***

* Are students able to find their tree from the pictures provided?
* How many observations are the groups able to make about their trees?
* Do the Field Notes capture the leaf clustering found in the given tree species?
* Were students able to find the tree when Field Notes were swapped?

***Safety***

* Make sure that students understand the boundaries indicating where they are not to go.
* Make sure that all students know the boundaries of the zone of where their trees are located.
* Before class, scan the area to look for hazards.
* You may want to consider having students wear safety goggles to protect their eyes from getting poked by branches while they explore the wooded area.

# Community Setting Activities

# Geocaching Introduction

Geocaching is a worldwide activity in which individuals and teams seek hidden containers, using a hand-held device called a Global Positioning System (GPS) and have the opportunity to swap treasure (trinkets). A hint is often used to help bring the treasure hunters to the final hiding spot because (for a variety of reasons) a GPS unit will be only so accurate. The GPS can save marked spots around the world and pinpoint your global location using a constellation of satellites. A saved location is called a waypoint, and the GPS unit can guide you back to that specific location with degrees of accuracy.

***Equipment***

* One GPS unit per two or three students
* One hidden canister or other container per group of two or three students
* Leader pack would be required if the activity occurs off school grounds (for a complete list of contents consult chapter 18 of the text)
* Extra batteries!

***Setup and Formation***

* In the designated common area, away from buildings and tree cover (the GPS is a receiver and overhead obstructions will interfere with the GPS’ ability to receive satellite signals), position the student groups in a circle. The teacher should be in the middle and ensure there is some space between the student groups (2-3 meters).
* Issue each group a GPS unit that already has a presaved waypoint as 001 and a sticky note attached (rubber band) with a hint about hiding spot 001 to help students find where you have hidden a canister. You will need to do this before the class arrives.
* Students need to precisely follow your explicit instructions to help familiarize them with the GPS functions they will need in order to play this hide-and-seek game. Thus you will need to devote some time to using the GPS unit so that you know the required prompts and allow time for students to become comfortable with the menu features of the GPS unit you are using.
* The following are the prompts, which are for the most part standard across the different GPS models:
* **GPS Functions and Prompts**
  + Have the students locate the power button.
  + When the GPS unit is on, the screen will display a number of menu functions. Review these with the students by scrolling up and down the menu screen using the toggle or arrow buttons located on the side of the GPS unit.
  + Allow a few minutes for the GPS to acquire satellites. This can be checked by accessing the satellite tile; use the arrow buttons or toggle, highlight the tile, and press enter (a button on the side of the GPS unit or the toggle). When this page is active, it will show you the satellites the GPS unit is receiving and accuracy of the unit.
  + Most units will be accurate from 3-7meters; the longer you wait the more accurate the unit will be in navigating the user. If this is taking time, spread the groups out a bit more so the GPS units are not interfering with one another in receiving the satellite signals.
  + When the GPS units are 3-5 meters in accuracy you are ready to navigate—the closer to 3 meters the better.
  + Use the back button, usually located on the side of the GPS unit, bring the students back to the menu screen. Locate the tile mark waypoint, highlight, and press enter.
  + When this menu feature is accessed, the students will be seeing a screen that will allow them to save the waypoint. In short, this is the exact global location for where the users are standing and the information saved are coordinates that will allow the users to come back to the saved location. Most units will default to a numbering system so this should be saved as 002, considering you already saved one location and it is 001. 002 represents the spot where the students are standing in their circle.
  + In time, when the students are comfortable using the GPS unit, they will be able to change the 002 waypoint to a name that better describes their location, using a series of screen prompts that will allow letters and numbers to rename of the waypoint, but that is another lesson.
  + Use the back button to return the students to the menu screen. Locate the tile called waypoint manager. Accessing this feature will allow students to see what has been saved. They should see 001 (this is what you presaved) and 002 (the location they just marked).

***Using the GPS***

* Have the students follow you away from the instructional circle; try to travel at least 100 meters.
* Have the groups get back into a circle, use the back button on the GPS unit, scroll the menu features and select the satellite tile, and check the accuracy reading.
* Have the students use the back button and find the waypoint manager tile. Access this function and students should see 001 and 002.
* Have them highlight 002 using the toggle or arrow buttons, and activate that waypoint by pressing the enter button.
* The next screen will display 002, the coordinates for this waypoint, and the distance to the saved location. Check with each group to see how many meters away they are from 002. They should be within meters of one another.
* If all groups are within a reasonable distance, have them begin to return to 002 by highlighting the Go To tab on the screen.
* A compass screen should be activated (if not, use the back button, scroll through the menu and locate the compass tile and access this function) and a travel arrow should be visible, inside a compass rose (NSWE).
* Students are now ready to follow the GPS unit back to the saved location 002.

Here are some special travel considerations:

* The travel arrow will point in the most direct line to the saved waypoint only if the GPS unit is in motion.
* Do not watch the screen constantly, as you will trip or bang into an object. Watch where you are walking and just check the screen for the pointing arrow direction.
* Check the distance to—the number in meters should be getting smaller and this is displayed on the screen.
* Groups should arrive back at their original starting point—or at least reasonably close to it!

***Finding a Cache***

1. Back at the common area, have students scroll the menu feature to waypoint manager, highlight 001, and activate that presaved waypoint.
2. Have the groups review their hints and check with each group about the distance in meters to the hidden cache; in your mind this distance should be reasonable.
3. Ask students to follow the travel arrow as before, head in the indicated direction, and watch for the distance to get smaller, which provides proof that they are getting closer (have them try to get within three meters and use the hint). Remember the GPS will bring them 3-5 meters of the marked spot 001 and the hint is key for helping them find the hidden canister.
4. Student should find the canister and bring it back to the common area as proof.

***Variations and Differentiation***

* GPS setup can be done in the classroom. You can cover how the GPS unit works, as well as factors that can interfere with GPS operation and thus render the unit useless in the field.
* Create groupings that facilitate students supporting one another. You will have students that are familiar with using a GPS system (cars or phone apps).
* If there are mobility concerns, hide the canisters along pathways or barrier-free walking areas.
* For older grades, consider Geocaching as a field trip following the steps outlined at www.geocaching.com.
* Another extension is having the older grades hide canisters for the younger students to find.
* Design your own school Geocache and have it registered at www.geocaching.com.

***Assessment Look-Fors***

* When in your instructional circle, make sure that all groups are on the same screen and reading the same information.
* For marking a waypoint, the groups should arrive within a couple of meters of their starting point.
* For finding a cache, the students should be able to bring back the cache container (and thus will know what to look for in the future).
* When hiding a practice caches, make sure that you can keep student groups within visual range.
* After the students have all arrived back with their canisters, ask a few follow-up questions: How accurate was the GPS unit? If your group was bounced around, what might have been affecting the unit? Was the hint helpful? What will you do next time when designing a hint? What makes a cache good when playing the hunt-and-seek aspect of Geocaching?

***Safety***

* Think carefully about where you locate a cache; you do not want groups walking past designated boundaries and then citing the GPS for taking them that way and that far.
* Scan the areas (on school grounds of off site) beforehand and take extra care to look for potential hazards around the hiding area.
* Make sure to carry extra batteries in your leader pack.
* When traveling off-site, plan accordingly. See P&P described in chapter 18 of the text, devise a group monitoring procedure, and conduct a review for traffic safety if traveling by foot to the teaching area.

# Park Setting or School Site

# 1. Nature Art (Four Sticks)

Art is a great way for students to engage in expression, and combining it with experiences in nature often results in wonderful creations.

***Equipment***

* Leader pack would be required if the activity occurs off school grounds (for a complete list of contents consult chapter 18 of the text)
* Daypack for each student (as listed in chapter 18)
* Map of the area
* Appropriate student attire for spending the day outdoors
* Four sticks (0.3 meter long) per group of four students
* Ample supply of natural items that can be found in a pocket of woods or edge of a field

***Setup and Formation***

* Create student groups of four.
* Give each group four sticks.
* Set up the activity in a natural area where the supply of items will be abundant for the class.
* Remind students not to harvest living materials. It is okay to pluck one or two flowering weeds but not an entire field of wild flowers. Similarly, it is okay to take one leaf but not to yank down an entire sapling.

***How to Play***

1. The four students in each group use their four sticks to make a square or rectangle on the ground.
2. The team then decides on a nature theme.
3. Allow the groups 15 minutes to gather their natural materials and design their expression of the chosen theme.
4. The artwork must be contained within the four sticks, which constitutes a picture frame.
5. When all teams are done, allow for a gallery tour. Two students from each team circulate through the gallery, while the other two stay behind to present their artwork. After a period of time, students switch roles.

***Variations and Differentiation***

* Use smaller sticks for a smaller frame.
* Link the expression to a novel study or pasttheme that has been part of a classroom learning experience.
* Tie the sticks together into a picture frame by lashing the four corners (any knot will do!) and have students move their frames to areas they want others to see—a traveling art gallery. This is a fun activity to do on a hike. Allow time for the nature-art framer to explain why the picture was special to them.

***Assessment Look-Fors***

* As the teams design their creations, watch for teamwork.
* Note the different types of materials used in students’ art.
* As you tour the gallery, listen to the verbal explanation offered by the artists and note the types of questions that students ask one another.
* As you view the artworks, note any common threads or patterns.
* Here are some guiding questions: Not including your own artwork, which was your favourite and why? Which material was the easiest or most fun to work with and why? What other materials would you have liked to work with but could not locate in this area, and why?

***Safety***

* Examine the area for potential hazards before students begin harvesting.
* If you are concerned about hazards, give your students a warning about what *not* to pick up and what to ask about if they are unsure.
* Be clear about where students can roam for gathering their nature supplies.

# 2. Snowshoeing

***Equipment***

* Leader pack would be required if the activity occurs off school grounds (for a complete list of contents consult chapter 18 of the text)
* Daypack for each student and appropriate for the season
* Snowshoes
* Map of the area
* Appropriate students attire for the day outdoors

***Setup and Formation***

* Do a warm fit for the snowshoes indoors so that students know which pair is theirs and how to fit them to their boots.
* Review basic snowshoeing skills (i.e., stomp-stride, kick-turn, ascent, and descent) either at school or at the site.

***How to Play***

* Begin with a whole-class activity to warm up by playing Pizza Tag.
* First, have students prepare the playing area.
* Follow the teacher and using your snowshoes, stomp out a big circle; remind the students to keep to the leader’s track.
* When the circle is well established, cut the circle in half, snowshoe across the middle.
* Repeat this again, and again, until you have established trails in the snow that resemble pizza slices in the snow.
* Next, have students play Pizza Tag.
* One person acts as “it” (or two or three people—you decide).
* Students can snowshoe only on the designated pizza track in the snow.
* Lane jumping is not allowed.
* Students can reverse direction at will as long as they stay in the established track.
* Keep everyone in the game rather than an elimination game. Devise a means back into the game after students are tagged.
* Once the students are warmed up, they are ready for the next activity.

***Variations and Differentiation***

* If you are uncomfortable with leaving the school grounds, take heart: Many snowshoe games can be played in any open space, and most tag games can easily be transferred to a winter setting.
* When students are snowshoeing the outer circle, this has to be backwards!
* Inner lanes must be hopped on using the left or right leg.

***Assessment Look-Fors***

* Watch for the snowshoeing skills (e.g., kick-turn, stomp-stride).
* See if students can consistently lift their toes as they run (it’s not as easy as it looks!).
* Look for fair play during games.
* Here are some guiding questions: What part of snowshoeing do you find physically challenging? What was it like running using snowshoes? What other games or activities could you do with snowshoes?

***Safety***

* Do not use hiking or ski poles during games.
* Monitor the temperature and the comfort of your students.
* Make note of the wind chill in the chosen area.
* Monitor students’ hydration and nutrition needs.
* If off site, stay on marked trails and take extra care around hills.

# 3. Guided Nature Quest

A popular outdoor education trip is the hike,and most hiking trails allow for many activities. Hiking is not only an underrated form exercise but also allows students to explore; more specifically, it enables seasonal exploration, which gives you a way to incorporate cross-curricular learning. Thus, a hike should be more than a walk, and opportunities to *do* something in nature will help students keep moving and stay engaged.

***Equipment***

* Leader pack would be required if the activity occurs off school grounds (for a complete list of contents consult chapter 18 of the text)
* Daypack for each student and appropriate for the season
* Water
* Sacks
* Map of the area
* Nature Quest bingo cards (laminated for multiple uses)
* Grease pencils (can be wiped off after the activity)
* Appropriate student attire for a day outdoors

**Nature Quest Bingo Card**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Smooth | Funny | Cold | Jagged | Rough |
| Helpful | Strange | Green | Shelly | Cultural |
| Yellow | Wet | Sad | Sticky | Tiny |
| White | Mysterious | Round | Soft | Unknown |
| Tall | Black | Pointed | Ugly | Harmful |

***Setup and Formation***

* Select a distance and terrain appropriate for your students’ age group.
* At the trailhead, review the route with the students, along with the safety plan.
* Once the class has been briefed, designate the lead hiker (the team in front), who will be in the middle of the pack (chaperones), and the sweep (the team in the back).
* Establish a buddy monitoring system to help keep track of all students (consult the at-a-glance form that is found in chapter 18).

***How to Play***

1. Early in the hike, schedule a break for students to have a sip of water and adjust their layers.
2. During the break, pass out the laminated Nature Quest bingo cards (if you are not able to laminate the activity, protect the cards by putting them in resealable plastic bags if it is raining).
3. Review the words on the sheet to make sure that all parts are clear to students (adjust these to fit the age group).
4. Pass out grease pencils for students to use in marking their progress.
5. As students are hiking, they look actively for things that match the words on the bingo card.

***Variations and Differentiation***

* This activity can be done in teams or individually.
* To increase the challenge, change the words on the bingo cards. Connect these words to learning activities that were experienced in the classroom. Develop themes for the students.
* If any students have mobility issues, keep the action on durable walking and wheeling surfaces.

***Assessment Look-Fors***

* Look and listen for students’ comfort level as they are hiking.
* Avoid hiking with only a few students; instead, move along the line and see what various students are finding.
* Observe whether students are following trail etiquette (i.e., leave-no-trace principles).
* Here are some guiding questions: What part of the hike did you find physically challenging? What part of the hiking trail did you like most? Least? What was the most interesting item you found for your bingo card? Why?

***Safety***

* Monitor the temperature and students’ comfort levels.
* Be aware of the weather in the area.
* Monitor students’ hydration and nutrition needs.
* Stay on marked trails.
* Take extra care to check in with students and keep track of everyone.

# Camp Setting: Flatwater Canoeing

# 1. In the Zone

***Equipment***

* Leader pack would be required if the activity occurs off school grounds (for a complete list of contents consult chapter 18 of the text). The pack will need to be waterproofed if stowing in a canoe.
* Daypack for each student with a change of clothes
* Personal flotation device (PFD) for each student
* One canoe per two paddlers, outfitted with required safety gear to meet Transport Canada regulations
* One appropriately sized paddle per student and one extra per boat
* Three floats/pins anchored to the bottom
* Two olive barrels with lids on

***Setup and Formation***

* Ten students, two per canoe(if there are more students, more chaperones will be required, and this would require additional canoes or appropriate drop in seats).
* Marked area of 80 to 100 metersin calm water (sheltered cove) along a shoreline, and 10 to 15 meters off shore.
* Review and demonstrate the following elements:
* How to safely enter and exit the canoe
* How to safely sit and kneel in a canoe
* Basic strokes: draw, push-away, forward stroke, backward stroke, stop, and rudder (simple steering)

***How to Play***

1. Within the designated boundaries, set up the three floats/pins in a triangle formation.
2. The floats should be at least 7 meters apart, and students need to stay within the triangle—in the zone!
3. Here are the rules of engagement:

* For a canoe to get into the game, one of its paddlers must touch a float/pin with his or her paddle.
* Now the paddlers can score two points by steering their canoe to touch one of the two barrels.
* To score again, the canoe must touch a different float/pin that marks the triangle. This can be repeated to rack up the points.
* If a canoe touches another canoe, the paddlers lose three points.
* If a canoe drifts out of the zone, it loses five points.

1. Observe game play and end the game when the paddlers are at their energy output or after a predetermined period of time.
2. Talley up the scores.

***Variations and Differentiation***

* Adjust the size of the triangle—smaller for more intense play or larger for more use of strokes, especially the rudder.
* To allow for inclusive participation, use pontoons or an outrigger floatation device to support paddlers of all abilities.
* To increase the scoring, use more olive barrels.

***Assessment Look-Fors***

* Notice the basic stokes being used.
* Observe the paddlers’ level of comfort (i.e., relaxed body or tense body).
* Listen for communication between paddlers (e.g., suggesting strokes and timing).
* Here are some follow-up questions: What stroke worked best for you personally? What stoke worked best for you and your partner together? What was the easiest stroke to do? Did you have fun? Why, or why not? What did you notice about the paddling that could help you become more efficient (or help you move the boat more easily, with less paddling effort)?

***Safety***

* Help students paddle safely by referring to the PaddleSmart program from Paddle Canada (www.paddlecanada.com/paddlesmart-adventuresmart-presenter-training-sessions/) or another established program in your province or territory.
* Credible camps provide qualified paddling instructors, but you can also be on the water, both to participate in the game and to provide instruction.
* If a canoe capsizes, freeze game play until the students are back in their drained boats according to established camp procedures. Remember, you are in a sheltered cove, and you are playing a water sport, so getting wet is inevitable. An overturned canoe is not a crisis.
* Ensure that your students stay well hydrated; if they get wet or damp, allow time for them to change into drier clothes if they feel chilled.

# Wooded Area Near the School

# 1. Shelter Building

In natural settings, you can choose from a variety of outdoor education units. One activity that students really enjoy is shelter building.

***Equipment***

* Tarps (3 by 3.5 meters)
* Rope bags, ideally 12 to 16 pieces of various lengths (3 to 4 meters)
* Leader pack would be required if the activity occurs off school grounds (for a complete list of contents consult chapter 18 of the text).The pack will need to be waterproofed if stowing in a canoe.
* Daypack for each student

***Setup and Formation***

* Put students in groups of six and give each group a tarp and a rope bag.
* Review with students the keys to good campsite selection.
* With older students (grades 7 and 8), take time to teach the following basic knots: reef, guideline hitch, sheet bend, bowline.
* Find a pocket of woods that provides space between the trees.

***How to Play***

1. Each group is challenged to find a place spend the night away from cabins and work as a team to pitch a tarp and make a sleep shelter.
2. Students can use only the supplies provided (there should be no use of live materials).
3. The aim is to be ready for worst-case weather. Can each group’s sleep tent withstand wind, rain, and snow?
4. Each team has 15 minutes to find a home and 30 minutes to build its nest.
5. When all teams have finished at the end of the established time, conduct a real estate tour and give each group an opportunity to present the highlights of its “location, location, location!” and their creative building efforts.

***Variations and Differentiation***

* Let students be creative; appreciate unique approaches.
* For younger grades, do not worry about knots—let them tie lots and have fun building.
* Pass out different sizes and types of plastic—huge garbage bags for emergency shelters or clear plastic (3 to 5 mil) used in home construction.
* During the holiday season, ask parents to donate used Christmas trees, which you can de-limb and use for building a natural shelter on school grounds.
* Shelter building can also be done at school if you have a wooded fringe or in a local park (please ensure that any needed permissions have been filed for land use).

***Assessment Look-Fors***

* During the tour, point out at least one strong shelter feature from the student gallery that will aid in “getting through the night.”
* For students in older grades, see if knots were used properly.
* When discussing each shelter with the class, have students identify creative or unique features and natural supports that make the shelter a sound place to sleep.
* At the end of the tour, invite the teams to discuss the following the following question: Now that you have seen other structures, what three construction ideas would use to renovate your structure?

***Safety***

* Ensure that your students stay well hydrated; if they become wet or damp, allow time for them to change into drier clothes.
* Review the boundaries of the area in which where shelters can be made.
* Ensure that every student has a whistle—3 whistle blows signals an emergency.
* Establish a check-in system to allow for quick accounting of students.
* Consider issuing safety glasses while students are moving around the wooded area to protect their eyes from stick punctures.

# 2. Natural Shelter Building

Shelter building is always a hit with students of all ages. They tend to see it as making a “fort,” but the lesson can involve so much more: habitat, human interaction with the environment, and the hierarchy of human needs. To prepare for this lesson, I send home a note asking families to donate any used Christmas trees at a predetermined date. Before the class builds its bush shelters, I de-limb the trees and stack them in the area so they are ready for use.

***Equipment***

* Leader pack would be required if the activity occurs off school grounds (for a complete list of contents consult chapter 18 of the text).
* Spruce limbs (enough to supply each group of students)

***Setup and Formation***

Pocket of woods with space between the trees and natural features such as downed trees, rocks slopes, and snow banks

***How to Play***

Teams have 30 minutes to build a natural shelter using only the natural materials provided and the natural features of the land. If there is snow on the ground, this is an excellent material to use in shelter construction.

***Variations and Differentiation***

* In winter, use rectangular kitty-litter buckets as molds for making snow blocks, which can be used for constructing igloos.
* Use the snow and explore shelter construction with just snow as the building material.

***Assessment Look-Fors***

* During the student shelter tour, point out at least one strong shelter feature from the studentsthat will aid in “getting through the night.”
* Look for efficient use of resources and incorporation of land features with the spruce limbs.
* When discussing each shelter with the class, have students identify creative or unique features and natural supports that make the shelter a sound place to sleep.
* At the end of the tour, invite the teams to discuss the following question: Now that you have seen other structures, list three things that you think an animal would do in its environment to build a home?

***Safety***

* Ensure that your students stay well hydrated; if they become wet or damp, allow time for them to change into drier clothes.
* Review the boundaries of the area in which shelters can be made.
* Ensure that every student has a whistle—3 whistle blows signals an emergency.
* Establish a check-in system to allow for quick accounting of students.
* Consider issuing safety glasses while students are moving around the wooded area to protect their eyes from stick punctures.